

中國廣核電力股份有限公司
CGN Power Co., Ltd.*

*(A joint stock company incorporated in the
People's Republic of China with limited liability)*

2018 Annual Report



Contents

Business at a glance for the year



2018 Major Events	1
Key Data for 2018	2
Business Model	5
Chairman's Statement	6
President's Review	9
Shareholder Value	14

Finance, Assets and Investment



Financial Performance and Analysis	18
Assets and Investment	23

Business Performance and Outlook



Industry Overview	28
Business Performance and Analysis	29
Future Outlook	41

Capitals



Production Capital	44
Intellectual Capital	50
Human Capital	55
Financial Capital	65
Environmental Capital	73
Social and Relationship Capital	75

Corporate Governance



Board of Directors, Supervisory Committee and Senior Management	80
Corporate Governance Report	90
Directors' Report	124
Audit and Risk Management Committee Report	139
Remuneration Committee Report	140
Nomination Committee Report	143
Nuclear Safety Committee Report	145
Supervisory Committee Report	146
Risk Management Report	150

Financial Report



Audit Report	160
Consolidated Balance Sheet	166
Balance Sheet of the Parent Company	169
Consolidated Income Statement	172
Income Statement of the Parent Company	174
Consolidated Cash Flow Statement	175
Cash Flow Statement of the Parent Company	177
Consolidated Statement of Changes in Shareholders' Equity	179
Statement of Changes in Shareholders' Equity of the Parent Company	181
Notes to the Financial Statements	182
Supplementary Information	393
Company Information	395

This 2018 Annual Report ("Annual Report") is the fifth annual report of CGN Power Co., Ltd. * ("CGN Power", the "Company", "we" or "us") since its listing. We continue to adopt the International Integrated Reporting Framework published by the International Integrated Reporting Council ("IIRC", website: www.theiirc.org) in December 2013 as the major guideline for this Annual Report. In preparing this report, we have also followed the "Environmental, Social and Governance Reporting Guide" of The Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange") as amended on December 21, 2015 and referred to other relevant documents and guidelines such as "The Standards for Contents and Formats of Information Disclosure by Companies Publicly Offering Securities No. 2 - Contents and Formats of Annual Reports (Revision 2017)" of China Securities Regulatory Commission (the "CSRC") as published on December 26, 2017.

For continuous improvement of the quality of annual reports, we welcome valuable advice on the contents and formats of this Annual Report. Please give us feedback by filling out the feedback form at the end of this Annual Report.

Unless otherwise defined in this Annual Report, the terms used in this Annual Report shall have the same meanings as those defined in the 2017 Annual Report of the Company dated March 28, 2018. This Annual Report has been prepared in Chinese and English respectively. In case of discrepancy, the Chinese version shall prevail.

For 2018, we continue to publish the Environmental, Social and Governance Report (the "ESG Report") separately to report to the community, the public, shareholders and all relevant parties on more environmental, social and governance practices in 2018. For details, please refer to the 2018 Environmental, Social and Governance Report (the "2018 ESG Report") published on our website at www.cgnp.com.cn on April 8, 2019.

Business at a glance for the year

CGN Power Co., Ltd. was established on March 25, 2014 and listed on the Main Board of the Hong Kong Stock Exchange on December 10, 2014.

CGN Power is the sole platform for nuclear power generation of China General Nuclear Power Corporation (中國廣核集團有限公司) (“CGNPC”). We build, operate and manage nuclear power plants (“NPP(s)”), sell electricity generated by these stations, and organize to develop the design and research & development (“R&D”) of NPPs.

Based on our principle of “Safety First, Quality Foremost, Pursuit of Excellence” and our core value of “Doing Things Right in One Go”, we are committed to nuclear power-based electricity supply and services, to create the best benefits for our customers, shareholders, employees and stakeholders, and strive to become a world-class nuclear power supplier and service provider.

2018 Major Events

Acquisition projects

On April 30, the Company completed the acquisition of the 100% equity interest in both CGN Ocean Power Co., Ltd. (中廣核海洋能源有限公司) (“Ocean Power”) and CGN Hebei Thermal Power Co., Ltd. (中廣核河北熱電有限公司) (“Hebei Thermal Power”) from CGNPC, and the acquisition of the 100% equity interest in CGN Power Sales Co., Ltd. (中廣核電力銷售有限公司) (“Power Sales Company”) from Shenzhen Nengzhahui Investment Co., Ltd. (深圳市能之匯投資有限公司) (“Nengzhahui”), a wholly-owned subsidiary of CGN (collectively, the “Acquisitions”). These three companies became subsidiaries of the Company.

New operating units

On July 12, Yangjiang Unit 5 commenced commercial operation.

On December 13, Taishan Unit 1 commenced commercial operation.

Units under construction

On May 23, Fangchenggang Unit 3 entered the equipment installation phase.

On July 3, Taishan Unit 2 entered the commissioning phase.

On October 23, Yangjiang Unit 6 entered the commissioning phase.

Other important events

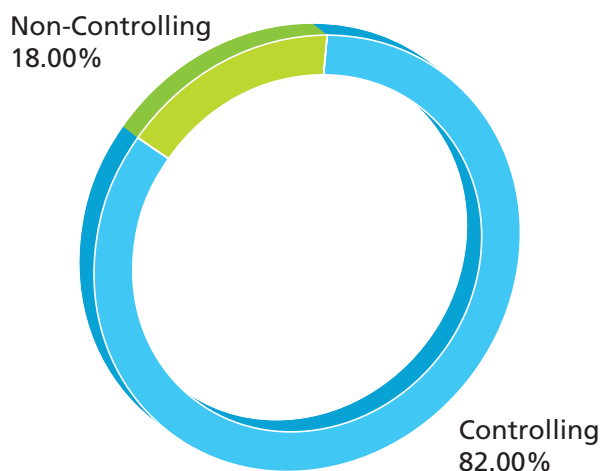
The plan for an initial public offering of RMB - denominated ordinary shares (the “A Shares”) for no more than 10% of the total share capital of the Company after issuance in China was approved at the extraordinary general meeting of the Company held on April 25. On June 22, the Company received a notice of acceptance in respect of the Company's application for A Share Offering issued by the CSRC.

Business at a glance for the year

Key Data for 2018

On-grid power generation

157,044.58_{Gwh}

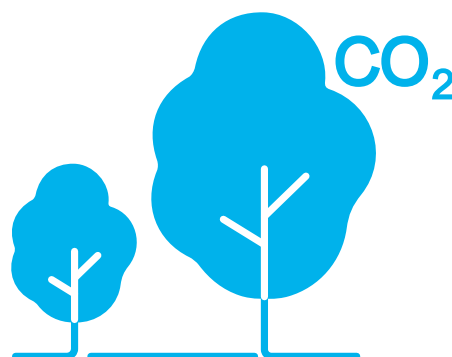


Emissions reduction contribution

Reduction of standard coal consumption of approximately

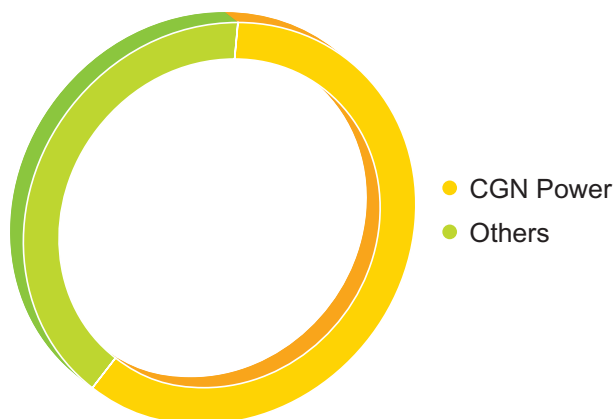
13,255_{ten thousand tons}

of CO₂ emission for on-grid power generation (including our associates) equivalent in 2018



22 generating units in operation

with an installed capacity of 24,306_{MW}

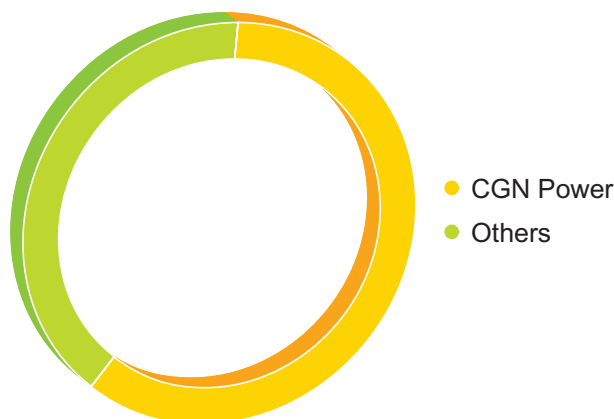


in mainland China

54.44%

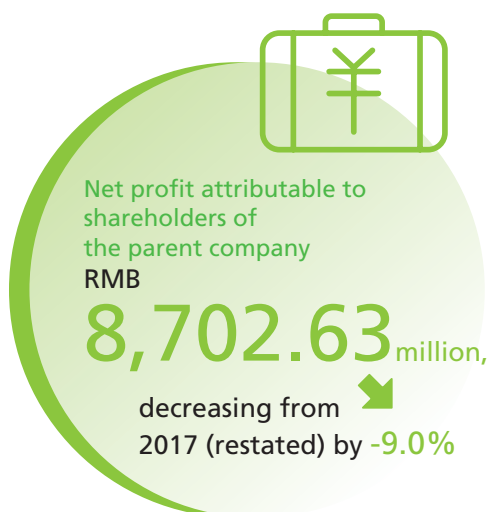
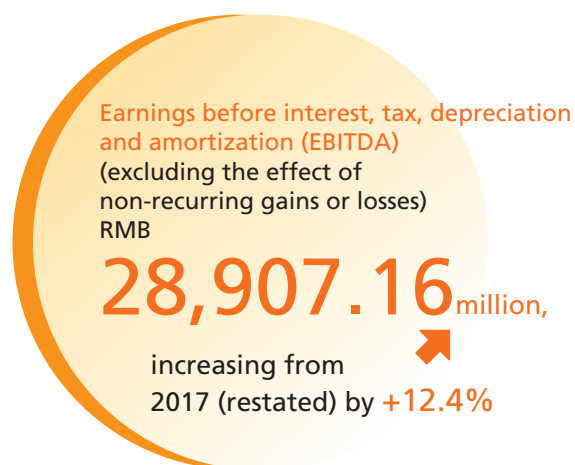
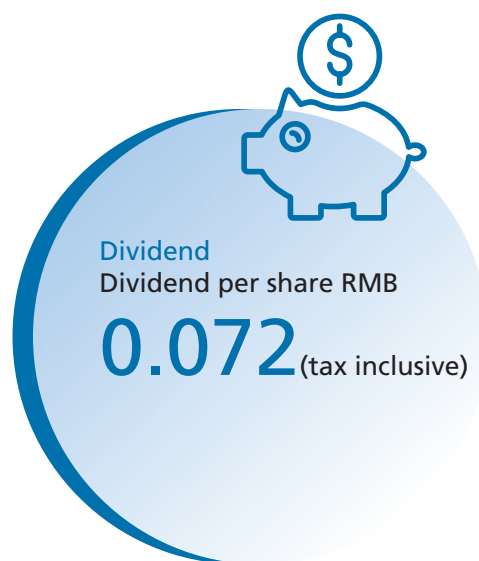
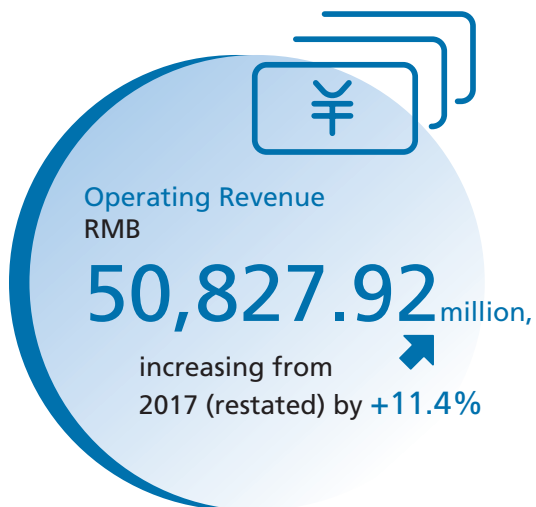
6 generating units under construction

with an installed capacity of 7,434_{MW}



in mainland China

55.30%



Note: For details of non-recurring profit and loss, please refer to Supplementary Information of this report.

Financial Highlights

Highlights of consolidated income statement

		Year ended December 31,			
	2018	2017 Restated ¹	2016 Restated ¹	2015 Restated ²	2014 Restated ^{2 and 3}
Operating revenue	50,827,919,184.43	45,633,453,920.64	33,026,794,633.05	26,839,713,787.24	23,872,755,275.80
Operating costs	28,503,854,609.56	25,185,044,094.56	18,085,009,626.58	14,275,656,077.64	12,921,568,629.81
Total profit	14,899,475,758.39	14,168,259,389.83	9,846,020,543.70	8,936,056,677.76	7,442,138,441.29
Net profit	13,681,677,330.13	12,724,187,560.67	9,119,329,157.26	7,960,075,688.70	6,688,605,451.80
Net profit attributable to shareholders of the parent company	8,702,632,650.82	9,564,092,697.56	7,364,426,999.05	6,647,843,787.99	5,635,408,369.66
Non-controlling interests	4,979,044,679.31	3,160,094,863.11	1,754,902,158.21	1,312,231,900.71	1,053,197,082.14

Highlights of consolidated balance sheet

		Year ended December 31,			
	2018	2017 Restated ¹	2016 Restated ¹	2015 Restated ²	2014 Restated ^{2 and 3}
Total current assets	55,387,916,293.85	55,904,651,132.70	43,640,765,941.51	44,945,317,558.41	59,020,030,207.68
Total non-current assets	313,167,754,066.43	301,395,905,627.54	241,582,275,663.02	223,461,734,337.77	204,252,671,785.14
Total assets	368,555,670,360.28	357,300,556,760.24	285,223,041,604.53	268,407,051,896.18	263,272,701,992.82
Total current liabilities	60,625,091,431.14	60,426,174,675.40	65,128,192,842.15	43,907,836,808.38	46,103,943,696.97
Total non-current liabilities	194,804,928,821.93	195,975,171,862.53	140,067,032,861.98	141,519,301,567.40	134,327,242,759.31
Total liabilities	255,430,020,253.07	256,401,346,537.93	205,195,225,704.13	185,427,138,375.78	180,431,186,456.28
Total equity attributable to shareholders of the parent company	71,114,915,512.70	64,848,470,381.92	55,454,459,497.37	59,423,441,780.00	61,833,197,412.30
Non-controlling interests	42,010,734,594.51	36,050,739,840.39	24,573,356,403.03	23,556,471,740.40	21,008,318,124.24
Total shareholders' equity	113,125,650,107.21	100,899,210,222.31	80,027,815,900.40	82,979,913,520.40	82,841,515,536.54
Total liabilities and shareholders' equity	368,555,670,360.28	357,300,556,760.24	285,223,041,604.53	268,407,051,896.18	263,272,701,992.82

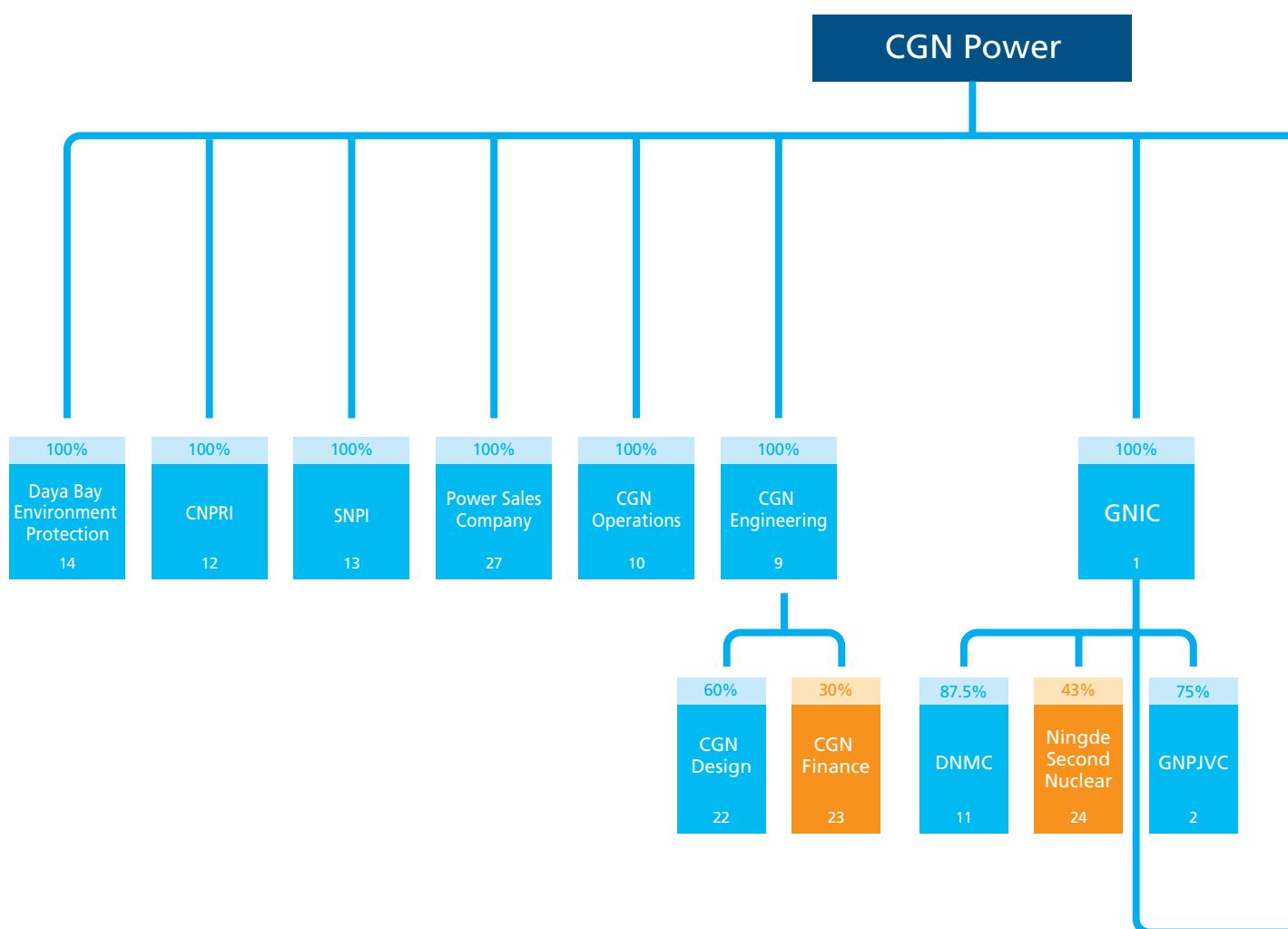
1 The Company acquired subsidiaries under common control in 2018. Therefore, the consolidated income statement for 2017 and 2016 and the consolidated balance sheet as at December 31, 2017 and December 31, 2016 of the Company and its subsidiaries (the "Group") were restated.

2 Since the Company acquired subsidiaries under common control in 2016, the consolidated income statement for 2015 and 2014 and the consolidated balance sheet as at December 31, 2015 and December 31, 2014 of the Group had been restated.

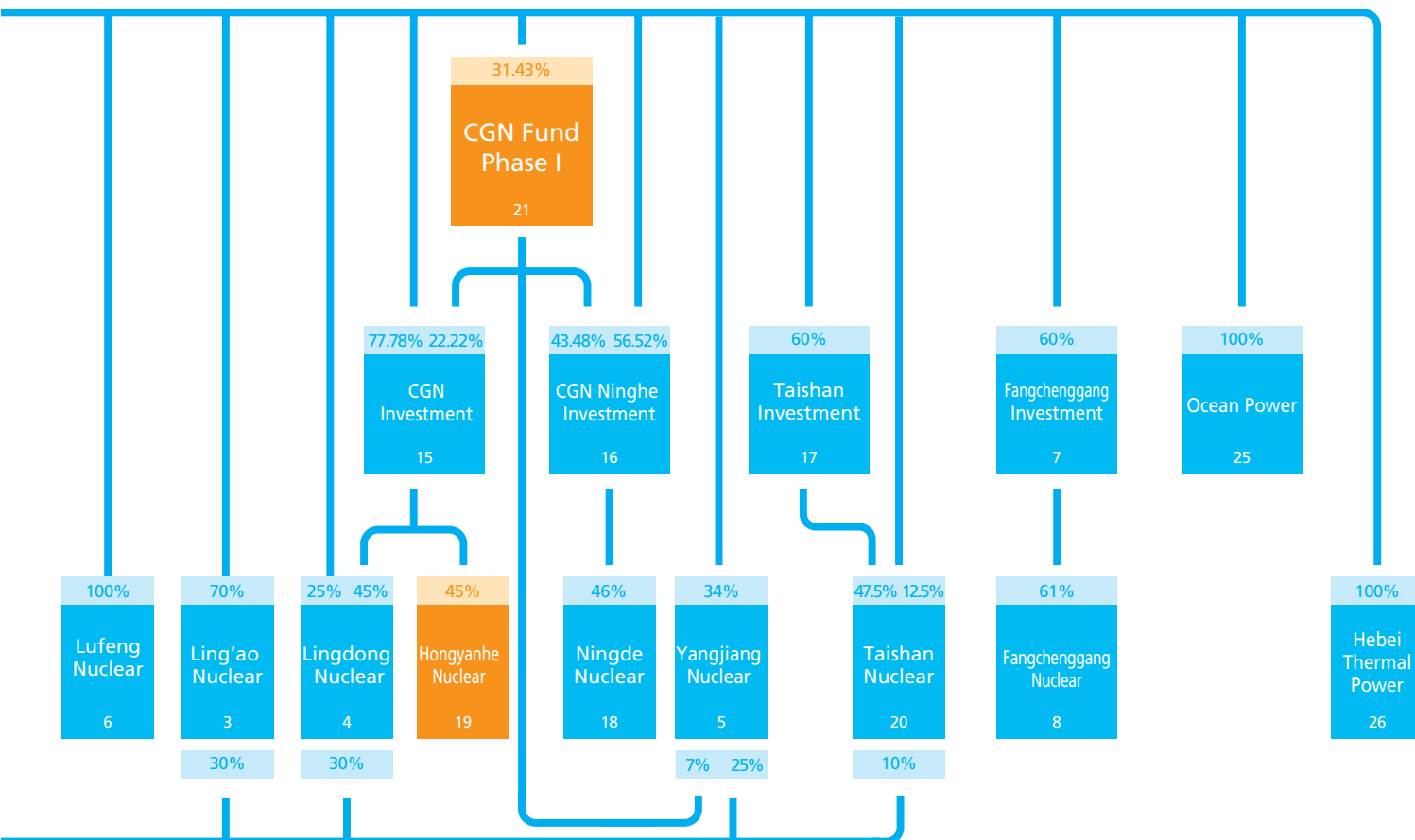
3 Since the Company acquired subsidiaries under common control in 2015, the consolidated income statement for 2014 and the consolidated balance sheet as at December 31, 2014 of the Group had been restated.

Business at a glance for the year

100%	1	Guangdong Nuclear Power Investment Co., Ltd. (廣東核電投資有限公司) (“GNIC”) GNIC was established in the PRC on August 18, 1983 and converted into a limited liability company on March 20, 2014. GNIC is a wholly-owned subsidiary of the Company.
75%	2	Guangdong Nuclear Power Joint Venture Co., Ltd. (廣東核電合營有限公司) (“GNPJVC”) GNPJVC is a Sino-foreign joint venture company established in the PRC on January 26, 1985 with 75% of its equity interests held by GNIC and the remaining 25% by Hong Kong Nuclear Investment Co., Ltd. (香港核電投資有限公司) (“HKNIC”). GNPJVC owns Daya Bay Nuclear Power Station.
100%	3	Ling’ao Nuclear Power Co., Ltd. (嶺澳核電有限公司) (“Ling’ao Nuclear”) Ling’ao Nuclear is a limited liability company established in the PRC on October 4, 1995 with 70% and 30% of its equity interests held by the Company and GNIC, respectively. Ling’ao Nuclear owns Ling’ao Nuclear Power Station.
93.14%	4	Lingdong Nuclear Power Co., Ltd. (嶺東核電有限公司) (“Lingdong Nuclear”) Lingdong Nuclear is a limited liability company established in the PRC on September 15, 2004 with 25%, 30% and 45% of its equity interests held by the Company, GNIC and CGN Investment, respectively. Lingdong Nuclear owns Lingdong Nuclear Power Station.
61.20%	5	Yangjiang Nuclear Power Co., Ltd. (陽江核電有限公司) (“Yangjiang Nuclear”) Yangjiang Nuclear is a limited liability company established in the PRC on February 23, 2005 with 34%, 25% and 7% of its equity interests held by the Company, GNIC and CGN Fund Phase I, respectively, and the remaining 17% and 17% by Guangdong Yudean Group Co., Ltd. (廣東省粵電集團有限公司) and CLP Nuclear Power (Yangjiang) Limited, respectively. Yangjiang Nuclear owns Yangjiang Nuclear Power Station.
100%	6	CGN Lufeng Nuclear Power Co., Ltd. (中廣核陸豐核電有限公司) (“Lufeng Nuclear”) Lufeng Nuclear is a limited liability company established in the PRC on February 20, 2008 and a wholly-owned subsidiary of the Company.
60%	7	Guangxi Fangchenggang CGN Nuclear Power Industry Investment Co., Ltd. (廣西防城港中廣核核電產業投資有限公司) (“Fangchenggang Investment”) Fangchenggang Investment is a limited liability company established in the PRC on January 10, 2018 with 60% and 40% of its equity interests held by the Company and Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業 (有限合夥)) (“Shenzhen Guotong”), respectively.
36.6%	8	Guangxi Fangchenggang Nuclear Power Co., Ltd. (廣西防城港核電有限公司) (“Fangchenggang Nuclear”) Fangchenggang Nuclear is a limited liability company established in the PRC on September 3, 2008 with 61% and 39% of its equity interests held by Fangchenggang Investment and Guangxi GI Energy Co., Ltd. (廣西廣投能源有限公司), respectively. Fangchenggang Nuclear owns Fangchenggang Nuclear Power Station.
100%	9	China Nuclear Power Engineering Co., Ltd. (中廣核工程有限公司) (“CGN Engineering”) CGN Engineering is a limited liability company established in the PRC on November 11, 1997 and a wholly-owned subsidiary of the Company.
100%	10	China Nuclear Power Operations Co., Ltd. (中廣核核電運營有限公司) (“CGN Operations”) CGN Operations is a limited liability company established in PRC on August 3, 2012 and a wholly-owned subsidiary of the Company.
87.5%	11	Daya Bay Nuclear Power Operations and Management Co., Ltd. (大亞灣核電運營管理有限責任公司) (“DNMC”) DNMC is a limited liability company established in the PRC on March 12, 2003 with 87.5% of its equity interests held by GNIC and the remaining 12.5% by CLP Nuclear Power Operations & Management (China) Limited (中電核電運營 (中國) 有限公司), respectively.
100%	12	China Nuclear Power Technology Research Institute Co., Ltd. (中廣核研究院有限公司) (“CNPRI”) CNPRI is a limited liability company established in the PRC on November 8, 2006 and a wholly-owned subsidiary of the Company.
100%	13	Suzhou Nuclear Power Research Institute (蘇州熱工研究院有限公司) (“SNPI”) SNPI was established in the PRC on May 13, 1978 and converted into a limited liability company on July 7, 2003. SNPI is a wholly-owned subsidiary of the Company.
100%	14	Guangdong Daya Bay Nuclear Power Environment Protection Co., Ltd. (廣東大亞灣核電環保有限公司) (“Daya Bay Environment Protection”) Daya Bay Environment Protection is a limited liability company established in the PRC on January 7, 2002 and a wholly-owned subsidiary of the Company.
84.76%	15	CGN Nuclear Power Investment Co., Ltd. (中廣核核電投資有限公司) (“CGN Investment”) CGN Investment is a limited liability company established in the PRC on October 11, 2011 with 77.78% and 22.22% of its equity interests held by the Company and CGN Fund Phase I, respectively.



70.19%	16	CGN Ninghe Investment Co., Ltd. (中廣核寧核投資有限公司) ("CGN Ninghe Investment") CGN Ninghe Investment is a limited liability company established in the PRC on October 11, 2011 with 56.52% and 43.48% of its equity interests held by the Company and CGN Fund Phase I, respectively.
60%	17	Taishan Nuclear Power Industry Investment Co., Ltd. (台山核電產業投資有限公司) ("Taishan Investment") Taishan Investment is a limited liability company established in the PRC on December 8, 2011 with 60% of its equity interests held by the Company and the remaining 40% by Guangdong Yudean Group Co., Ltd. (廣東省粵電集團有限公司).
32.29%	18	Fujian Ningde Nuclear Power Co., Ltd. (福建寧德核電有限公司) ("Ningde Nuclear") Ningde Nuclear is a limited liability company established in the PRC on March 23, 2006 with 46% of its equity interests held by CGN Ninghe Investment and the remaining 44% and 10% by Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司) and Fujian Energy Group Co., Ltd. (福建省能源集團有限責任公司), respectively. Ningde Nuclear owns Ningde Nuclear Power Station.
38.14%	19	Liaoning Hongyanhe Nuclear Power Co., Ltd. (遼寧紅沿河核電有限公司) ("Hongyanhe Nuclear") Hongyanhe Nuclear is a limited liability company established in the PRC on August 28, 2006 with 45% of its equity interests held by CGN Investment, and the remaining 45% and 10% by CPI Investment Nuclear Power Co., Ltd. (中電投核電有限公司) and Dalian Construction Investment Co., Ltd. (大連市建設投資集團), respectively. Hongyanhe Nuclear owns Hongyanhe Nuclear Power Station. Hongyanhe Nuclear is an associate of the Company.
51%	20	Taishan Nuclear Power Joint Venture Co., Ltd. (台山核電合營有限公司) ("Taishan Nuclear") Taishan Nuclear is a limited liability company established in the PRC on July 5, 2007 with 12.5% of its equity interests held by the Company, 10% by GNIC, 47.5% by Taishan Investment, and the remaining 30% by EDF International and its subsidiary EDF (China) Holding Ltd. Taishan Nuclear owns Taishan Nuclear Power Station.
31.43%	21	CGN Industry Investment Fund Phase I Co., Ltd. (中廣核一期產業投資基金有限公司) ("CGN Fund Phase I") CGN Fund Phase I is a limited liability company established in the PRC on June 30, 2010 with 31.43% of its equity interests held by the Company, and the remaining 28.57%, 20%, 7.39%, 7.14% and 5.47% by China Three Gorges Corporation (中國長江三峽集團公司), BOC Investment Asset Management Co., Ltd. (中銀投資資產管理有限公司), China Development Bank Jingcheng (Beijing) Investment Fund Co., Ltd. (國開精誠(北京)投資基金有限公司), China Development Bank Capital Corporation Ltd. (國開金融有限責任公司) and China Development Bank Siyuan (Beijing) Investment Fund Co., Ltd. (國開思遠(北京)投資基金有限公司), respectively. CGN Fund Phase I is an associate of the Company.

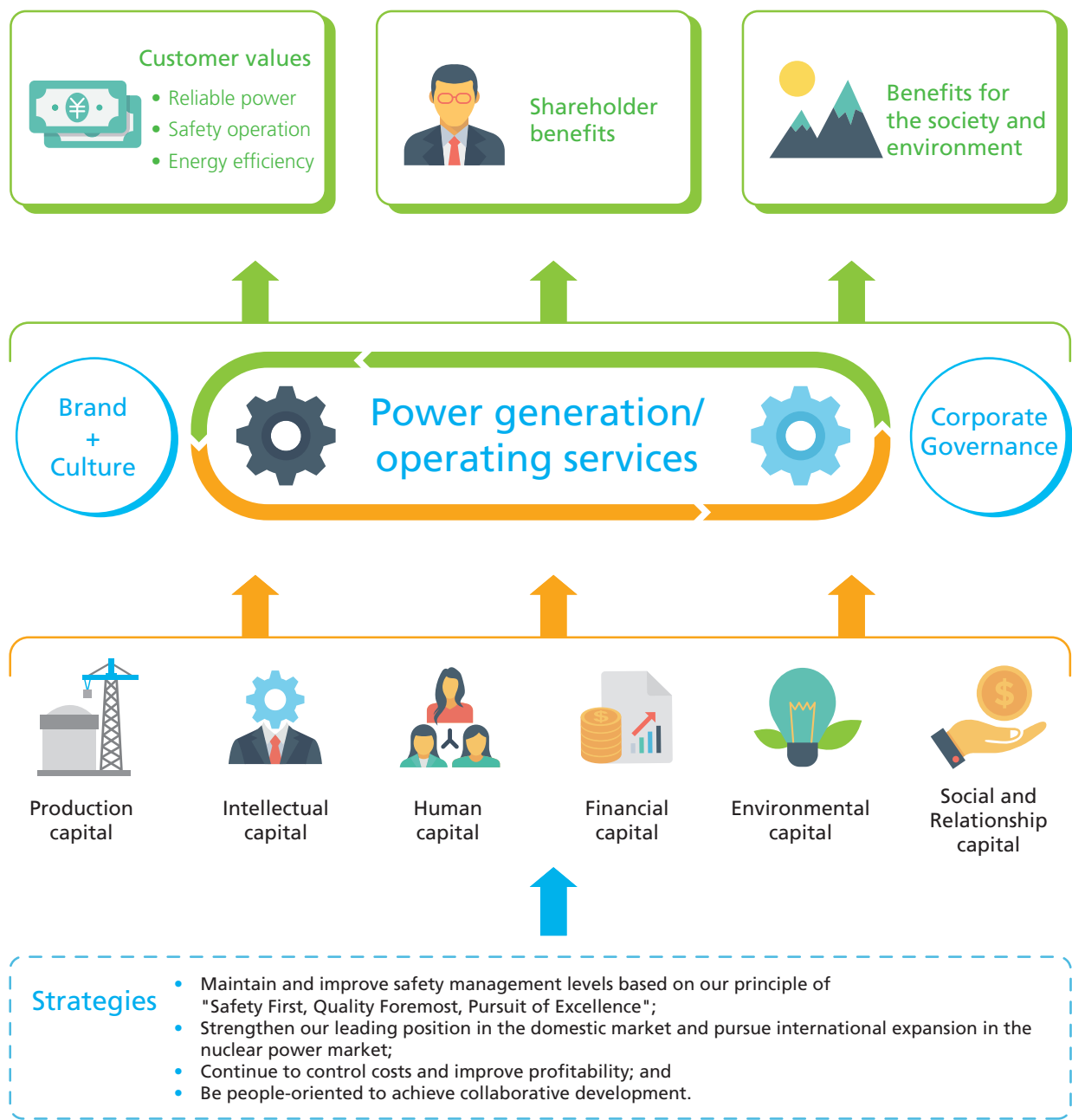


60%	22	China Nuclear Power Design Co., Ltd. (Shenzhen) (深圳中廣核工程設計有限公司) ("CGN Design") CGN Design is a limited liability company established in the PRC on May 18, 2005 with 60% of its equity interests held by CGN Engineering and the remaining 40% by Guangdong Electric Power Design Institute (廣東省電力設計研究院).
30%	23	CGN Finance Co., Ltd. (中廣核財務有限責任公司) ("CGN Finance") CGN Finance is a limited liability company established in the PRC on July 22, 1997 with 30% of its equity interests held by CGN Engineering and the remaining 66.66% and 3.34% by CGNPC and CGN Services Group Co., Ltd. ("CGN Services Group"), respectively. CGN Finance is an associate of the Company.
43%	24	Fujian Ningde Second Nuclear Power Co., Ltd. (福建寧德第二核電有限公司) ("Ningde Second Nuclear") Ningde Second Nuclear is a limited liability company established in the PRC on December 9, 2016 with 43% of its equity interests held by GNIC and the remaining 47% and 10% by Datang Corporation Nuclear Power Company Limited (大唐集團核電有限公司) and Funeng Co., Ltd. (福能股份有限公司), respectively. Ningde Second Nuclear is an associate of the Company.
100%	25	CGN Ocean Power Co., Ltd. (中廣核海洋能源有限公司) ("Ocean Power") Ocean Power is a limited company established in the PRC on September 10, 2015 and a wholly-owned subsidiary of the Company.
100%	26	CGN Hebei Thermal Power Co., Ltd. (中廣核河北熱電有限公司) ("Hebei Thermal Power") Hebei Thermal Power is a limited company established in the PRC on June 17, 2016 and a wholly-owned subsidiary of the Company.
100%	27	CGN Power Sales Co., Ltd. (中廣核電力銷售有限公司) ("Power Sales Company") Power Sales Company is a limited company established in the PRC on November 10, 2015 and a wholly-owned subsidiary of the Company.

Note: The above companies were the major subsidiaries and affiliates of the Company as of December 31, 2018.

Business Model

The core business of the Company focuses on nuclear power-based electricity supply and services. Through years of NPP construction and operation management, we have accumulated capital in areas such as production capital, intellectual capital, human capital, financial capital, environmental capital and social and relationship capital. Through continuous investment in the various forms of capital, we create the best benefits for our customers, shareholders, employees and the society.



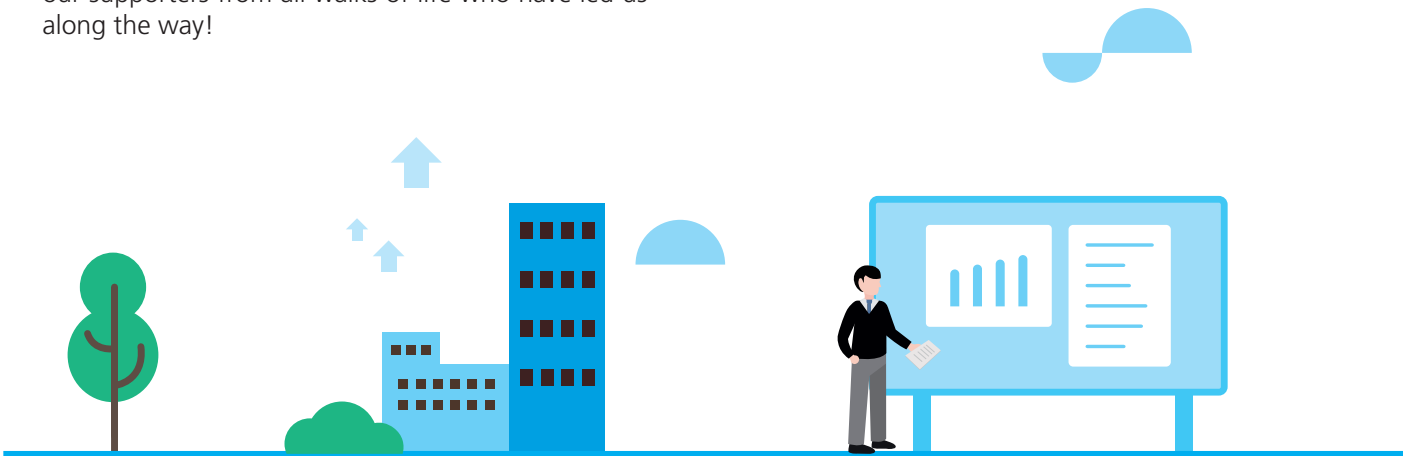
Chairman's Statement

Dear shareholders

In 2018, CGN Power maintained steady operation, with stable growth in both business and results. We put 2 new units into operation and the number of nuclear power units in operation reached 22 with a total installed capacity of approximately 24.31 GW, accounting for 54.4% of the total nuclear power installed capacity in operation in China (the "PRC"). Revenue of the Group for the year was approximately RMB50,828 million, representing an increase of 11.4% over 2017. Excluding the effects of non-recurring gains or losses, net profit attributable to shareholders of the parent company was approximately RMB8,610 million, representing an increase of 8.0% over 2017. Based on the earnings for the year, the Board of Directors recommended a payment of a dividend of RMB0.072 (tax inclusive) per share for the year, an increase of 5.9% as compared with RMB0.068 per share last year.

In 2018, the domestic economy was generally stable. The market-based reform of the energy generation structure and the electricity market continued to deepen. The complicated and changing external environment posed challenges to the development of the whole energy industry. The Company's achievement in the face of challenges depends on the concerted efforts of all staff of the Group and the full support of relevant parties such as shareholders, customers, business partners and relevant ministries and commissions of the State. On behalf of the board of directors of the Company (the "Board"), I would like to take this opportunity to express my heartfelt gratitude to all shareholders and our supporters from all walks of life who have led us along the way!

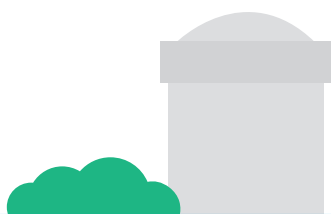
According to the latest report of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations in 2018, to achieve the target of limiting global warming to 1.5°C by the end of this century, an installed capacity of nuclear power of approximately 1,000.00 GW is needed by 2050 and nuclear power shall account for around 25% of power generation. The report named Scenario Study on Energy Emissions under the Realization of Global 1.5°C Target in the PRC prepared by the Energy Research Institute of the National Development and Reform Commission (the "NDRC") also shares a similar conclusion. To achieve the 1.5°C temperature control target of the PRC, nuclear power shall account for around 28.1% of power generation and the "installed capacity of nuclear power shall reach 540.00 GW" by 2050. Currently, both the installed capacity and the ratio of nuclear power generation to the total electricity generation in the PRC are far lower than the above research results. We believe that the State still need to develop a certain scale of nuclear power, enhances the ratio of clean energy and promote the realization of global environmental protection target. We believe that the policy of safely and efficiently developing nuclear power has not changed. With the commencement of operation of domestic nuclear power units under construction one after another, especially the third-generation nuclear power projects which feature a higher safety level, the State has the ability to undertake more new nuclear power project construction with greater confidence. We believe the State will approve nuclear power projects in accordance with its nuclear power development strategies in the future.



Chairman's Statement



High Quality
Stable Development



On December 13, 2018, Taishan Unit 1 commenced commercial operation and became the first EPR reactor put into commercial operation in the world. Taishan Unit 1 started construction in 2009, lagging behind the EPR reactor in other countries. However, in 2015, Taishan Unit 1 became the first EPR reactor in the world, and must deal with tremendous challenges of repeated iteration of design of the first EPR reactor, which was beyond our expectations at the beginning. With the support of the national policy, the cooperation of participating enterprises from the PRC and France and our experience in nuclear power construction and operation of more than 30 years, the project finally commenced operation. This achievement was hard won. Our strength in construction of third-generation nuclear power technology was further strengthened, and can provide experience and support for nuclear power

construction of the same type in the world. Although we seek to undertake strict control, construction cycle and expenses of the project increased to a large extent compared with the original plan. In the future, we still need to optimize lean management of units' operation and ensure the project to achieve good economic benefits. With our years of experience in operation, we are confident that we can do it well.

The Nuclear Safety Law of the People's Republic of China (《中華人民共和國核安全法》) (the "**Nuclear Safety Law**") came into effect on January 1, 2018. On September 20, 2018, the Atomic Energy Law of the People's Republic of China (Draft for Comments) commenced soliciting public comments. The continuous perfection of the laws and regulations relating to the nuclear field by the State had profound implications for the whole nuclear power



Taishan Nuclear main control room

Chairman's Statement

industrial chain. The directors of the Company had emphasized risk management and, under the current environment, we profoundly realized that besides insisting on "Study and abide by the laws, eliminate violation of laws, integrity and transparency and eliminate falsification", we also need to enhance law compliance awareness of our cooperative partners along the industrial chain, strengthening the foundation for achieving the common target of high-quality development.

2018 was a year when the State's national power system reform (the "**Power System Reform**") moved towards full implementation from the top-level design. For example, the transaction mechanism gradually improved and was gradually open to more transaction parties. The construction of the electricity spot market entered the start-off phase, and the electricity auxiliary service market continued to develop. Faced with the continuous promotion of the Power System Reform, the Board of Directors required that the management of the Company continue to adapt to changes in the external environment, support the relevant policies of the State's clean energy development and the Power System Reform, and actively communicate with governments at all levels, implement nuclear power consumption, actively participate in regional electricity market transactions, and provide more reliable clean energy for the society.

The development of any industry is closely related to technological innovation. The same applies to the nuclear power field. We actively participate in research of application of various new technologies in the nuclear power field, and prepare technological capacities for the Company's future development. In April 2018, we acquired Ocean Power and Hebei Thermal Power, which was favorable for our reserving small modular reactor projects and advanced technology, and further deepening production and research integration and promoting technology R&D and commercialized and industrialized application and grasp future development opportunities of nuclear power.

Last year, the Company proposed an initial public offering of A shares in the PRC of not more than 10% of the total issued share capital of the Company. This proposal gain the support of our shareholders. We have also submitted relevant application documents to CSRC for review. Considering the current progress of the review of CSRC, to ensure the continuity of the review process, the Company will convene an extraordinary general meeting in April, and hope to obtain approval from shareholders to continue relevant declaration work of issuing A shares. Shareholders are reminded to read the relevant circular published on March 7, 2019 for details.

2018 was the 40th anniversary of the PRC's reforms and opening up. Benefiting from reforms and opening policies of China, our Daya Bay Nuclear Power Station commenced construction and became China's first large-scale commercial nuclear power station. Over the past 40 years, beginning from Daya Bay Nuclear Power Station, the nuclear power of the PRC realized its growth out of nothing and expanded from small scale to large scale, and further to make great achievements known to the world. CGNPC and CGN Power also gradually grew during the 40 years of the PRC's nuclear power development. With the State setting energy development as important content of ecological civilization construction, and the promotion of "Build a clean and low-carbon, and safe and efficient energy system", the development of the nuclear power industry is still in a strategic opportunity period. We will grasp this historic opportunity and insist on "Safety First, Independent Innovation, Comprehensive Risk Management", enhance internal value, strengthen our market awareness, fulfill corporate social responsibility, and give back to the shareholders and society with our high quality and stable development.

Zhang Shanming
Chairman

March 12, 2019

President's Review

In the environment where opportunities and challenges coexisted, we achieved stable operation and steady results in 2018. I will present a summary of the key work and performance of the Company for the year and highlight our major plans in the future. The detailed analysis of the Company's business is set forth in the relevant sections of this Annual Report.

Safety Management

Safety is crucial to any company. Nuclear safety is the cornerstone of the Company's existence and development, and we make nuclear safety our highest priority. We always adhere to the concept of "Nuclear Safety is Paramount" and the basic principles of "Safety First, Quality Foremost, Pursuit of Excellence", and apply them to various stages of the design, construction, operation and decommissioning of the NPPs. 2018 was the first year of implementation of the state's Nuclear Safety Law. We strictly complied with various requirements of the Nuclear Safety Law, and enhanced safety management level in accordance with the Company's upgrade and improvement plans.

To maintain a high level of awareness of nuclear safety culture of all employees requires long-term devoted efforts. We try to adopt new technologies to enrich activity forms of safety culture education and promote the strengthening of effects of educational activities. For example, Hongyanhe Nuclear established a Virtual Reality ("VR") safety experience center enabling employees to have more direct physical feeling of unsafe behavior. Besides seeking to enhance safe behavior awareness of employees, we also seek to adopt new technology to eliminate or avoid safety potential hazards. For example, Yangjiang Nuclear built up a real time monitoring

system of ocean organisms, achieving online warning monitoring of ocean organisms in coolant, which can effectively avoid events such as shortage of cooling water acquisition and shutdown resulting from intrusion of ocean organism or foreign materials. Ningde Nuclear adopted IOT (Internet of Things) technologies and achieved verification of working point through smart signs, which can effectively prevent human-factor events caused by entry into wrong compartments. Whole-process monitoring was achieved through visualized deployment and behavior deviation can be discovered and analyzed in time, and thereby standardizing staff behavior and enhancing safety awareness as well as efficiency and level of on-site operation management. Besides, we also need to help cooperative partners closely related to the Company's production and construction business to develop good nuclear safety culture awareness and promote safety behavior of the staff of contractors. Effective techniques coupled with good awareness of all employees are necessary to ensure the stable enhancement of the Company's safety management results.

In 2018, our safety management system operated effectively and was able to discover potential hazards in time. Throughout the year, no International Nuclear and Radiological Event Scale (《國際核事件分級表》) (the "INES") set by the International Atomic Energy Agency (the "IAEA") events (Level 1 or above) of units in operation occurred. With continued efforts, the rate of incident per 200,000 working hours of our projects under construction continued to maintain an internationally leading level over the past five years, and showed a trend of significant decrease. At no time does safety management allow satisfaction or negligence. We must stay alert and pursue excellence in our safety management results.

President's Review



Doing Things
Right in
One Go

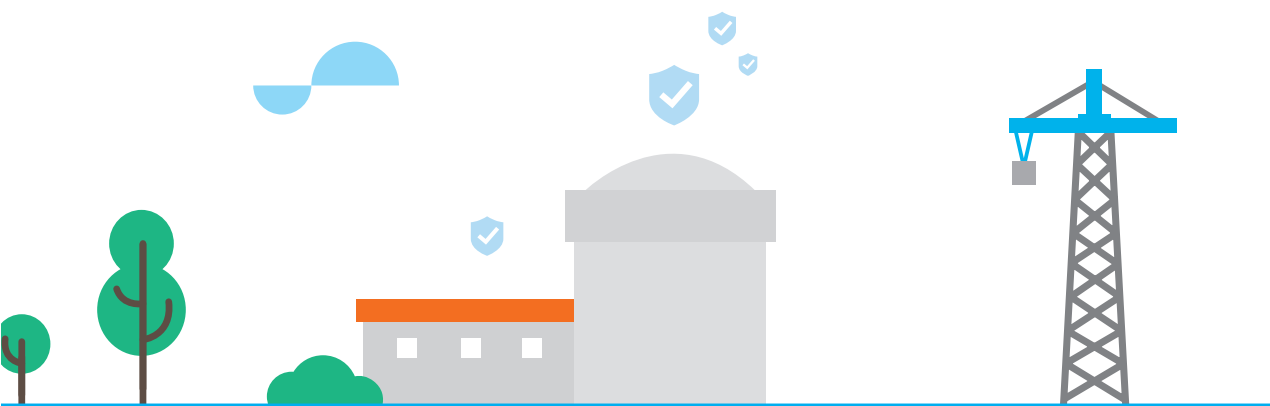


Operation Management

We continued to implement “specialization, centralization and standardization” (the “SCS”) management strategies and strengthen integration and coordination of resources. All of the operating units operated safely and stably during the year. In 2018, according to the ranking and statistical rules of performance indicators of the World Association of Nuclear Operators (“WANO”), 78.8% of the indicators among the 22 operating units of the Company achieved top 1/4, with 73.1% achieving top 1/10. Compared with the figures for 2017, the proportion of performance indicators of WANO achieving top 1/4 and top 1/10 was increased. “Capacity factor” is one of the best indicators of nuclear power safety management and nuclear power operational results commonly recognized by the international nuclear industry. In 2018, the average capacity factor of the 22 nuclear power units in operation of the Company for the first time exceeded 92% and reached internationally leading standard. While the number of the operating units continued to increase, these performance indicators also improved. This reflected that our ability to manage and control multiple units had been enhanced continuously during the implementation. We firmly believe that we can grasp various opportunities and provide safe and reliable clean energy for the society only by maintaining the safe and stable operation of units constantly.

As the number of the operating units increased, the number of refueling outages each year also increased correspondingly. We face increasingly complicated plans for refueling outages. The number of refueling outages we planned in 2018 was 13, of which two were the first outage and five were refueling outages which were highly overlapped. We repeatedly analyzed every stage of outages, and continuously optimized and organized with care, and finally completed all outages as planned, safeguarding safe operation of the next fuel cycle of units. The management efficiency of outage was continuously enhanced. While safety and quality were assured, the construction period of outage was better than the planned target. The overall outage management capacity of the Company was tested and continuously enhanced in every outage.

In 2018, the national situation of power oversupply slightly improved, but the Company’s electricity sales condition was still severe. We actively communicated with governments and power grids at all levels, and with the support of the national ministries and commissions, we continued to promote the implementation of the Provisional Measures for Nuclear Power Offtake under the Condition of Securing Nuclear Safety (《保障核電安全消納暫行辦法》) in various areas. With the gradual deepening of the national power market reform, the share of the national market-based power output will be expanded year by year, and the power trading mechanism in various regions is more mature and



President's Review

flexible. With the expansion of the share of market-based power output, the comprehensive electricity tariff has indeed declined compared with electricity tariff when all were planned electricity. We believe this is a challenge that all power generation companies must face. Nuclear power has a certain marginal cost advantage. The Company focuses on on-grid electricity. Each nuclear power base has set up a specialized power marketing organization. Through a variety of methods, in addition to continuing to obtain more planned power and market-based power, it also focuses on the development of the incremental market, and strives to improve the utilization rates of units. In 2018, we achieved on-grid power generation of 157,044.58 GWh, an increase of 14.0% over last year. The market-based electricity accounted for approximately 23.8% of the on-grid power generation. The average electricity tariff of our market-based electricity was also better than last year.

Construction Project

In 2018, the construction of two units was completed and successfully commenced commercial operation. Yangjiang Unit 5 commenced operation on July 12, 2018, earlier than the Company's planned target. Taishan Unit 1 commenced commercial operation on December 13, 2018, and became the first EPR third-generation nuclear power unit commenced commercial operation of the world. During the course of construction of Taishan Nuclear project of nearly ten years, we cooperated with other Chinese

and French companies in different stages including design, construction, installation and commissioning, to jointly solve every technical problem encountered, and finally succeeded in achieving the commencement of operation of Taishan Unit 1. The commencement of operation of Taishan Unit 1 laid the foundation for the commencement of operation of Taishan Unit 2 as planned in the future, and accumulated valuable management and technical experience for the subsequent construction of the third-generation nuclear power project with features of the first EPR unit. In the future, we will seek to optimize management on the basis of maintaining safe and stable operation of units, and achieve good economic benefits of the project.

Currently, we have six units under construction, and the construction is proceeding steadily as planned. The quality during project construction is of paramount significance to long-term safe and stable operation of units after commencement of operation, and project progress directly affects construction cost and is significant to the whole-cycle economy of the project. In 2018, under the premise of "Safety First and Quality Foremost", we continued to undertake lean management with respect to project construction cost and conduct strict control on expenses of various projects under construction.

R&D

Our technology R&D is aimed at helping us achieve excellent performance and facilitating future development. We not only pay attention to the enhancement of safety, reliability and the economy brought about by the technology improvement of NPPs, but also value the mastery of technologies needed for future development, in order to continuously enhance the core competitiveness and development ability of the Company, helping the future business expansion, market competition and sustainable development.

After the PRC confirmed that the third-generation technology will be adopted in more nuclear power projects in the future, the technologies we have mastered basically cover most of the third-generation of technologies in the world. We actively participate in the study of the application of various leading-edge technologies in the field of nuclear power in order to keep reserving our technological capabilities for the future development of the Company.

We also pay attention to the transformation and application of scientific research achievements as well as interoperability between scientific research and technological improvement during the construction and operation of NPPs, creating greater value for the safety and economy of nuclear power operations. In 2018, the number of patents we had applied for reached 1,046, of which one invention patent was awarded “China Patent Silver Award” and one invention patent was awarded “China Excellent Patent award”. These patents consolidated the basis for the Company’s innovation. The introduction and application of the results of this scientific research is explained in detail in the “Intellectual Capital” section of this Annual Report and our 2018 ESG Report.

Future Outlook

The development and operation of the Company in the future will face numerous uncertainties. We will adhere to the nuclear safety culture of “Honesty and Transparency” and the basic principle of “Safety First, Quality Foremost, Pursuit of Excellence” as well as the core value of “Doing Things Right in One Go”, strengthening the foundation of safety and quality and striving to achieve steady growth.

In 2019, we plan to have two units put into commercial operation. As mentioned above, however external environment changes, the safe and stable operation of units in operation is the foundation of the Company’s business. We will continue to effectively allocate and integrate the resources of the Company and realize the enhancement of overall quality, and maintain our cost advantages. We are also well-prepared for complicated and changing circumstances of the electricity market, and take the initiative to adapt to it and grasp the opportunity with close attention. For remaining projects under construction, we will continue to strictly manage safety and quality of project construction, and control the construction period and costs. We will also continue to invest in the research of new technologies to enhance our independent R&D capabilities with innovation so that we can fully adapt to the new technologies needed for the future development of nuclear power.

In the future, we wish to realize high-quality development of CGN Power together with all cooperative partners, providing the society with more safe and reliable clean nuclear power.

Gao Ligang
President

March 12, 2019

Shareholder Value

The Board of Directors, the management and employees of the Company are responsible for and obliged to create value for the shareholders. As such, the Company will continue to maintain stable operational development and steady growth, while it will take an active and transparent approach with integrity, stay in close contact with its shareholders and safeguard the shareholders' trust and confidence on the Company with rewards to them.

As at December 31, 2018, CGN Power had 3,820 registered shareholders, but the actual number of investors would be much greater if one takes into account individuals and institutions holding equity interests in the Company indirectly through intermediaries such as nominees, investment funds, the Hong Kong Central Clearing and Settlement System (CCASS), the Shanghai-Hong Kong Stock Connect, and the Shenzhen-Hong Kong Stock Connect.

Dividend distribution

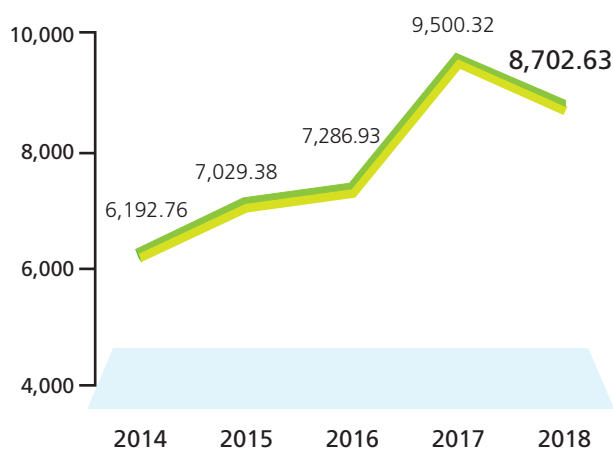
The final dividend for the year ended December 31, 2017 was RMB0.068 (tax inclusive) per share and the Company completed the distribution by July 31, 2018.

The Board has proposed to declare a final cash dividend of RMB0.072 (tax inclusive) per share for the year from January 1, 2018 to December 31, 2018 to our shareholders as of the record date of dividend payment. The final dividend of this year will be distributed after being approved by our shareholders at the 2019 first extraordinary general meeting of the Company and is expected to be distributed in June 2019.

When considering the dividend distribution ratio in the future, we will take into consideration the business performance of the Company for the year, the future development strategies of the Company and other factors, provided that it shall not be lower than 33% of the distributable net profits for the year. The Board and management attach great importance to the safe and stable operation of nuclear power generating units and strive to achieve the stable growth of the Company's overall operation. The Company intends to provide its shareholders with steady and growing dividend by maintaining a reasonable increase in dividend (subject to approval at the general meeting of the relevant financial year) in the three financial years of 2018, 2019 and 2020 based on the annual dividend per share for 2017.

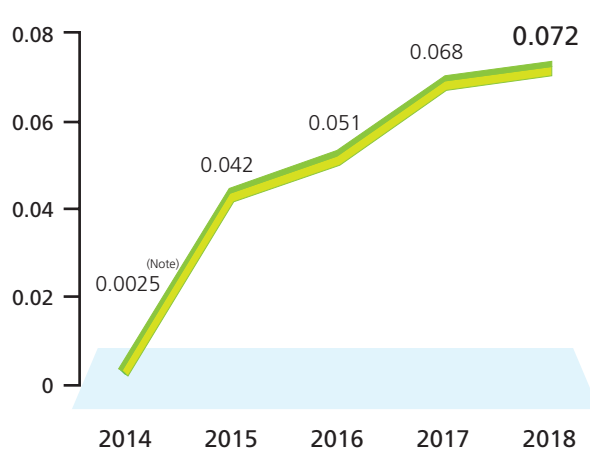
Net profit attributable to shareholders of the parent company for the recent five years

Unit: RMB million



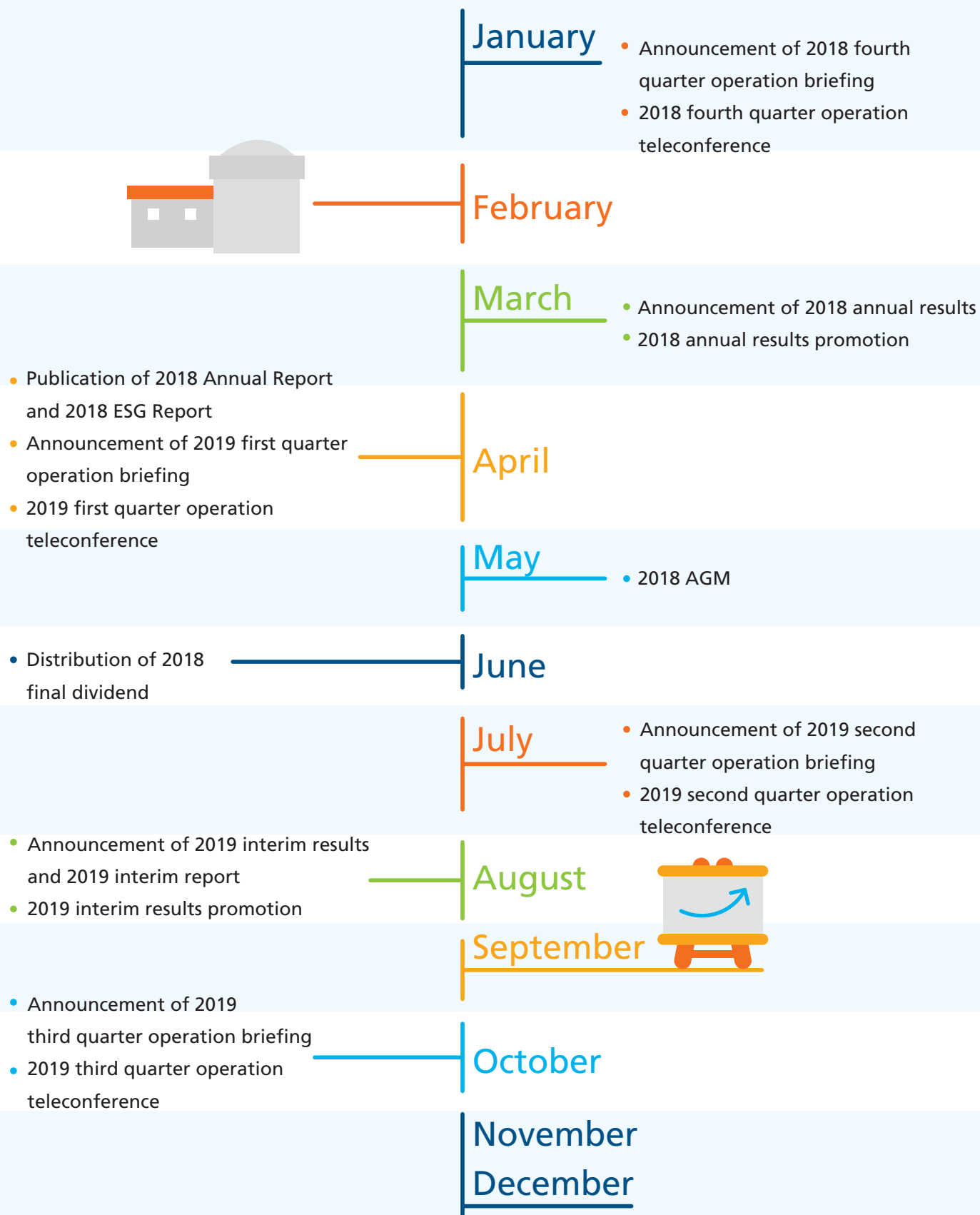
Dividend distribution per share for the recent five years

Unit: RMB



Note: It was the final dividend from the listing date of the Company (i.e. December 10, 2014) to the year ended December 31, 2014.

Shareholders' Diary 2019



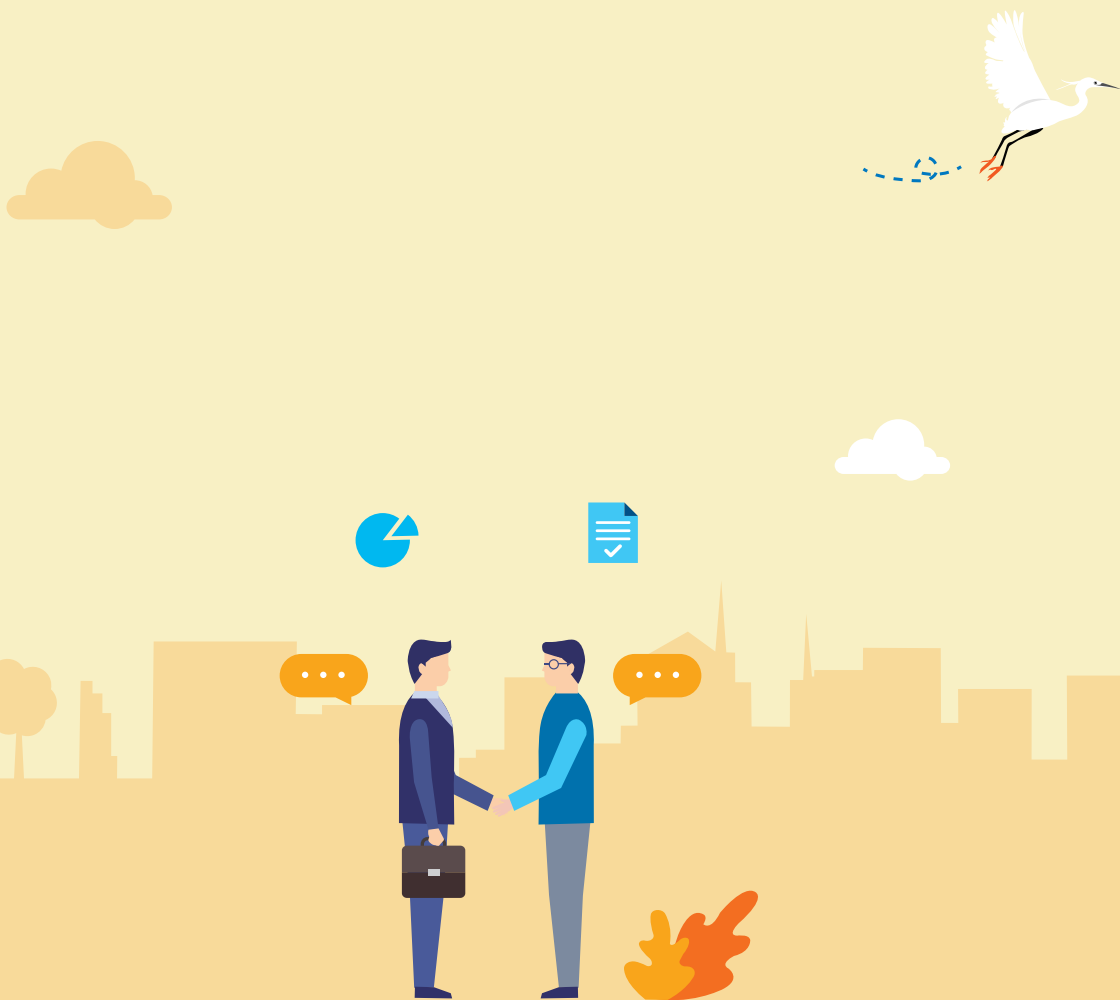
Note: Any changes to the above dates will be announced on the website of the Company.

Stable



Finance, Assets and Investment

- 18 Financial Performance and Analysis
- 23 Assets and Investment



Financial Performance and Analysis

Our investment and operational strategies affect our business performance, which in turn translate into the finance data combined in our financial statements.

Key Financial Indicators

Item	2018	2017 (Restated)
Indicators of profitability		
EBITDA margin (%) ⁽¹⁾	57.1	60.7
Net profit margin (%) ⁽²⁾	26.9	27.9
Indicators of investment returns		
Return on equity (excluding non-controlling interests) (%) ⁽³⁾	12.8	15.9
Return on total assets (%) ⁽⁴⁾	5.8	6.4
Indicators of solvency		
Asset-liability ratio (%) ⁽⁵⁾	69.3	71.8
Debt to equity ratio (%) ⁽⁶⁾	183.5	206.7
Interest coverage ⁽⁷⁾	2.1	2.0

Notes:

- (1) EBITDA margin = (Total profit + Interest expenses recognized in profit or loss + Depreciation and amortization)/ Operating revenue * 100%
- (2) Net profit margin = Net profit/ Operating revenue * 100%
- (3) Return on equity (excluding non-controlling interests) = Net profit attributable to shareholders of the parent company/ Average equity attributable to shareholders of the parent company (the arithmetic mean of the opening and closing balances) * 100%
- (4) Return on total assets = (Total profit + Interest expenses recognized in profit or loss)/ Average total assets (the arithmetic mean of the opening and closing balances) * 100%
- (5) Asset-liability ratio = Total liabilities/ Total assets * 100%
- (6) Debt to equity ratio = Net debt (the total amount of bank and other borrowings less cash and cash equivalents and other deposits over three months)/ Total shareholders' equity * 100%
- (7) Interest coverage = (Total profit + Interest expenses recognized in profit or loss)/ (Interest expenses recognized in profit or loss + Interest expenses capitalized)

Financial Results and Analysis

	For the year ended December 31		Fluctuations increase/ (decrease) RMB'000	Percentage change increase/ (decrease) %
	2018 RMB'000	2017 RMB'000 (Restated)		
Revenue from principal operations	50,543,922.15	45,457,057.44	5,086,864.71	11.2
Cost of principal operations	28,227,621.58	25,023,009.07	3,204,612.51	12.8
Finance costs	6,000,868.77	6,106,623.05	(105,754.28)	(1.7)
Other gains ⁽¹⁾	1,563,140.90	1,513,456.99	49,683.91	3.3
Investment income ⁽²⁾	1,044,558.66	2,312,138.17	(1,267,579.51)	(54.8)
Including: Income from investment in associates and joint ventures ⁽³⁾	1,029,509.83	602,635.84	426,873.99	70.8
Non-recurring gains or losses ⁽⁴⁾	115,782.10	1,970,846.36	(1,855,064.26)	(94.1)
Net profit attributable to shareholders of the parent company	8,702,632.65	9,564,092.70	(861,460.05)	(9.0)
Net profit attributable to shareholders of the parent company (excluding the effects of non-recurring gains or losses)	8,609,512.93	7,974,020.39	635,492.54	8.0

(1) Other gains mainly comprise value-added tax ("VAT") refunds and other government grants.

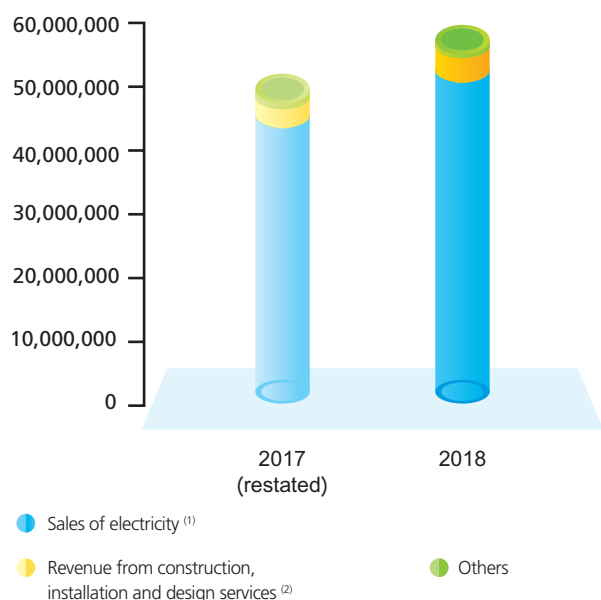
(2) The decrease in investment income was primarily due to the investment income amounted to RMB1,785,082,110 arising from the remeasurement of equity originally held in Ningde Nuclear on the acquisition date upon the change of Ningde Nuclear from a joint venture to a subsidiary of the Company on January 1, 2017.

(3) The increase in income from investment in associates and joint ventures was primarily due to the increase of 29.31% in the on-grid power generation of Hongyanhe Nuclear, an associate, over the previous year, resulting in profit better than last year.

(4) The decrease in non-recurring gains or losses was primarily due to the investment income amounted to RMB1,785,082,110 arising from the remeasurement of equity originally held in Ningde Nuclear on the acquisition date upon the change of Ningde Nuclear from a joint venture to a subsidiary of the Company on January 1, 2017.

Financial Performance and Analysis

Revenue from Principal Operations



- (1) The increase in revenue from sales of electricity was primarily due to the commencement of commercial operation of Yangjiang Units 4 and 5 and Taishan Unit 1 in March 2017, July 2018 and December 2018, respectively, and the increase in the overall power generation utilization hours of the units. The on-grid power generation of our subsidiaries increased by 11.13% as compared with 2017.
- (2) The increase in revenue from construction, installation and design services was primarily due to the increase in the construction volume of Hongyanhe Units 5 and 6 and the preliminary work of the proposed Ningde Phase II project (including Ningde Units 5 and 6) of CGN Engineering.

Cost of Principal Operations

	For the year ended December 31			
	2018 RMB'000	2017 RMB'000 (restated)	Fluctuations increase/ (decrease) RMB'000	Percentage change increase/ (decrease) %
Cost of sales of electricity	23,425,317.97	21,569,118.17	1,856,199.80	8.6
Of which: Cost of nuclear fuel ⁽¹⁾	7,338,796.57	6,765,809.25	572,987.32	8.5
Depreciation of fixed assets ⁽²⁾	6,956,778.93	6,263,622.61	693,156.32	11.1
Provision for spent fuel management ⁽³⁾	1,332,687.59	1,187,124.43	145,563.16	12.3
Construction, installation and design services ⁽⁴⁾	3,812,574.57	2,540,486.01	1,272,088.56	50.1
Other costs	989,729.04	913,404.89	76,324.15	8.4
Total cost of principal operations	28,227,621.58	25,023,009.07	3,204,612.51	12.8

- (1) The increase in cost of nuclear fuel was primarily due to the commencement of commercial operation of Yangjiang Units 4 and 5 and Taishan Unit 1 in March 2017, July 2018 and December 2018, respectively, and the increase in the overall power generation utilization hours of the units. The on-grid power generation of our subsidiaries increased by 11.13% as compared with 2017.
- (2) The increase in depreciation of fixed assets was primarily due to the commencement of commercial operation of Yangjiang Units 4 and 5 and Taishan Unit 1 in March 2017, July 2018 and December 2018, respectively, and the increase in the overall power generation utilization hours of the units. The on-grid power generation of our subsidiaries increased by 11.13% as compared with 2017.
- (3) The increase in provision for spent fuel management was primarily due to the commencement of provision and payment for spent fuel management as Ningde Unit 1 commenced commercial operation for five years in April 2018.
- (4) The increase in cost of construction, installation and design service was primarily due to the increase in the construction volume of Hongyanhe Units 5 and 6 and the preliminary work of the proposed Ningde Phase II project (including Ningde Units 5 and 6) of CGN Engineering.

Financial Position

The major assets, inventories, receivables, payables and borrowings of the Company are shown in the table below. Details of the financial position are set out in the notes to the consolidated financial statements.

	December 31, 2018 RMB'000	January 1, 2018 RMB'000 (Restated)	Fluctuations increase/ (decrease) RMB'000	Percentage change increase/ (decrease) %
Bank and other borrowings ⁽¹⁾	222,716,755.82	220,972,370.34	1,744,385.48	0.8
Receivables ⁽²⁾	16,095,693.97	17,279,147.58	(1,183,453.61)	(6.8)
Payables ⁽³⁾	23,592,561.18	24,010,490.51	(417,929.33)	(1.7)
Inventories	21,372,255.36	19,738,836.98	1,633,418.38	8.3
Fixed assets and intangible assets ⁽⁴⁾	215,570,003.03	163,728,718.58	51,841,284.45	31.7

- (1) Bank and other borrowings comprise short-term loans, long-term loans, bonds payable, and long-term loans and bonds payable due within one year.
- (2) Receivables comprise bills receivable and accounts receivable, prepayments, contract assets and other receivables. The main reason for the decrease in receivables was that CGN Engineering completed the settlement of partial work with Hongyanhe Nuclear.
- (3) Payables comprise bills payable and accounts payable, receipts in advance, contract liabilities and other payables.
- (4) The main reason for the increase in fixed assets and intangible assets was that Yangjiang Unit 5 and Taishan Unit 1 commenced commercial operation in July 2018 and December 2018, respectively, and the relevant construction in progress was transferred to fixed assets.

Financial Performance and Analysis

Cash Flow Analysis

Further improvement in cash flows

In 2018, the Company's cash flow position was better than the same period of the previous year, in which the net cash flows from operating activities increased as compared with 2017, mainly because the income increased as compared with 2017. Net cash flows from investment activities decreased as compared with 2017, mainly due to the remaining payment of the Company for the acquisition of 61% equity interest in Fangchenggang Nuclear, 100% equity interest in Lufeng Nuclear and 100% equity interest in CGN Engineering amounted to RMB5,536.3 million in 2017, and the significant decrease in cash paid for acquisition of fixed assets as compared with the previous year as a result of the commencement of commercial operation of Yangjiang Unit 5 and Taishan Unit 1, cash paid for acquisition of fixed assets decreased significantly as compared with the previous year; the net cash flows from financing activities also decreased as compared with 2017, mainly due to the higher net cash inflow from operating activities of the Company in 2018 as compared with the previous year and the lower net cash outflow from investing activities as compared with the previous year, which decreased financing amount, including an increase in the amount of equity financing by RMB2,030.3 million from 2017 and a decrease in the amount of net debt financing by RMB12,505.4 million from 2017.

	2018 RMB'000	2017 RMB'000 (restated)	Fluctuations increase/ (decrease) RMB'000	Percentage change increase/ (decrease) %
Net cash flows from operating activities	28,409,570.58	26,870,816.95	1,538,753.63	5.7
Net cash flows from investing activities	(16,382,045.13)	(24,604,375.11)	8,222,329.98	(33.4)
Net cash flows from financing activities	(10,910,023.69)	(435,007.90)	(10,475,015.79)	2,408.0

Assets and Investment

The Group was mainly engaged in the investment in construction of nuclear power generating units, technical improvement in the NPPs in operation, and R&D of technologies related to nuclear power for the year ended December 31, 2018.

Investment in fixed assets

For the year ended December 31, 2018, the Group's investment in fixed assets amounted to approximately RMB18,902.4 million, representing a decrease of RMB760.6 million or 3.9% from RMB19,663.0 million in 2017, mainly due to the decrease in capital expenditure arising from the commercial operations of Yangjiang Unit 5 and Taishan Unit 1.

Major investments in equity

For the year ended December 31, 2018, the Group increased its capital contribution in associates by RMB494.4 million, of which RMB399.1 million, RMB54.4 million and RMB40.9 million were made to Hongyanhe Nuclear, Ningde Second Nuclear and CGN Fund Phase I, respectively.

Major acquisition and disposal

The Company entered into an investment agreement with Shenzhen Guotong on December 29, 2017, pursuant to which the Company and Shenzhen Guotong established Fangchenggang Investment on January 10, 2018 to hold 61% equity interest in Fangchenggang Nuclear, a subsidiary of the Company. The Company and Shenzhen Guotong hold 60% and 40% equity interest in Fangchenggang Investment, respectively. Both Fangchenggang Investment and Fangchenggang Nuclear are subsidiaries of the Company and their financial results have been consolidated into the consolidated financial statements of the Group, with the procedures of the transfer of the relevant equity interest completed on February 11, 2018.

On March 8, 2018, the Company signed a share transfer agreement with CGNPC and Nengzhahui, a wholly-owned subsidiary of CGNPC, pursuant to which the Company shall acquire 100% equity interest in Ocean Power and 100% equity interest in Hebei Thermal Power, both held by CGNPC, from CGNPC, and 100% equity interest in Power Sales Company from Nengzhahui, a subsidiary of CGNPC, respectively, at an equity transfer price of approximately RMB235.0 million. The equity transfers were completed on April 30, 2018.

Saved for the matters above, the Group had no other material acquisition disposal for the year ended December 31, 2018.

Assets and Investment

Use of proceeds

The Company issued 10,148,750,000 H shares by way of global offering in December 2014 with net proceeds of approximately RMB21,603.5 million (in equivalent) from the offering after deducting various issuance costs. As of December 31, 2018, the Company had used RMB20,531.7 million of the net proceeds for the purposes as set out in the prospectus, representing 95.0% of the net proceeds from the offering.

Items	Movements RMB'000
Net proceeds from the listing	21,603,535
Less: Proceeds used	20,531,709
Among which: Acquisition of 60% equity interest in Taishan	
Investment and 12.5%	
equity interest in Taishan Nuclear	9,700,196
Capital expenditure for nuclear power stations under construction	8,714,300
R&D activities	783,813
Replenishment of working capital	1,333,400
Proceeds unused as at December 31, 2018	1,071,826

The remaining unused proceeds have been intended to be used mainly for R&D activities and overseas market exploration. The proceeds intended to be used for R&D activities are being progressively used according to the annual R&D plan of the Company. As the Company has not carried out any overseas projects, the proceeds intended to be used for overseas market exploration remain unused.

Contingencies

External Guarantees

The Group confirmed that, for the year ended December 31, 2018, the Group had not provided any external guarantee.

Pledge of Assets

As at December 31, 2018, the Group's assets of RMB24,346.5 million in carrying value were pledged to banks and related parties to secure loans for the Group. As at December 31, 2017, the carrying value of the Group's assets pledged to banks and related parties was RMB19,215.7 million.

As at December 31, 2018 and December 31, 2017, the electricity tariff collection rights of Ling'ao Nuclear, Lingdong Nuclear, Yangjiang Nuclear, Ningde Nuclear, Fangchenggang Nuclear and Taishan Nuclear were pledged to secure the facilities and loans from banks to these entities.

Legal Proceedings

The Group confirmed that, for the year ended December 31, 2018, there was no significant litigation against the Group, and the Board was not aware of any pending or threatened litigation against the Group which had or could have a material and adverse effect on the financial conditions or operations of the Group.

Investment Direction

Based on the strategies and business development needs of the Company, the Company will finance the construction of nuclear power stations under construction according to investment schedules, continue to fund the technology improvement in nuclear power stations in operation, make continuous investment in R&D and innovation of technologies, and fund the acquisitions of contingent assets in 2019. In addition, the Company will also carry out relevant investment activities at appropriate time by exercising its rights to acquire retained businesses as set out in the non-competition deed entered into between the Company and CGNPC, thereby laying a solid foundation for the Company's future development.

Growth



Business Performance and Outlook

28	Industry Overview
29	Business Performance and Analysis
41	Future Outlook



Industry Overview

According to the external commitment of the Chinese government, non-fossil energy will account for 20% of the PRC's primary energy consumption by 2030. Nuclear power, as a clean energy source, embraces critical development opportunities. According to the report named Scenario Study on Energy Emissions under the Realization of Global 1.5°C Target in the PRC (《我國實現全球1.5°C目標下的能源排放情景研究》) prepared by the Energy Research Institute of the National Development and Reform Commission (the "NDRC"), to achieve the 1.5°C temperature control target, the installed capacity of nuclear power should reach 189.41 GW by 2030, the installed capacity of nuclear power should reach 536.95 GW by 2050, and nuclear power shall account for 28.1% of power generation. The domestic policy of safe and efficient development of nuclear power remained unchanged.



**Guaranteed
consumption**

In 2018, the overall economy in the PRC remained within a reasonable range and stable, with general stability and continuing steady progress. According to the Analysis and Forecast Report on the Situation of Electricity Supply and Demand in China in 2018-2019 (《2018-2019年度全國電力供需形勢分析預測報告》) issued by the China Electricity Council (the "CEC"), the electricity consumption in the PRC recorded a year-on-year increase of 8.5% in 2018, which was the highest growth rate in seven years. At the same time, the scale of the PRC's installed power generation capacity increased by 6.5% as compared with the same period of previous year. The increase of electricity consumption in the PRC was for the first time greater than the increase in installed capacity of power generation in the PRC. The power supply and demand throughout the country changed from generally at ease over the past few years to generally balanced. The State has also launched policies securing nuclear power consumption one after another. In November 2018, the NDRC and the National Energy Administration published the Action Plan on Clean Energy Consumption (2018-2020) (《清潔能源消納行動計劃(2018-2020年)》) (the "Action Plan"). The Action Plan required that, when formulating mid-term and long-term plans for the scale of electricity transactions in the market and power generation of the thermal power unit, the relevant departments of local governments shall reserve sufficient priority power generation space for clean energy, and phase down the planned power generation of coal-fired power plant. In September 2018, the Ministry of Justice issued the Atomic Energy Law (Draft for Comments) (《原子能法(徵求意見稿)》) which required that the State shall encourage nuclear power development and implement protective consumption policy of nuclear power. The National Energy Administration also took the lead to promote the pilot run for "full load power generation with favorable tariff" of nuclear power and explored the ways and approaches to realize the full load power generation of nuclear power units, creating favorable conditions for enhancing nuclear power units in terms of economy. Average utilization hours of nuclear power generating units in 2018 across the country reached 7,184 hours, increasing by 76 hours compared with 2017. The utilization rate of nuclear power still remained at a relatively high level.

	Ratio of installed capacity by type of energy (%)		Ratio of generation capacity by type of energy (%)		Average utilization hours (hours)	
	2018	2017	2018	2017	2018	2017
Nuclear power	2.4	2.0	4.2	3.9	7,184	7,108
Thermal power	60.0	62.2	70.4	70.9	4,361	4,209
Hydropower	18.4	19.2	17.6	18.6	3,613	3,579
Wind power	9.5	9.2	5.24	4.8	2,095	1,948

Note: Data from the Analysis and Forecast Report on the Situation of Electricity Supply and Demand in China in 2018-2019 of the CEC.

In 2018, with the further reforms in the national power system, the share of electricity traded in the market further expanded. According to statistics of the CEC, the share of electricity traded in the market accounted for 30.2% of national power generation in 2018, increasing by 4.3 percentage points compared with the corresponding period of last year. Except for Guangdong Province, the volume of electricity traded in the market where our nuclear power bases were located in other provinces recorded a large increase as compared with 2017.

Business Performance and Analysis

As of the end of 2018, we managed 22 nuclear power generating units in operation and six nuclear power generating units under construction. During the year, we had two new nuclear power generating units commencing commercial operation, namely Yangjiang Unit 5 and Taishan Unit 1.

As of December 31, 2018, the number and capacity of nuclear power generating units in operation and nuclear power generating units under construction are as follows:

		As at December 31, 2018	As at December 31, 2017	Growth rate
Nuclear power generating units in operation	Number	22	20	10.00%
	Capacity	24,306 MW	21,470 MW	13.21%
Nuclear power generating units under construction	Number	6	8	-25.00%
	Capacity	7,434 MW	10,270 MW	-27.61%

We will introduce and analyse the Company's business performance in 2018 in respect of five aspects, namely safety management, nuclear power generating units in operation, nuclear power generating units under construction, sales of electricity and lean management.

Safety Management

Safety is crucial to any company. We always adhere to the concept of "Nuclear Safety is Paramount" and our basic principles of "Safety First, Quality Foremost, Pursuit of Excellence", and apply them to various stages of the design, construction, operation and decommissioning of the NPPs. Based on our experience in nuclear power operation over the years, we have established a mature safety management system.

We highly value safety and always place safety at our top priority. We believe that maintaining nuclear power safety is a great responsibility to the State, society, shareholders, employees and other stakeholders. Only with safety can our units in operation maintain stable operation and our units under construction make steady progress, and thus we can achieve constant improvement in our overall results.

We continue to launch activities such as "On-site Management", "Observing Nuclear Safety from Compliance with Procedures" and "Precautionary Education on Nuclear Safety Culture" so as to enhance the nuclear safety culture awareness among all employees. At the same time, we continue to promote internal and external supervision as well as dynamic and transparent experience feedback. We organize regular emergency drills under different emergent scenarios and ensure effective operation of safety management system so as to promote the further enhancement of the Company's safety management level.

According to the INES set by IAEA, the NPPs we operated and managed have maintained our all-time good safety record of no nuclear event at level 2 or above in 2018.

Business Performance and Analysis

In 2018, the number of operational events of our nuclear power generating units in operation are as follows:

Base or NPP	Number of Operational Events As of December 31,	
	2018	2017
Daya Bay Base (including Daya Bay Nuclear Power Station, Ling'ao Nuclear Power Station and Lingdong Nuclear Power Station)	1	0
Yangjiang Nuclear Power Station	1	5
Fangchenggang Nuclear Power Station	0	2
Ningde Nuclear Power Station	2	7
Taishan Nuclear Power Station *	0	N/A
Hongyanhe Nuclear Power Station	1	2

* Taishan Unit 1 commenced commercial operation on December 13, 2018.

According to the INES of the IAEA, as of December 31, 2018, no operational events at level 1 or above occurred in the 22 nuclear generating units we managed, and a total of five deviations without safety significance (below scale/Level 0) occurred.

Note: Nuclear incidents are classified into seven levels in the INES according to their impact on (i) people and the environment, (ii) radiological barriers and control, and (iii) defence-in-depth. Level 1 to Level 3 are termed "incident", while Level 4 to Level 7 are termed "accidents". Events without safety significance are classified as "below scale/Level 0".

For other related activities of safety management, please refer to the 2018 ESG report of the Company.

Nuclear Power Generating Units in Operation

Safe and stable operation of power generating units is the foundation of nuclear power enterprises. In 2018, all nuclear power generating units in operation managed by us maintained safe and stable operation, including Yangjiang Unit 5 and Taishan Unit 1 which have commenced commercial operation, with a total annual on-grid power generation of 157,044.58 GWh, representing a year-on-year increase of 14.02% as compared with that of 2017.

Among which, the total annual on-grid power generation from NPPs managed by our subsidiaries (including Daya Bay Nuclear Power Station, Ling'ao Nuclear Power Station, Lingdong Nuclear Power Station, Yangjiang Nuclear Power Station, Fangchenggang Nuclear Power Station, Ningde Nuclear Power Station and Taishan Nuclear Power Station) amounted to 128,774.43 GWh, representing a year-on-year increase of 11.13% as compared with that of 2017. The total annual on-grid power generation from NPPs managed by our associates (Hongyanhe Nuclear Power Station) amounted to 28,270.15 GWh, representing a year-on-year increase of 29.31% as compared with that of 2017.

On-grid power generation of subsidiaries increased by 11.13%

Name of NPP	On-grid power generation from January to December 2018 (GWh)	On-grid power generation from January to December 2017 (GWh)	Change rate for the same period (%)
<i>From subsidiaries</i>			
Daya Bay Nuclear Power Station	15,751.48	15,720.17	0.20
Ling'ao Nuclear Power Station ¹	14,260.61	14,741.28	-3.26
Lingdong Nuclear Power Station	16,125.83	15,197.19	6.11
Yangjiang Nuclear Power Station ²	35,138.39	29,962.65	17.27
Fangchenggang Nuclear Power Station ³	15,081.60	11,782.05	28.00
Ningde Nuclear Power Station ⁴	31,732.44	28,469.37	11.46
Taishan Nuclear Power Station ⁵		Under construction	N/A
Subsidiaries, total	128,774.43	115,872.70	11.13
<i>From associates</i>			
Hongyanhe Nuclear Power Station ³	28,270.15	21,862.17	29.31
Subsidiaries and associates, total	157,044.58	137,734.87	14.02

Notes:

1. Duration of refuelling outage of Ling'ao Nuclear Power Station in 2018 was longer as compared with 2017.
2. Yangjiang Unit 4 commenced commercial operation on March 15, 2017. Yangjiang Unit 5 commenced commercial operation on July 12, 2018. Duration of refueling outage of Yangjiang Nuclear Power Station in 2018 was longer as compared with 2017.
3. Duration of refuelling outage of Fangchenggang Nuclear Power Station and Hongyanhe Nuclear Power Station in 2018 was longer as compared with 2017. Duration of temporary operation at reduced load or shutdown as requested by power grids was shorter as compared with 2017.
4. Duration of temporary operation at reduced load or shutdown of Ningde Nuclear Power Station as requested by power grids in 2018 was shorter as compared with 2017.
5. Taishan Unit 1 commenced commercial operation on December 13, 2018.

Operation Performance

Capacity factor, load factor and utilization hours are the three indicators normally used by us to evaluate the utilization of nuclear power generating units. They are mainly subject to the effects of refuelling outages for the generating units. According to the arrangements of the annual outage plan, there are certain differences between the duration of refuelling outages for different generating units, and refuelling outages may be implemented over to the next year, resulting in small differences between the duration of outages in different years with respect to the same type of refuelling outage for the same type of generating unit. Meanwhile, load factor and utilization hours of nuclear power generating units are also under the influence of temporary operation at reduced load or shutdown resulting from the demand and supply conditions of the electricity market.

Business Performance and Analysis

In 2018, we had 22 nuclear power generating units in operation, with an average capacity factor of 92.75%, an average load factor of 86.94% and average utilization hours of 7,554 hours, as compared with 89.59%, 79.31% and 6,906 hours of the 20 nuclear power generating units in operation in 2017. The details of the operation performance of generating units we operated and managed in 2018 are as follows:

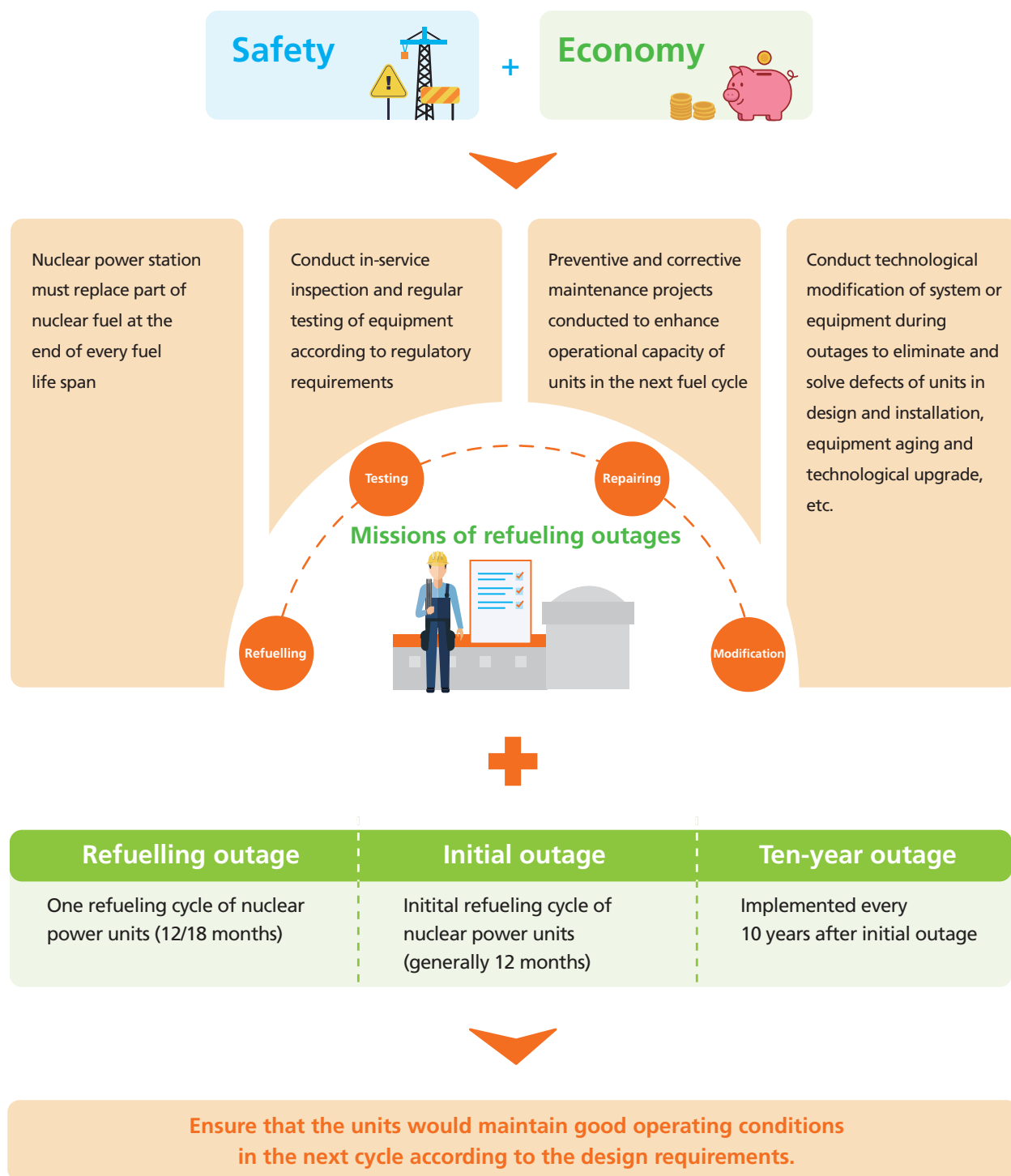
Nuclear power station	Capacity factor (%)		Load factor (%)		Utilization hours (hours)	
	2018	2017	2018	2017	2018	2017
<i>From subsidiaries</i>						
Daya Bay Unit 1 ¹	89.25	99.98	90.34	101.23	7,915	8,869
Daya Bay Unit 2 ²	99.72	88.74	100.87	89.41	8,838	7,834
Ling'ao Unit 1 ³	87.52	89.15	84.19	84.59	7,373	7,408
Ling'ao Unit 2 ⁴	92.09	96.32	87.61	93.22	7,672	8,164
Lingdong Unit 1 ⁵	89.32	86.99	88.12	84.19	7,720	7,369
Lingdong Unit 2 ⁶	98.34	91.33	91.85	85.97	8,047	7,525
Yangjiang Unit 1 ⁷	88.23	99.61	86.09	97.10	7,541	8,506
Yangjiang Unit 2 ⁸	99.98	87.97	99.72	84.17	8,736	7,373
Yangjiang Unit 3 ⁹	91.61	86.49	88.58	83.00	7,759	7,271
Yangjiang Unit 4 ¹⁰	82.42	90.00	73.79	89.41	6,464	7,832
Yangjiang Unit 5 ¹¹	99.60	Under construction	95.05	Under construction	8,326	Under construction
Fangchenggang Unit 1 ¹²	89.60	76.19	83.32	59.05	7,299	5,172
Fangchenggang Unit 2 ¹³	99.98	80.70	85.87	74.25	7,522	6,505
Ningde Unit 1 ¹⁴	88.50	83.66	84.48	79.86	7,401	6,996
Ningde Unit 2 ¹⁵	89.13	98.80	86.30	91.11	7,560	7,981
Ningde Unit 3 ¹⁶	92.54	95.62	89.54	88.20	7,843	7,726
Ningde Unit 4 ¹⁷	99.99	84.38	94.27	60.63	8,258	5,311
Taishan Unit 1 ¹⁸	96.47	Under construction	94.97	Under construction	8,319	Under construction
<i>From associates</i>						
Hongyanhe Unit 1 ¹⁹	99.98	88.92	95.95	79.41	8,406	6,957
Hongyanhe Unit 2 ²⁰	89.80	98.08	84.03	63.77	7,362	5,586
Hongyanhe Unit 3 ²¹	91.17	83.07	71.11	61.46	6,231	5,384
Hongyanhe Unit 4 ²²	85.16	85.76	56.56	36.14	4,956	3,166

Notes:

1. Daya Bay Unit 1 completed a refuelling outage in 2018 and did not conduct any refuelling outage in 2017.
2. Daya Bay Unit 2 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
3. Ling'ao Unit 1 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was longer compared with 2017.
4. Ling'ao Unit 2 completed a refuelling outage in 2018 and did not conduct any refuelling outage in 2017.
5. Lingdong Unit 1 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was shorter compared with 2017.
6. Lingdong Unit 2 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
7. Yangjiang Unit 1 completed a refuelling outage in 2018 and did not conduct any refuelling outage in 2017.
8. Yangjiang Unit 2 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
9. Yangjiang Unit 3 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was shorter compared with 2017.
10. Yangjiang Unit 4 completed the initial outage after commencement of operation in 2018 and its duration was longer, being similar to that of a ten-year outage.
11. Yangjiang Unit 5 commenced commercial operation on July 12, 2018.
12. Fangchenggang Unit 1 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was shorter compared with 2017.
13. Fangchenggang Unit 2 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
14. Ningde Unit 1 commenced a refuelling outage in 2018 and was completed on January 5, 2019. Refuelling outage duration in 2018 was flat compared with 2017.
15. Ningde Unit 2 completed a refuelling outage in 2018 and did not conduct any refuelling outage in 2017.
16. Ningde Unit 3 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was longer compared with 2017.
17. Ningde Unit 4 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
18. Taishan Unit 1 commenced commercial operation on December 13, 2018.
19. Hongyanhe Unit 1 did not conduct any refuelling outage in 2018 and completed a refuelling outage in 2017.
20. Hongyanhe Unit 2 completed a refuelling outage in 2018 and did not conduct any refuelling outage in 2017.
21. Hongyanhe Unit 3 completed a refuelling outage in 2018 and refuelling outage duration in 2018 was shorter compared with 2017.
22. Hongyanhe Unit 4 completed the initial outage after commencement of operation in 2018 and its duration was longer, being similar to that of a ten-year outage.

Business Performance and Analysis

Based on the design of pressurised water reactor (the “PWR”) NPPs, the nuclear reactor of each unit in operation must be shut down and refuelled after a certain period of time. The refuelling intervals are generally 12 to 18 months.



Considering the economic factors and arrangements for related works, refuelling outages intervals of nuclear power generating units are not fixed to every 12 to 18 months. In order to ensure the safe operation of the generating units, we usually take local power load fluctuations into account and communicate with local power grid companies to rationalize the refuelling outage plans for generating units. As the needs for inspection and maintenance projects are different, the duration of each refuelling outage is not identical. More inspection items are required for the initial and ten-year outages, resulting in a longer inspection period compared to that of regular refuelling outages. According to the specific operating conditions of each generating unit, we continue to enhance and develop targeted refuelling outage plans, reasonably arrange inspection and maintenance projects, and actively adopt advanced technology to improve the efficiency of inspection and maintenance, in order to have good control over the duration of each refuelling outage on the premise of ensuring the quality of safety.

In 2018, we successfully conducted 14 refuelling outages, including the refuelling outage of Ningde Unit 3 conducted at the end of 2017 and completed 13 refuelling outages during the year including 2 initial outages. Another one refuelling outage was conducted over to the next year.

In 2018, the total aggregate number of calendar days for refuelling outages was approximately 525 days.



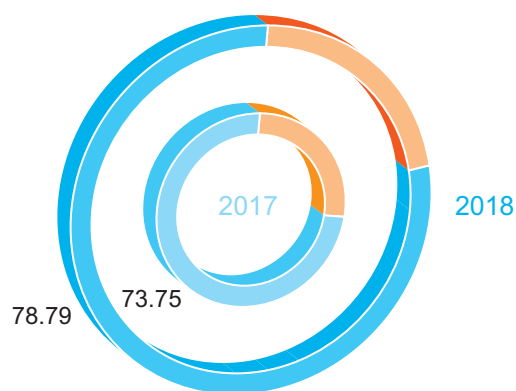
**Pursuit
of
Excellence**

"Pursuit of Excellence" is one of the basic principles of the Company. In order to discover our inadequacies and make sustained improvements, we continue to compare our indicators with international counterparts. When compared with the one-year benchmark value of the 12 performance indicators for the PWR set by WANO, for our nuclear power units, the ratio of performance indicators achieving the world's top 1/4 level and top 1/10 level remained at a high level. Ling'ao Unit 1 has been operating without unplanned reactor shutdown for more than 4,600 days (excluding refueling outages duration) and continued to rank No. 1 among units of the same type in the world.

The following table indicates the comparison of our 22 nuclear power generating units for 2018 and the one-year benchmark value of the 12 performance indicators for the PWR set by WANO in 2017:

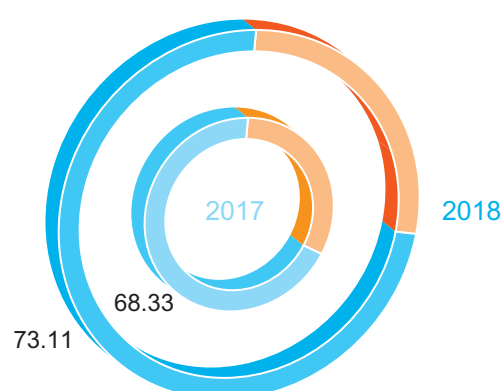
	2018	2017
Number of units	22	20
Total number of indicators	264	240
Including:		
Number of indicators ranked top 1/4 level in the world	208	177
Number of indicators ranked top 1/10 level in the world	193	164

Percentage (%) of indicators ranked top 1/4 level in the world



● CGN Power ● Others

Percentage (%) of indicators ranked top 1/10 level in the world



● CGN Power ● Others

Business Performance and Analysis

Environmental Performance

We continued to improve radioactive waste management, optimize emissions discharge process and strictly comply with emission control standards. In 2018, the radioactive waste management of the 22 generating units in operation managed by us has strictly complied with the national laws and regulations, and has met the standards of the relevant technical specifications.

The following table sets forth the amounts and percentages of the various types of radioactive waste discharged at our NPPs for the period indicated as a percentage of the national standards. The amounts of all of the radioactive substances discharged by all of our NPPs were below the applicable PRC limits.

	Daya Bay Base Area (including Daya Bay Nuclear Power Station, Ling'ao Nuclear Power Station and Lingdong Nuclear Power Station)		Yangjiang Nuclear Power Station		Fangchenggang Nuclear Power Station		Ningde Nuclear Power Station		Taishan Nuclear Power Station		Hongyanhe Nuclear Power Station	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Discharged liquid radioactive waste (radionuclides other than tritium) as a percentage of the national standards	0.35%	0.47%	0.29%	0.38%	0.43%	0.78%	0.30%	0.38%	0.54%	Under construction	0.21%	0.22%
Discharged gas radioactive waste (inert gases) as a percentage of the national standards	0.56%	0.44%	0.24%	0.30%	0.35%	0.39%	0.30%	0.51%	0.71%	Under construction	0.21%	0.15%
Solid radioactive waste (m ³)	248.6	276.4	44.8	42.8	64.6	101.3	136.8	129.6	0	Under construction	159.6	196.8
Results of environmental monitoring	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal

Note: The main reason for changes in the data includes: the refuelling outage plan is different for every unit, maintenance projects are different, Yangjiang Unit 5 and Taishan Unit 1 were put into commercial operation in 2018.

The national regulatory authority continuously monitored the air-absorbed rates in the periphery of our nuclear power generating units in operation in the PRC. The monitoring data indicated that the air-absorbed rates fell within the fluctuation range of local background radiation levels.

Nuclear power is a clean energy source that contributes to energy saving and emissions reduction to the society. Our annual on-grid nuclear power generation in effect represented a reduction of approximately 48.3697 million tons of standard coal consumption, approximately 132.5456 million tons of CO₂ emissions, with an equivalent effect of planting a forest of approximately 0.3534 million hectares.

Nuclear Power Generating Units under Construction

The quality of units under construction is important for the safe and efficient operations of nuclear power generating units after commencement of operation. We meticulously organize project construction in strict compliance with the requirements of relevant laws and regulations. We would enter into the next phase of work only after passing the inspection of the national regulatory authorities which confirmed our compliance with the requirements. We also attach importance to learning from experience feedbacks of domestic and foreign NPP construction, and improving of the safety and quality of our construction work.



Safety

As of December 31, 2018, among six nuclear power generating units we construct, two were in the commissioning phase, three were in the equipment installation phase and one was in the civil construction phase.



Order

We control, supervise and manage aspects including the safety, quality, progress, investment, technology and environment of our construction projects, so as to ensure that the projects under construction comply with various regulatory requirements and facilitate safe, stable and economical operation of the units after commencement of commercial operation.

	Nuclear Power Generating Units	Civil Construction Phase ¹	Equipment Installation Phase ²	Commissioning Phase ³	Grid Connection Phase ⁴	Expected Date of Commencement of Operation
<i>From subsidiaries</i>						
Completed the hot functional test on February 23, 2019.	Yangjiang Unit 6			√		Second half of 2019
Completed the hot functional test on January 25, 2019.	Taishan Unit 2			√		2019
Entered the equipment installation phase on May 23, 2018.	Fangchenggang Unit 3		√			2022
	Fangchenggang Unit 4	√				2022
<i>From associates</i>						
	Hongyanhe Unit 5		√			Second half of 2020
	Hongyanhe Unit 6		√			2021

Notes:

- 1 "Civil construction" phase refers to the process from the First Concrete Day (FCD) to the proper roof installation of the main plant of the nuclear reactor.
- 2 "Equipment installation" phase refers to the process from the installation of nuclear island equipment upon the roof installation of the main plant of the nuclear reactor to the nuclear island main system meeting the conditions to conduct cold function tests.
- 3 "Equipment commissioning" phase refers to the process of conducting cold function tests for nuclear island main system and commencing joint debugging for the power plant.
- 4 "Grid connection" phase refers to the commissioning of generators upon the first grid connection with the power grid, demonstrating that the power generating units are capable for power generation.

Business Performance and Analysis

The construction process of nuclear power generating units may be affected by various factors including, among others, delivery delays, increase in the cost of key equipment and materials, delay in obtaining regulatory approvals, permits or licenses, unexpected engineering, environmental or geological problems, change of localization ratio as well as the implementation of additional PRC regulatory and safety requirements for nuclear safety, so the actual date of commencement of operation may be different from such expected date. We will disclose updated information pursuant to the relevant requirements from time to time.

Sales of Electricity

Over 90% of the Group's revenue came from sales of electricity by our subsidiaries. We sell the electricity generated by our NPPs based on electricity sales contracts. In 2018, the on-grid power generation of our subsidiaries was 128,774.43 GWh and the sales revenue of electricity was approximately RMB46,071.8 million, representing 90.6% of our operating revenue for the year.



Strive for target

In 2018, the condition of oversupply of electricity in the PRC has improved. As the economic development condition of each region differs, the demand and supply for electricity in some provinces where our nuclear power generating units are located varies. In light of the complex power market situation, the Company adopted the power sales strategy of "striving for more shares of planned on-grid power generation, striving for better market power generation and power tariff and striving for development and utilization of incremental market", and completed our power plan for the year and guaranteed the overall economic benefits of the Company.



Favorable power price



Seize development

We actively communicated and coordinated with national competent departments to promote the efficient implementation of the Provisional Measures for Nuclear Power Offtake under the Condition of Securing Nuclear Safety (《保障核电安全消纳暂行办法》) in various provinces. In November 2018, the NDRC and the National Energy Administration issued the Action Plan, providing good conditions for securing nuclear power consumption.



Maintain efficiency

In 2018, our nuclear power generating units in operation achieved a total on-grid power generation of 157,044.58 GWh, representing a year-on-year increase of 14.02%, including the market-based power generation volume of approximately 37,380.91 GWh from the other nuclear power generating units excluding Guangdong province, accounting for approximately 23.80% of the on-grid power generation, representing a year-on-year increase of 9.37 percentage points over the corresponding period in 2017.

While striving to increase on-grid power generation, we also paid close attention to the on-grid tariffs of operating units. In 2018, the on-grid tariffs of planned power generation by commercial nuclear power units of the Company remained stable. As the oversupply condition of electricity improved, on-grid tariffs of market-based power generation became rational and its difference with on-grid tariffs of planned power generation was narrowed every year. In 2018, average electricity tariff of other nuclear power units' electricity traded in market (except Guangdong province) was approximately RMB0.3492/kWh (VAT included).

Guangdong province



The electricity consumption in Guangdong province increased by 6.1% in 2018 over the corresponding period of previous year. In 2018, the Company and Guangdong Provincial Government have agreed that, in order to prevent uncertainties caused by market volatility, the Company's nuclear power units in Guangdong province will participate in electricity market in the "full load power generation with favourable tariff" model in 2018, which is expected to be maintained in the next two years.

Fujian province



The electricity consumption in Fujian province increased by 9.5% in 2018 over the same period of previous year. In 2018, by pursuing more market-based generation and generation right transactions, the on-grid power generation of Ningde Nuclear increased by 11.46% over the corresponding period of previous year.

Liaoning province



The electricity consumption in Liaoning province increased by 7.8% in 2018 over the corresponding period of previous year. In 2018, as the electricity transmission lines of Hongyanhe Nuclear have completed, we strived for expanding outbound electricity quota and electricity sales channels, and the on-grid power generation of Hongyanhe Nuclear increased by 29.31% over the corresponding period of previous year.

Guangxi Zhuang Autonomous Region



The electricity consumption in Guangxi Zhuang Autonomous Region increased by 17.8% in 2018 over the corresponding period of previous year. Since we developed new market and participated in cross-district electricity transmission, the on-grid power generation of Fangchenggang Nuclear increased by 28.00% over the corresponding period of previous year.

Business Performance and Analysis

As of December 31, 2018, the on-grid tariffs (VAT included) of the planned electricity sales of our nuclear power generating units in operation is as follows:

		On-grid Tariffs (VAT included) (RMB/kWh)
Nuclear Power		
Generating Units	Clients	
Daya Bay Unit 1	Guangdong Power Grid Co., Ltd.	0.42
Daya Bay Unit 2	Guangdong Power Grid Co., Ltd.	0.42
Ling'ao Unit 1	Guangdong Power Grid Co., Ltd.	0.429
Ling'ao Unit 2	Guangdong Power Grid Co., Ltd.	0.429
Lingdong Unit 1	Guangdong Power Grid Co., Ltd.	0.43
Lingdong Unit 2	Guangdong Power Grid Co., Ltd.	0.43
Yangjiang Unit 1	Guangdong Power Grid Co., Ltd.	0.43
Yangjiang Unit 2	Guangdong Power Grid Co., Ltd.	0.43
Yangjiang Unit 3	Guangdong Power Grid Co., Ltd.	0.43
Yangjiang Unit 4	Guangdong Power Grid Co., Ltd.	0.43
Yangjiang Unit 5	Guangdong Power Grid Co., Ltd.	0.43
Fangchenggang Unit 1	Guangxi Power Grid Co., Ltd.	0.4207
Fangchenggang Unit 2	Guangxi Power Grid Co., Ltd.	0.4207
Ningde Unit 1	Fujian Electric Power Co., Ltd.	0.43
Ningde Unit 2	Fujian Electric Power Co., Ltd.	0.43
Ningde Unit 3	Fujian Electric Power Co., Ltd.	0.4055
Ningde Unit 4	Fujian Electric Power Co., Ltd.	0.3717
Hongyanhe Unit 1	Liaoning Electric Power Co., Ltd.	0.4142
Hongyanhe Unit 2	Liaoning Electric Power Co., Ltd.	0.4142
Hongyanhe Unit 3	Liaoning Electric Power Co., Ltd.	0.4142
Hongyanhe Unit 4	Liaoning Electric Power Co., Ltd.	0.4142

Note: According to the Notice on Reducing the On-grid Tariffs of Some Power Generation Enterprises (《關於降低部分發電企業上網電價的通知》) issued by the Fujian Provincial Price Bureau in September 2018, the on-grid tariff of Ningde Units 1 to 4 was confirmed by both Ningde Nuclear and Fujian Electric Power Co., Ltd (福建省電力有限公司).

Under normal circumstances, local power grid company will pay 80% of the benchmark on-grid tariff of the local coal-fired generating unit (desulfurization) as the provisional tariff during the period between the unit is put into commercial operation and the on-grid tariff of the planned power generation is approved, and such portion of the tariff will be retroactively settled after the approval of the commercial tariff. According to the approval document we received on March 27, 2019, the trial on-grid tariff for planned generation of Taishan units is set at RMB0.4350/kWh (tax inclusive) effective from the date of production commencement to the end of 2021. For details, please refer to the relevant announcement of the Company on March 28, 2019.

Lean Management

We continue to put efforts into lean management. In 2018, we made certain achievements in lean management.

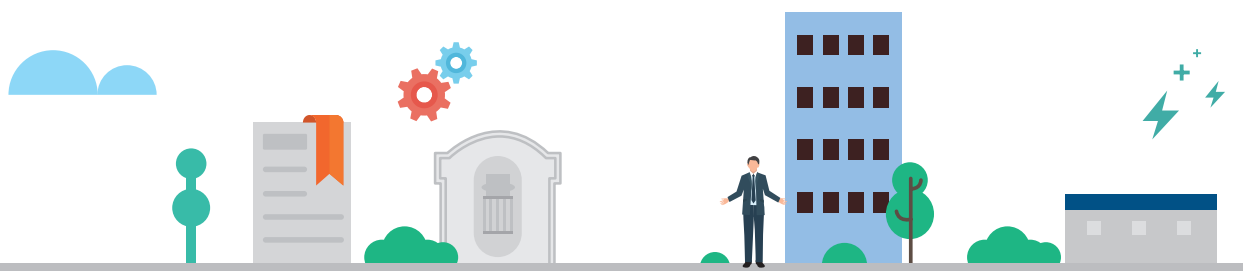
In order to effectively control the operation and maintenance costs of power stations, we have formulated a cost control plan for the past three years based on the results of benchmarking with domestic and overseas counterparts, and issued standards for different items of cost and expense. Based on these standards, each NPP and specialized company actively improved the independent maintenance rate and utilization rate of standard working hours, continuously optimized the preventive maintenance strategy of equipment, promoted business integration, and strengthened the coordination and management of contractors, etc. With the effective implementation of these measures, the Company basically achieved the cost control target of 2018 under the premise of ensuring safety and quality.

Future Outlook

With the PRC's economy entering into a period of high-quality development, and the ongoing intensified implementation of power system reform, the Company's development and operation are facing a lot of new requirements and new changes. We will adhere to the nuclear safety culture with "Honesty and Transparency" and the basic principle of "Safety First, Quality Foremost, Pursuing Excellence" as well as the core value of "Doing Things Right in One Go" to explore new ideas, actively plan and respond.

In 2019, we plan to carry out the following initiatives:

- We will fully implement the requirements of the Nuclear Safety Law and strengthen nuclear safety management and responsibilities;
- In the premise of ensuring safety and quality, we will push forward construction of generating units as planned. Two generating units under construction (Yangjiang Unit 6 and Taishan Unit 2) are expected to commence commercial operation in 2019;
- We will ensure the safe and stable operation of all the generating units in operation. We plan to conduct 17 refuelling outages during the year (including an initial refuelling outage). According to the regular arrangement of power grids during holidays, we plan to mainly conduct five refuelling outages in the first quarter, six in the second quarter, three in the third quarter, and three in the fourth quarter of 2019;
- We will adapt to the changes in the electricity market situation, continuously optimize the marketing system, and mechanism of electricity market, and develop the capabilities of the marketing team for sales of electricity to strive for more on-grid generation through various channels and initiatives, striving to achieve an average utilization hour of generating units in 2019 not less than that in 2018;
- We will promote reliability of fuels and equipment, and improve safety system performance of power generating units with business growth driven by independent innovation such as application of technology innovation and technical transformation, in order to facilitate the sustainable development of the Company;
- We will continuously push forward the implementation of specialization, centralization and standardization management strategy and lean management and strengthen internal resource coordination and cooperation to effectively control construction cost of units under construction as well as operation and management cost of generating units in operation; and
- We will closely follow the change of national policy, domestic and international economic and financial environment, adhere to the principle of prudence, identify changes in risks in a timely manner through operation of risk management system, and adjust our measures when appropriate to ensure the steady development of the Company.



Clean



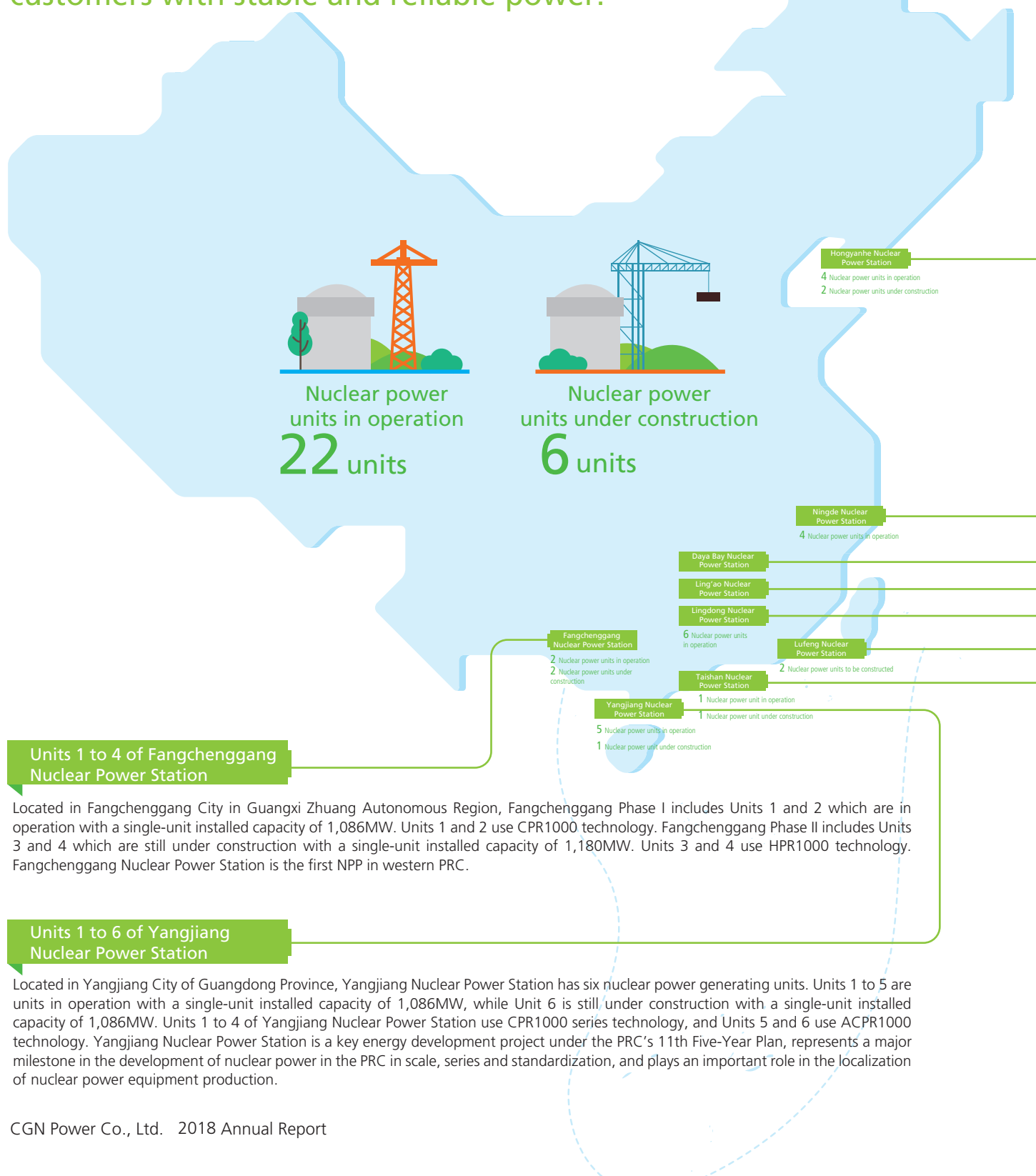
Capitals

44	Production Capital
50	Intellectual Capital
55	Human Capital
65	Financial Capital
73	Environmental Capital
75	Social and Relationship Capital



Production Capital

Our production capital is mainly our investments in nuclear power units (including those in operation and under construction), as well as the ongoing optimized management strategies. With these capitals, we continue to provide customers with stable and reliable power.



Units 1 to 6 of Hongyanhe Nuclear Power Station

Located in Dalian City of Liaoning Province, Hongyanhe Nuclear Power Station has six nuclear power generating units. Units 1 to 4 are units in operation with a single-unit installed capacity of 1,119MW, while Units 5 and 6 were still under construction with a single-unit installed capacity of 1,119MW. Units 1 to 4 of Hongyanhe Nuclear Power Station use CPR1000 technology, while Units 5 and 6 use ACPR1000 technology. Hongyanhe Nuclear Power Station is the first NPP that commenced commercial operations in Northeast PRC.

Units 1 to 4 of Ningde Nuclear Power Station

Located in Ningde City of Fujian Province, Ningde Nuclear Power Station has four nuclear power generating units in operation with a single-unit installed capacity of 1,089MW. All four units use CPR1000 technology. Ningde Nuclear Power Station is the first NPP that commenced commercial operation in Fujian Province of PRC.

Units 1 and 2 of Daya Bay Nuclear Power Station

Located in Shenzhen City of Guangdong Province, Daya Bay Nuclear Power Station has two nuclear power generating units, both of which have a single-unit installed capacity of 984MW and use M310 technology. Daya Bay Nuclear Power Station is a large commercial PWR NPP that was built in the PRC by utilizing foreign Investment, advanced technology and management experience. Unit 1 commenced commercial operation on February 1, 1994 and is the first commercial nuclear power unit that commenced commercial operation in the PRC.

Units 1 and 2 of Ling'ao Nuclear Power Station

Located in Shenzhen City of Guangdong Province, Ling'ao Nuclear Power Station is adjacent to Daya Bay Nuclear Power Station. It has two nuclear power generating units in operation, both of which have a single-unit installed capacity of 990MW and use M310 technology. Ling'ao Nuclear Power Station is the second large-scale commercial NPP built in Guangdong Province following Daya Bay Nuclear Power Station. Leveraging our experience gained in the construction of the Daya Bay Nuclear Power Station, Ling'ao Nuclear Power Station met international standards for NPP operation design and construction with fully localized project management, construction and installation, commissioning and operations preparation, and partially localized design and equipment manufacturing.

Units 1 and 2 of Lingdong Nuclear Power Station

Located in Shenzhen City of Guangdong Province, Lingdong Nuclear Power Station is adjacent to Daya Bay Nuclear Power Station and Ling'ao Nuclear Power Station. It has two nuclear power generating units in operation, have a single-unit installed capacity of 1,087MW and use CPR1000 technology. Lingdong Nuclear Power Station is the third large-scale commercial NPP built in Guangdong Province following Daya Bay Nuclear Power Station and Ling'ao Nuclear Power Station. It is an exemplary project for the PRC's domestically developed modified CPR1000 gigawatt-level nuclear power technology, and is also the PRC's first gigawatt-level NPP designed, manufactured, constructed and operated in reliance upon the PRC's domestic service providers and equipment suppliers.

Units 1 and 2 of Lufeng Nuclear Power Station

Located in Lufeng City in Guangdong Province, Lufeng Phase I includes Lufeng Units I and 2, and total installed capacity of 2,500MW. Lufeng Phase I obtained the approval letter in relation to the launch of preliminary work of Lufeng Phase I (《關於同意陸豐核電一期項目工程開展前期工作的函》) from the NDRC on December 27, 2010, and was approved by the NDRC on March 13, 2013 to adopt the third-generation nuclear power technology of AP1000.

Units 1 and 2 of Taishan Nuclear Power Station

Located in Taishan City of Guangdong Province, Taishan Nuclear Power Station has two nuclear power generating units. Unit 1 is a unit in operation with a single-unit installed capacity of 1,750MW, while Unit 2 is a unit under construction with a single-unit installed capacity of 1,750MW. Both nuclear power generating units use EPR technology. Taishan Nuclear Power Station was invested and constructed by a Sino-French joint venture and adopts the third-generation nuclear power technology of EPR.

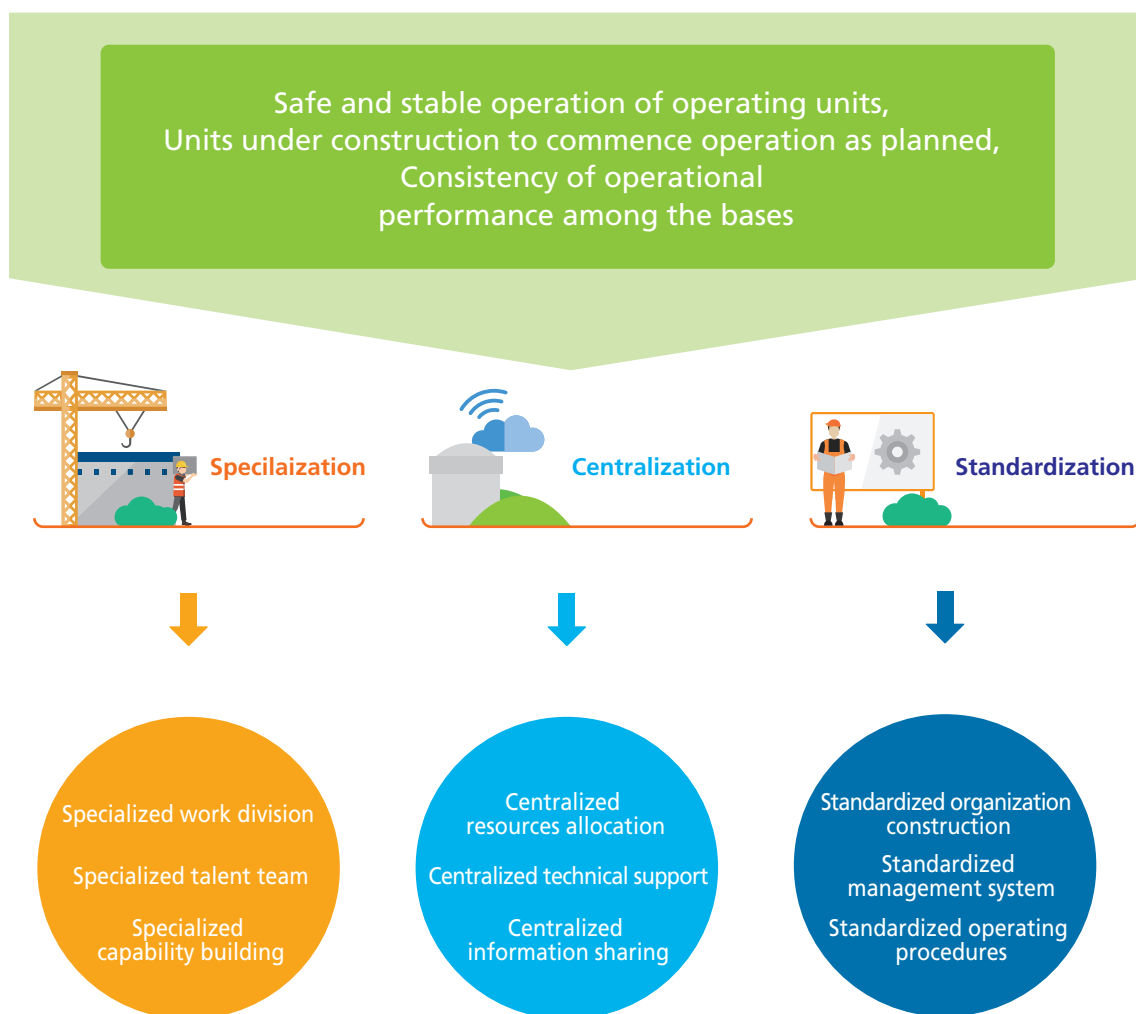
Production Capital

Management Strategy

Since the Daya Bay Nuclear Power Station commenced commercial operation, the Company has gone through the development stages from a single power station to a nuclear power base comprising multiple power stations, and then from managing a single nuclear power base to managing multiple nuclear power bases. To adapt to the trend, we continue to optimize our management strategies. Over the years, through implementation of benchmarking, we carried out multi-layered safety supervision and evaluation, promoted the SCS management, continuously promoted safety management of the Company to enable the Company to continuously adapt to changes of internal and external situations, thereby promoting our ongoing improvement in operational level and performance.

SCS Management

To maintain the safe and stable operation of operating units, ensure successful commencement of commercial operation of units under construction and achieve good operational performance of all bases, the Company has implemented SCS management on all nuclear power bases.



For specialization, the Company owns specialized companies including CGN Operations, CNPRI, SNPI and CGN Engineering, to promote refueling outage, engineering modification, equipment management, spare parts management as well as design and construction of NPPs. In addition, regarding major projects, we form technical teams made up of professionals from various NPPs and specialized companies to be responsible for the implementation of the projects.

For centralization, we continuously enhanced economy of power generating units and maximized overall value through centralized management such as by means of resources allocation, effective operation of centralized platform and information sharing.

For standardization, we established the OPST (Organization, Procedure and process, Knowledge and skill and System tools) management model for key operating areas, which are unified organization and management system, unified skill standards and procedure and process system, unified job qualification and authorization training system, and unified operation management tools.



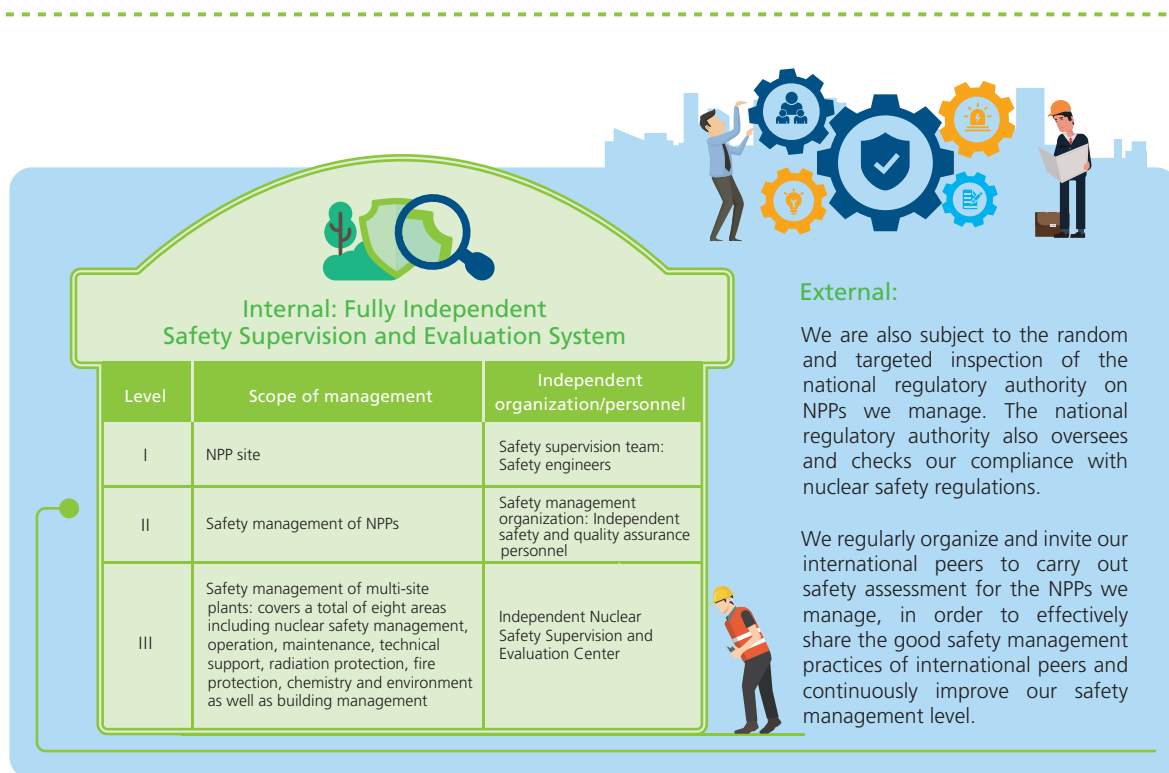
Ningde Nuclear Power Base

Production Capital

Safety Management

Nuclear safety is the bedrock of nuclear power companies. We adhere to the principles of “Nuclear Safety is Paramount” and “Safety First”. These principles are reflected throughout all stages in the design, construction and operation of the NPPs. The overall goal of nuclear safety is: to establish and maintain an effective defense system in NPPs for protecting people, society and the environment from radioactive hazards. In the operations of NPPs, we always put safety first, strictly abide by the national laws, regulations, guidelines and standards, and earnestly fulfill our commitments, out of our conviction that “only a safe NPP can be economical”. The Company is committed to the safety culture construction with “demonstration by leaders, implementation by backbones, participation by all employees”, and has set up a complete safety management system with defense-in-depth management principle, adopted highly transparent and effective experience feedback, carried out wholly independent safety supervision and evaluation and established emergency response and disposal mechanism under emergency conditions, so as to ensure the safe, economical and reliable operation of our NPPs and the safety of the society and the public.





Highly Transparent and Effective Experience Feedback System

The NPP experience feedback system is an integral part in the safe operation of an NPP. Our experience feedback system is based on detection of events. It adheres to a transparent event reporting system for root cause analysis, developing corrective actions targeting at root causes, and forming a dynamic and transparent experience feedback system to prevent reoccurrence of events. While focusing on feedbacks for issues arose and experience gained during the operation and management of NPPs, we also regularly conclude and strengthen our good practices, and learn from external experience and feedbacks through continuous exchanges with peers to facilitate enhancement of our safety management.

Vigilant Nuclear Emergency Response and Disposal System

In order to respond quickly and effectively to nuclear emergencies, NPPs must have well-conceived general contingency plans and adequate emergency preparations, and establish a vigilant nuclear emergency response and disposal system. We have a full-coverage emergency management system focusing on nuclear emergency response, a multi-layer emergency defense mechanism, professional emergency response facilities, and adequate qualified emergency response personnel. We have implemented a comprehensive emergency preparedness system in all NPPs we manage and organized different scales of emergency exercises in a timely manner to ensure rapid response to any emergencies.

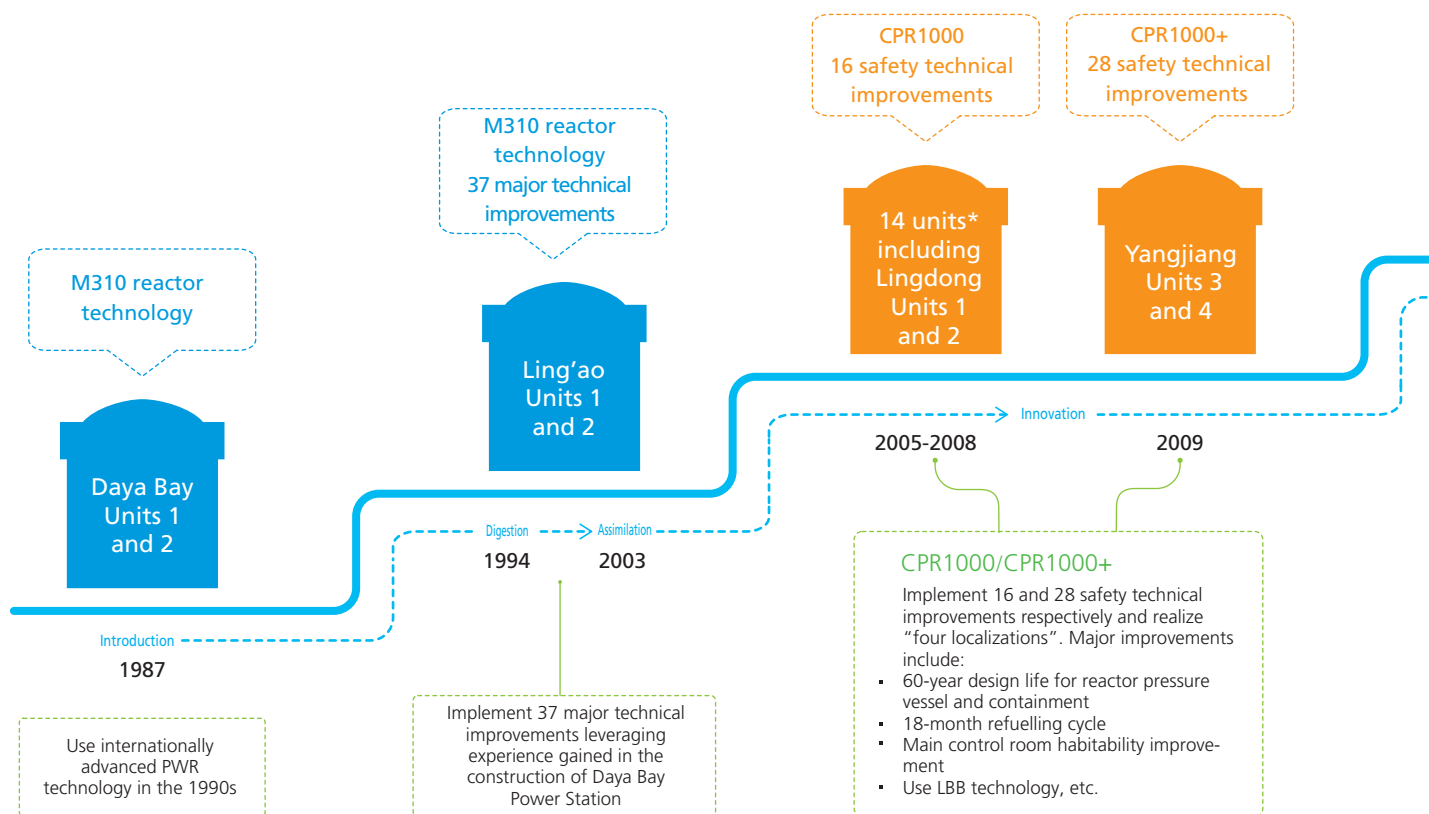
Intellectual Capital

Strong technical foundation and technical R&D capabilities are among the core resources for our sustainable development. We always focus on technical R&D that improves our business performance to enhance our competitiveness and growth.

Selection and Development of Nuclear Technologies

We focus on the development of PWR technology. Since the construction of Daya Bay Nuclear Power Station in 1980s, we have persisted in the path of "Introduction, Digestion, Assimilation and Innovation" ("引进、消化、吸收、创新"), and have consistently improved our technology.

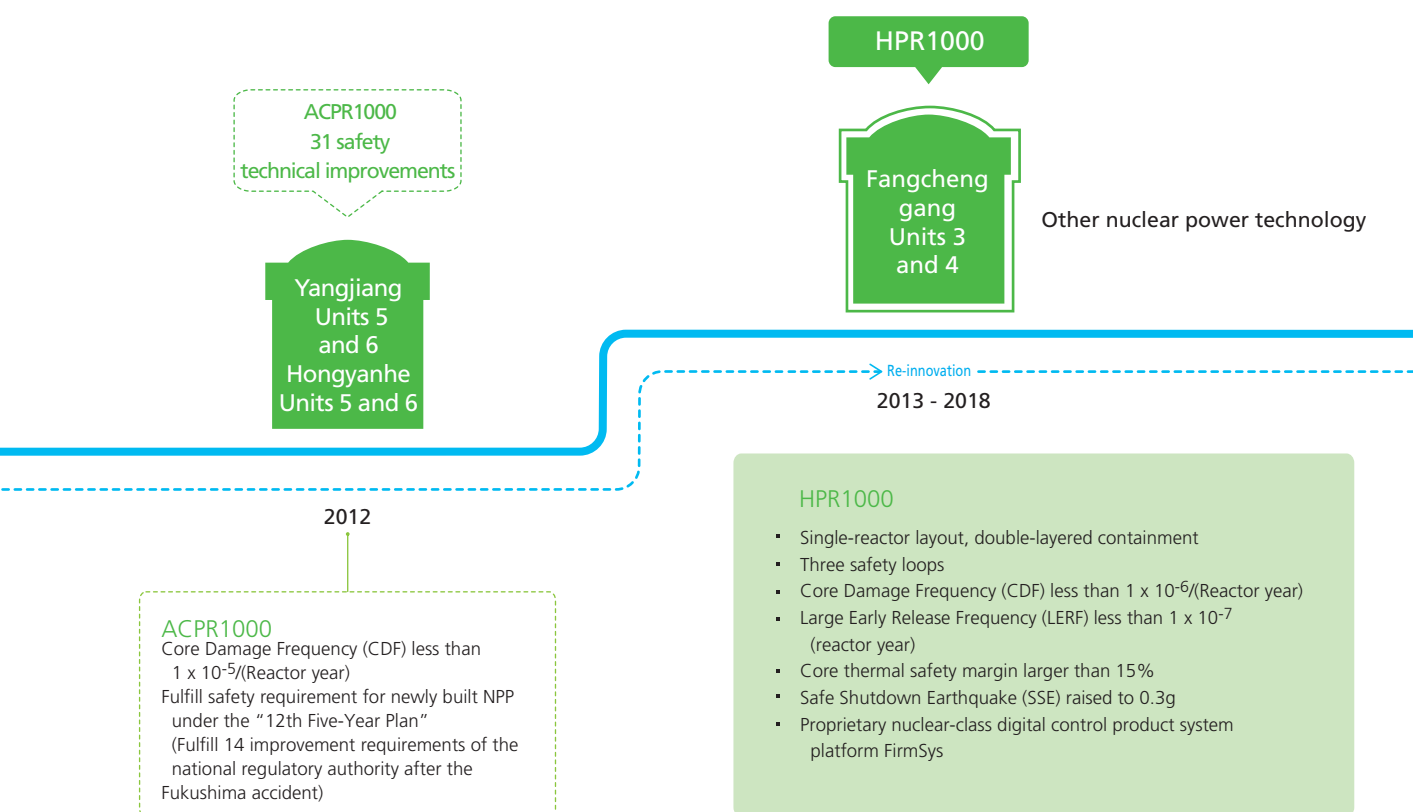
On the foundation of the M310 reactor technology used by Daya Bay Nuclear Power Station, we worked with CGNPC in implementing a series of major technological improvements (including 16 safety technology improvements) to create the second-generation improved CPR1000 series nuclear power technology with our own brand. In reference to the latest international safety standards and feedbacks of the latest experience, we have implemented 31 safety technical improvements on the foundation of the CPR1000 technology to develop and create the ACPR1000 technology which has the major features of third-generation nuclear power technology.



* Including Lingdong Units 1 and 2, Hongyanhe Units 1-4, Ningde Units 1-4, Yangjiang Units 1 and 2 and Fangchenggang Units 1 and 2

We own the proprietary intellectual property rights of the third-generation nuclear power technology HPR1000. HPR1000 is a gigawatt-level third-generation nuclear power technology with proprietary intellectual property rights developed on the basis of experience, technology and talents from the PRC's NPP design, construction, operation and development for more than three decades. Compared with other third-generation nuclear power technology, HPR1000 enjoys full competitiveness on safety and economy aspects. The independent development of HPR1000 has laid the technical foundation for subsequent nuclear power development of the Company. Fangchenggang Unit 3 and 4 are the demonstration projects of the HPR1000 technology and the reference plant of Bradwell B Project in the United Kingdom. Fangchenggang Units 3 and 4 have commenced construction on December 24, 2015 and December 23, 2016, respectively. The construction of the two generating units is currently progressing smoothly.

The PRC has made it clear that the third-generation nuclear power technology will be the main stream in the future nuclear power projects. We have already mastered the major third-generation nuclear power technology in the world and possess the corresponding construction and maintenance capacity.



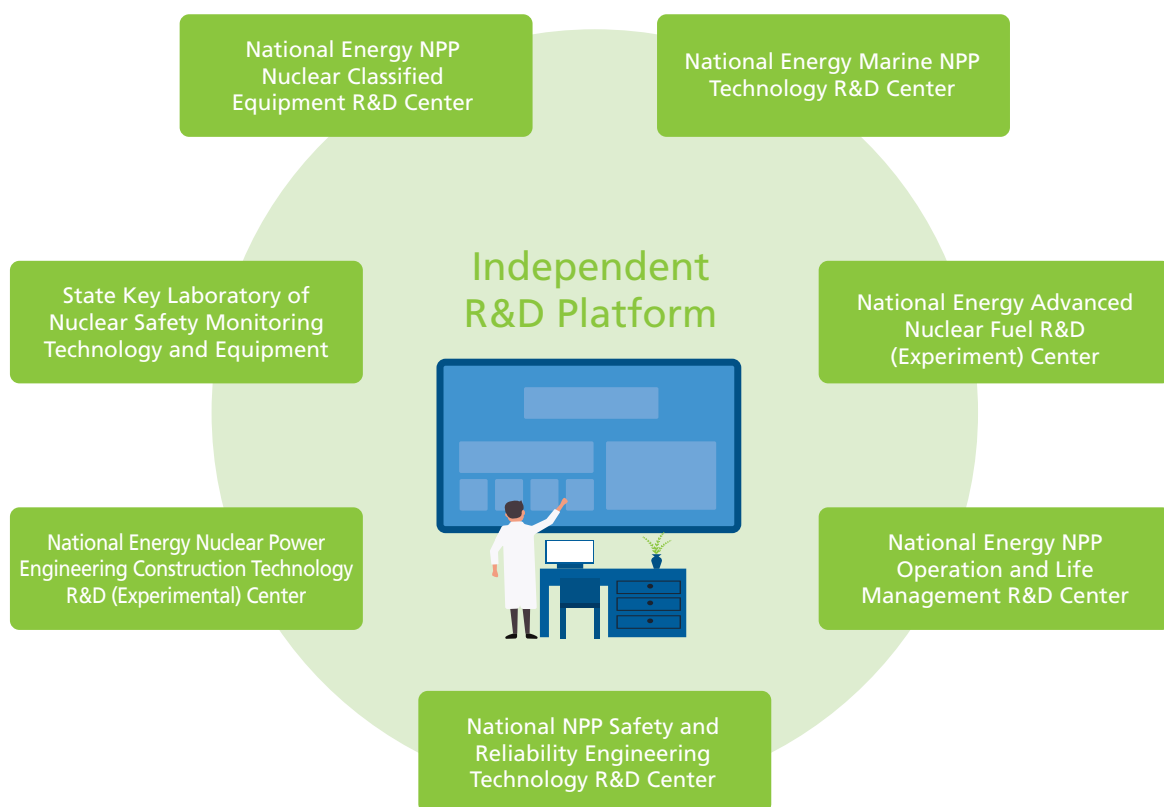
Intellectual Capital

We are also independently developing ACPR50S, a small offshore NPP with high safety, modularity and versatility. It is more economically competitive than conventional marine energy and is suitable for comprehensive supply of heat, electricity and fresh water in marine resource development activities, as well as suitable for energy supply and emergency support for islands, coastal areas and river regions. It is also an important choice for distributed marine integrated energy systems. Actively developing the ACPR50S offshore small reactor will help the company seize the opportunity of the offshore small reactor market, and seize the future development of nuclear power. At present, the preliminary design of the offshore small reactor has been completed, and actively applying for the construction permit to test platform from relevant state authorities is underway.

We continue to track the latest development of fourth-generation reactor technology at home and abroad, and actively participate in the R&D of related technologies to maintain competitiveness and lay the foundation for the sustainable development of the Group.

Independent R&D Platform

We have developed R&D platform of our Company. We own seven national R&D centers and key laboratories, and have established a number of large laboratories of advanced level within the industry. The establishment of independent R&D platform will help shorten the transformation cycle of scientific and technological achievements, improve the maturity, matching and engineering level of existing scientific and technological achievements, accelerate the reform of our production technology, promote the upgrading of technology, and provide us with basic technical support for introduction, digestion and assimilation of the advanced technologies from foreign countries. As at the end of 2018 we had more than 5,500 R&D staff.



R&D of Key Technologies

Relying on our own R&D platforms, we continue to study and solve key technical issues in the construction and operation of NPPs, and continuously improve the safety, reliability and economy of units. We have also promoted part of the key technologies to markets outside of the Group, thus increasing our business opportunities.

We have successfully developed a number of technical innovations, and we will select some of our important achievements every year to introduce in our annual report. We continue to introduce some of the major technologies recently applied as follows.

Name of technology/ equipment	Summary of the technology	Benefits
Reactor pressure vessel inspection and maintenance and jamming main bolt emergency removal equipment	<p>This equipment is specially developed for the process of inspection and repairment, including removal of jamming bolt from reactor pressure vessel and screw hole repair, and flange sealing surface polishing. The equipment has high level of automation and can be operated remotely so that it can reduce working time and improve work accuracy, thus significantly improving the efficiency and quality of inspection and maintenance.</p> <p>This equipment broke up the monopoly of foreign countries, and reached an internationally advanced level.</p> <p>Supply contracts were entered into with Ling'ao Nuclear Power Station, Hongyanhe Nuclear Power Station, Fangchenggang Nuclear Power Station, Yangjiang Nuclear Power Station and Ningde Nuclear Power Station.</p>	Enhanced economy and safety
Improved WiFi wireless communication system for NPPs	<p>This technology combines the Internet of Things (IoT) technology and WiFi technology to transform nuclear power communication from the traditional one-way, single digital and voice mode to the multi-directional, multilateral big data and video communication mode, thereby improving the efficiency of power station management. The basic network platform for nuclear power operation big data transmission has also been established, to achieve real-time monitoring of various pipelines and data of instruments and apparatus during the operation of NPPs, and has enhanced the safety and reliability of power station operation.</p> <p>It is the first of its kind at home and abroad, reached an international advanced technology level, and has obtained the invention patent authorization certificate in Europe and the United States.</p> <p>The system was deployed at Fangchenggang Nuclear Power Station and Ningde Nuclear Power Station.</p>	Enhanced reliability and safety

Intellectual Capital

Intellectual Property Rights

Technical improvements and innovations can enhance the operational and safety performance of NPPs, and at the same time we also pay attention to acquire intellectual property rights accordingly during the course of technical R&D. We believe that owning these intellectual property rights will strengthen our competitiveness.

Statistics of our intellectual property rights from 2014 to 2018

Year	Patent (Item)						Authorship Registration (Item)	
	Patent Application			Patent Licensing			Software	Others
	Invention	Utility Model	Design	Invention	Utility Model	Design		
2014	292	198	0	54	249	1	51	4
2015	285	229	0	101	241	0	107	2
2016	458	272	2	239	234	6	128	22
2017	437	413	3	269	267	1	140	25
2018	600	443	3	229	424	2	138	9
Total	2,072	1,555	8	892	1,415	10	564	62

In 2018, the invention patent, “NPP Passive Reactor Cavity Flooding System and Method” of CGN Engineering won the 20th China Patent Silver Award awarded by the National Intellectual Property Administration, and the invention patent, “Integral Bolt Tensioner for Nuclear Reactor Pressure Vessels and its operation technique” of the CNPRI and Ling’ao Nuclear won the 20th China Outstanding Patent Award awarded by the National Intellectual Property Administration.

Human Capital

Having a team of sufficiently competent and experienced employees is the most valuable treasure of the Company. We always pay attention to the reasonable use and maintenance of human capital, and continuously improve the development and management system of human resources, thus cultivating a talented team with excellent management and technical personnel.

Talent Force

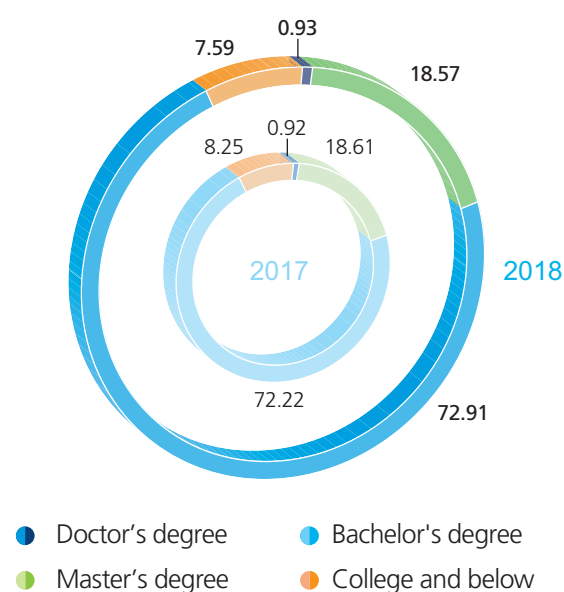
As at the end of 2018, we had 18,663 employees (excluding our affiliates).

Employee Structure

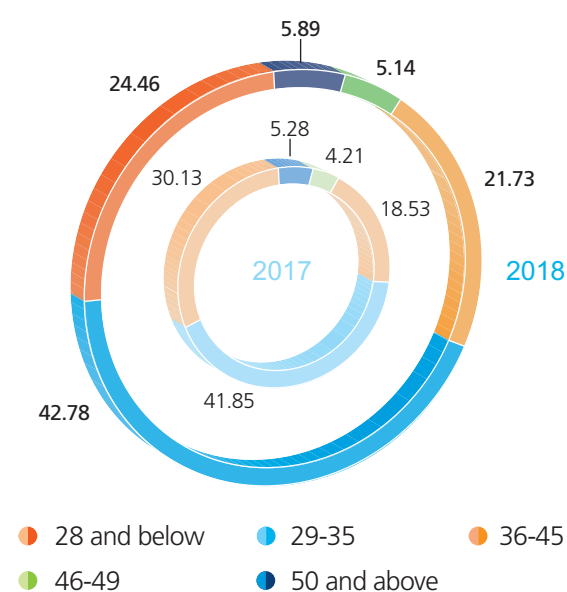
Composition of employees in terms of profession

Profession	Number of Employees	
	2018	2017
Administrative employees	1,360	1,335
Technicians	17,303	17,763
Total	18,663	19,098

Academic qualification expressed as a percentage of total number of employees (%)



Age expressed as a percentage of total number of employees (%)



Human Capital

Recruitment of Talents

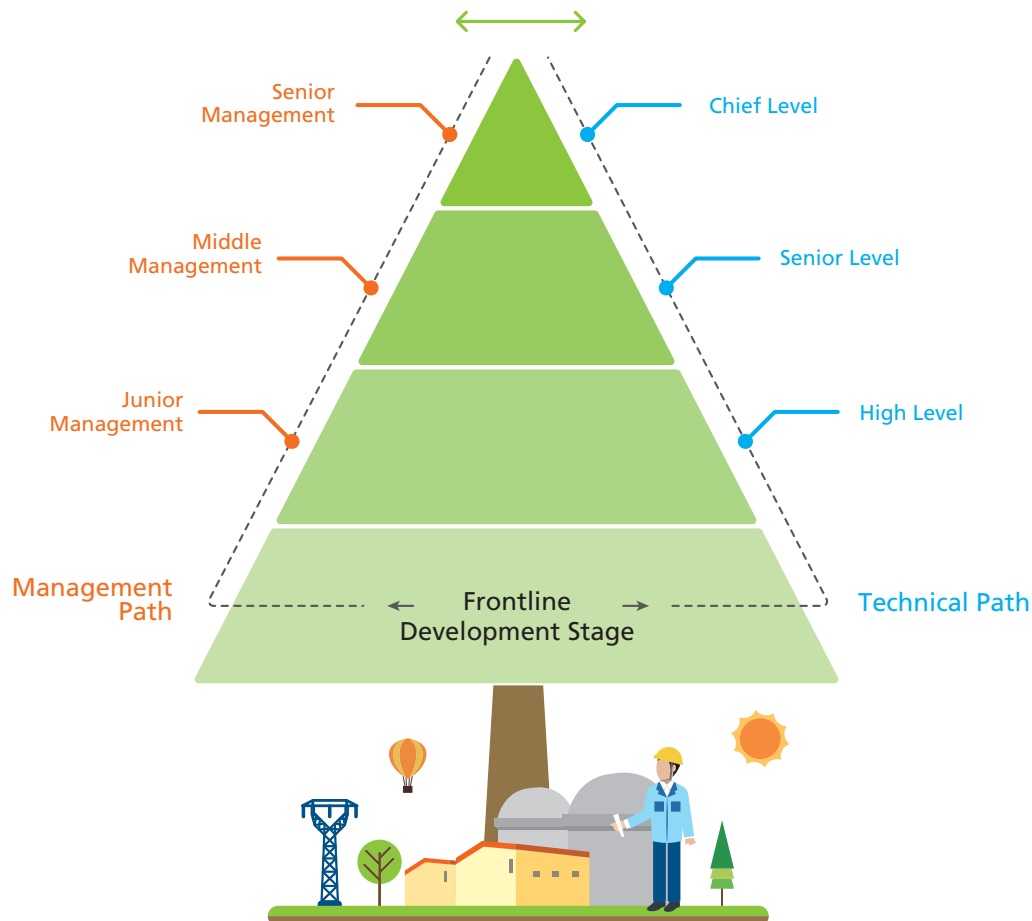
To meet the needs of the Company's business development, safeguard a reasonable structure of our talent force and make adequate talents available, the Company has formulated a human resources plan to recruit talents through a combination of on-campus recruitment and general hiring.

Due to the scarcity of nuclear power related professionals, the supply of external talent market is relatively low, considering from the perspectives of the echelon formation and talent cultivation, our recruitment of talents is still focused on on-campus recruitment. In 2018, the Company recruited a total of 316 persons, among whom, 263 outstanding graduates were recruited through on-campus recruitment and 53 persons through general hiring.

Personnel Management

Development Paths

We respect the contribution made by each employee, pay attention to the career development of employees, and encourage employees to develop individual career development plan under the guidance and assistance of the Company. We offer two career development paths for management and professional skills, and have established mechanisms for conversion between the two paths that employees can achieve their own career development through the two paths according to their competence, potential and characters.



Internal Market

The Company encourages employees to concentrate on their own positions to master the business skills, becoming experienced professionals. At the same time, by incorporating the development strategies of the Company and personal development goals of employees, we continually improve the market element in the internal employment system and facilitate the reasonable and orderly flow of talents, thereby enhancing our allocation efficiency of human resources, realizing appreciation in human capital as well as offering more development opportunities for employees.

Appraisal System

The Company is committed to the creation of a high performance organization. We pay attention to performance achievement of employees and organizations to ensure achievement of overall operation objectives of the Company. Through devising individual performance plans, we put the Company and our organization's goals into the work plans of employees at all levels, and carry out communication, counseling and follow-up during the course of the implementation of the plan. We mainly evaluate employees' work performance according to the performance plan, and the evaluation results will be used for payment of bonuses, remuneration adjustment, term assessment and personal development, etc.

Personnel Training

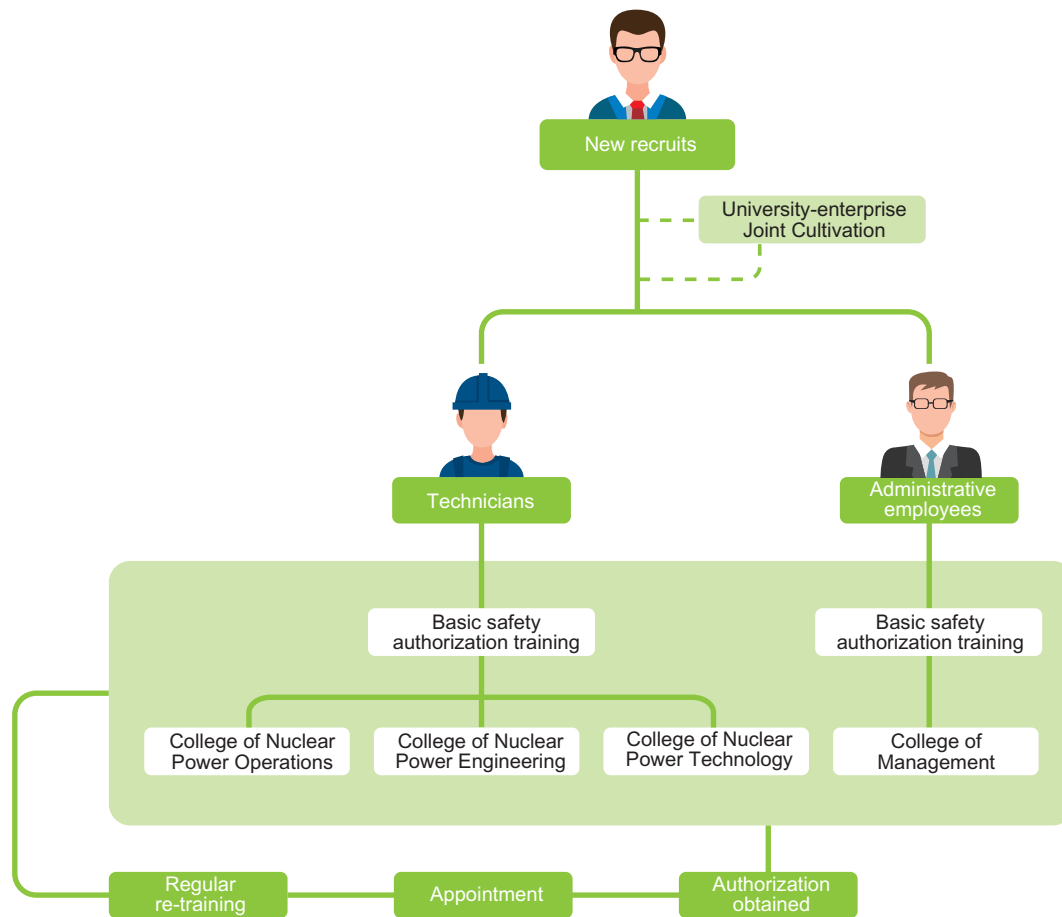
With the stable development of our businesses, the Company emphasizes ongoing enhancement of the working skills of our employees. The Company always adheres to the core principle of "cultivate people and not just train people" and implements the basic requirements of "entire staff training, authorized employment and life-long learning". Through learning from international advanced experience in personnel training, combined with our development characteristics, we have developed our personnel training system as well as a standardized and efficient training management system. We have a group of experienced and qualified teaching staff, comprehensive curriculum and large-scale training facilities, and actively promote standardized and regulated personnel training for nuclear power operations, which has effectively met the needs of personnel training for the stable development of the Company.

To match with the business development of the Company, we regularly renew the personnel training scheme. We had prepared our talent succession plan 2018 in accordance with the medium and long-term planning needs for talents and the feedback on training experiences. In order to consolidate and enhance qualities and skills of management staff and employees at all levels, we organize trainings continuously. In 2018, the average training hours per employee of the Group was 179 hours.

Personnel Training System

The Company entered into personnel training cooperation agreements with a number of universities in China, pursuant to which some of the new employees study specialization courses on nuclear power during their university education. The Company has a College of Nuclear Power Operations, College of Nuclear Power Engineering, College of Nuclear Power Technology and College of Management, with "training, assessment, authorization, appointment" as the basic process, which have formed the training system for all employees.

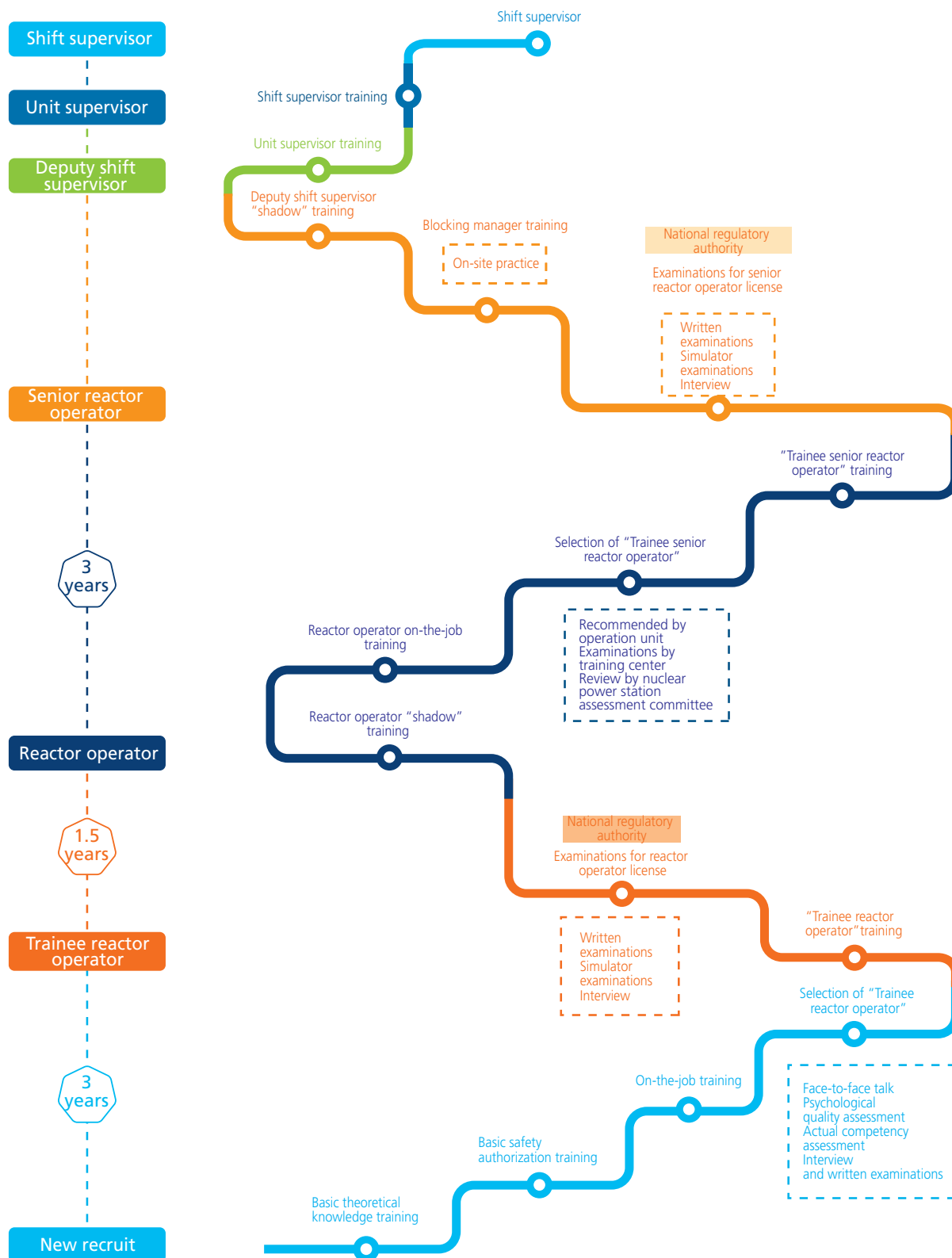
Human Capital



Nuclear power reactor operators are the key technical staff in NPPs. According to the relevant requirements of the Regulations of the People’s Republic of China on the Safety Supervision and Administration of Civil Nuclear Facilities (《中華人民共和國民用核設施安全監督管理條例》), operators should hold a “Reactor Operator License”, shift supervisors should hold a “Senior Reactor Operator License”, while the qualification of reactor operators and senior reactor operators is recognized through systematic assessment of abilities which are supervised and licensed by the national regulatory authority.

We set a position of safety technical advisor (“STA”) in our NPPs. They are responsible for safety supervision of plants and conduct independent assessment and supervision on nuclear safety of daily operation of units. Same as the shift supervisors, STA requires “Senior Reactor Operator License”. In addition, an STA shall have a deep understanding of the regulations on nuclear safety, standards of designing NPPs, analysis methods of nuclear safety and other aspects.

The diagram below shows our training process for reactor operators.



Note: Licensed reactor operators are qualified to operate nuclear facilities' control systems, and licensed senior reactor operators are qualified to operate, guide or supervise the operation on nuclear facilities' control systems.

Human Capital

With reference to the construction progress of third-generation nuclear generating units, we strengthened the nurturing of reactor operators, projects construction personnel and operation and maintenance personnel required for the third-generation nuclear power technology, such as HPR1000, EPR, and AP1000. For example, in 2018, we finished the development and training of “HPR1000 Operation and Control” theory course. Design of HPR1000 Simulator course system was also completed and entered core development stage. For the first batch of licensed personnel working on EPR units, we developed retraining course and carried out training. This laid a good foundation for the training of relevant technical personnel and consolidation and enhancement of skills.

Training Resources

As there might be many potential major risks in nuclear power units operation, we have to prepare corresponding training equipment to equip employees with proficient operation skills before their hands-on operation. For example, to cultivate reactor operators, we have the 1:1 simulator with the main control room. For different purposes, our main simulators include full-scope simulators, principle simulators, function simulators, post-accident analysis simulators and severe accident analysis simulators.

As of the end of 2018, the numbers of simulators of all nuclear power bases were as follows:

	Full-scope Simulators (piece)	Principle Simulators (piece)	Function Simulators (piece)	Post- accident Analysis Simulators (piece)	Severe Accident Analysis Simulators (piece)
Daya Bay Nuclear Power Base	4	2	2	1	1
Yangjiang Nuclear Power Base	3	0	0	0	0
Taishan Nuclear Power Base	1	0	0	1	0
Fangchenggang Nuclear Power Base	1	1	0	0	0
Ningde Nuclear Power Base	2	0	1	0	0
Hongyanhe Nuclear Power Base	2	0	0	1	0

For maintenance techniques training, we have 131 skills training rooms (including the refueling training facilities) with a total area of about 50,000 square meters, covering all maintenance areas and skills, which can carry out 317 training items. In particular, the Nuclear Fuel Operation Training Center is the only training and qualification examination certification center in the PRC for nuclear fuel operators which simulates real situations. In 2018, 49 fuel operators were trained, including 15 fuel operators from Fujian Fuqing Nuclear Power Co., Ltd. (福建福清核電有限公司) and Hainan Nuclear Power Co., Ltd (海南核電有限公司).

The Company develops and improves corresponding curriculum based on post training programs. As of the end of 2018, we had a total of 10,580 courses, adopting forms including face-to-face training, online training, mobile-app training and courses in other forms, which satisfy the need of the current stage of the Company's business development. Taking senior operators post training as an example, we hereby introduce the course of “Design Principles of EPR Units Intelligent Control”. Through training provided by the course on features of intelligent control of EPR units, design principles of intelligent diagnosis, design principles of intelligent control in normal operation, challenges of intelligent intervention and intelligent control of abnormal and transient operation, students are able to master knowledge of intelligent operation of EPR units, and identify control process and methods of units through analysis, laying a foundation for subsequent actual work.

We value the sharing of our employees' accumulated experience and have established the system of key employees acting as part-time instructors to enrich our training resources. Currently, we have 211 full-time instructors and 983 part-time instructors. We also require management to participate in tutoring to share their knowledge and experience. In 2018, the average teaching hours of management was more than 7 hours.

Forms of Training

Our trainings include face-to-face training, online training, face-to-face and web-based mixed training, as well as conducting staff skill competitions in various major fields. Based on the direction of scientization, standardization and professionalization, we continuously innovate competition format, raising competition levels and widening technology communication channels among employees. In 2018, we hosted the Guangdong Province "Instrumentation and Control Design and Repair Occupational Skills Competition". More than 600 competitions at base level were conducted and participated in by various companies, involving more than 30,000 participants. Through a wide range of skill competitions, the training forms were enriched and a strong learning atmosphere of "matching, learning, chasing, helping and exceeding" had been created, which enhanced the overall quality of staff.

Achievement of Talent Cultivation

With reference to our man-power allocation of reactor operators in NPPs, the reactor operators holding valid prevailing licenses of the Company can effectively manage dozens of nuclear power generating units at the same time. As at December 31, 2018, the Group (including affiliates) had 612 reactor operators and 734 senior reactor operators holding valid licenses. 166 and 79 employees of the Group (including affiliates) obtained licenses for reactor operators and senior reactor operators in 2018, respectively.

Relevant qualification of employees provides firm support and professional assurance on the Company's strategic development and business expansion. As of December 31, 2018, a total of 125 employees obtained or maintained registered qualifications in respect of construction projects, including 6 registered First Class Architects; 2 registered second class architects; 5 registered consultant engineers (new energy); 17 registered utility engineers (heating, ventilation and air conditioning); 15 registered utility engineers (water supply and drainage); 36 registered utility engineers (power); 44 registered electrical engineers (power generation and transmission).

In addition, at the end of 2018, 55 employees of the Group (including the associates) participated in the training for fuel operators and passed certification examination to obtain the qualification for fuel operators.

In 2018, we achieved great honors in talent cultivation. Zhou Chuangbin, our commissioning engineer, won the honorary title of "China Skills Award". Qiao Sukai, our nuclear fuel operator, won the honorary titles of "National Technical Expert" and 2018 "Great Country Craftsman of the Year". Wang Junyi, our training engineer of nuclear power operators, won "National Skills Talent Cultivation Work Individual with Distinguished Contribution". Jia Zhengjun, our production operator, won "Guangdong May Day Labour Medal". For our production maintenance engineers, Ji Tao, Chen Yongwei and Wang Bin won the title of "Guangdong Skills Talent", and Dai Fubing, Hu Zhenhe, Yan Jichao and Dong Guangyu won the title of "Shenzhen Skills Talent", while Dai Fubing won the champion in the Industrial System Safety Valve Senior Maintenance Technicians "Star of Craftsman" Occupational Skills Competition in 2018 Shenzhen Skills Competition. These honors were not only rewarding individuals, but also affirming our years of efforts in talent cultivation. The training of these professional talents provided strong support for the safe and stable operation of our nuclear power generating units.

Human Capital

Remuneration System

Remuneration as returns to employees for their performance of duties and creation of values is the most fundamental reflection of their value. We use employees' duties, capacities and performance as the basic standards to assess their value.

Pursuant to the national laws and regulations and in light of the industry characteristics, the Company has established a competitive and ongoing strategy-driven remuneration management system to specify the concept of creating value and stimulate employees' potential. The remuneration system is mainly in the form of a position-based wage system, under which the Company implements the "remuneration changes with position" policy and determines employees' remuneration level based on their duties and capabilities (skills) in the principle of "remuneration based on duties and capabilities, remuneration based on performance, and adjustment based on capabilities and performance". The Company has also established a performance-linked remuneration system under which the performance bonus is adjusted based on the performance of employees.

The Company has established a long-term share appreciation rights incentive scheme to provide incentives to key talents and create more value for shareholders. According to the H Shares Appreciation Rights (the "**SAR**") Scheme (the "**Scheme**") as approved at the 2014 annual general meeting, the initial grant of the SAR had been completed on December 17, 2016. Currently, the vesting period for the Scheme of the initial grant has expired. Rights have not been exercised because the exercise price are not yet reached. For retired/redesigned Directors and senior management, the specific arrangements for the exercise are implemented in accordance with the SAR Agreement. Since the Scheme does not involve the grant of any new share or share option over other new securities to be issued by the Company (or any of its subsidiaries), it does not fall within the ambit of, and is not subject to, the regulations of Chapter 17 of the Hong Kong Companies Ordinance and the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "**Listing Rules**"). Please refer to Note (XI) of the financial statements in the Annual Report for details of the first grant of the SAR.

The second issue of the Scheme was granted after being approved by the Board on December 14, 2017. As of December 31, 2018, the second issue of the Scheme is still subject to the restriction period.

The Company has bought social security (with 100% coverage), supplemental medical insurance and enterprise annuity for employees. According to the national laws and the practical conditions of the Company, we have vacation management policies that allow employees to have paid leave. The Company also encourages employees to reasonably arrange their vacations.

Occupational Health Management

We are highly concerned about the occupational health of our employees. By strictly adhering to the provisions of occupational safety and health of the State, the Company has established a comprehensive occupational safety and health protection system, set up specific organizations in all NPPs to take charge of occupational safety and health management, and obtained the certification of OHSAS18000 occupational safety and health management system.



Identification and management of occupational hazards

Through identification and evaluation of occupational health hazards in various types of work processes, we control occupational health risks, undertake graded management of the risks of exposures and hazards, and adopt a series of measures and means such as technologies, management and individual physical protection, safeguarding the health and safety of employees.



Full participation and proactive prevention

The Company emphasizes on the full participation and proactive prevention regarding occupational health and focuses on continuous control and improvement of occupational health management level. We actively carry out occupational hazard monitoring, conduct independent monitoring and evaluation of occupational health and safety risks through daily work processes, and take timely control measures in accordance with the principles of elimination, isolation, reduction and personal protection to protect and enhance the health and safety level of employees. The premises with occupational health hazards are equipped with protective equipment such as ear protectors, protective suits, protective shoes and the working time limit is specified according to occupational hazard assessment.



Publicity, training and warning

The Company actively undertakes activities such as occupational hazard publicity and training, and informs employees of the types of occupational hazards that may exist in work and protective methods, etc, so that employees are able to understand and master correct protective skills. This includes posting warning signs and on-site test results at relevant workplaces. Through such publicity and education, we enhance employees' self-protection awareness and ability and help them consciously change unsafe work habits.



Professional inspection by external organizations

The Company engages external professional organizations every year to undertake occupational health inspection on employees of some positions (including radioactivity, noise, high temperature, chemical poisons (ammonia), high pressure, etc.), mainly including pre-job, on-job and off-job inspection. Personal health files are established. Occupational contraindications and occupational health damage are identified through inspection. We conduct individual and group health analysis and assessment of adaptability to work, so as to ensure health conditions of employees are compatible with working conditions they are engaged in, and undertake target intervention in accordance with inspection results.

Capitals

Human Capital

Due to contractors' direct participation in a large number of construction and operation activities of NPPs, we assume the responsibilities of ensuring employees' occupational health and safety not only to the Company's own employees, but also to employees of such contractors as well as to other persons who have normal access to NPPs to carry out the relevant activities. The maximum individual radiation dose rate of workers entering control zone of each NPP operated and managed by us (including employees, contractors and other people) is far lower than the management target value of NPP and also far lower than the limit of national laws and regulations. For details of maximum individual radiation dose rate of NPPs, please refer to the 2018 ESG Report published by the Company.

We pay attention to all the safety events in the work process. While properly arranging relevant personnel, we thoroughly investigate all events and conduct root cause analysis, conduct feedback among our NPPs to raise the safety awareness of staff and contractors, and adopt a series of measures to enhance safety management and avoid reoccurrence of such events. We strive for continually lowering the rate of industrial accidents. In 2018, the Company maintained good performance of occupational safety and health. All NPP staff were able to complete the relevant work safely and efficiently in accordance with the procedures and did not cause any minor or more serious safety incidents. For details of the performance in relation to occupational safety and health issues as well as mental health of employees, please refer to the 2018 ESG Report published by the Company.



Field personnel takes safety measures in strict compliance with the procedures and specifications

Financial Capital

Our capital needs mainly come from the capital expenditure for construction of NPPs and facilities, payments of debts and interests and operating expenditure in nuclear power projects in operation. The sources of capital include cash generated from operating activities, shareholders' cash investment, bank borrowings and bond issuance.

External Financing Environment

In 2018, the global economy generally maintained a recovery trend, but the development and policies of major economies varied.



In 2018, the local monetary policy in the PRC remained stable with a suitable degree of tightness. With the benchmark interest rate of RMB loans remained unchanged, the interest rate of RMB in the market gradually went downward with a reasonable and sufficient liquidity level. The Company's financing pressure was gradually relieved. Facing the ever-changing internal and external environment, the Company continued to strengthen the organization, coordination and risk monitoring of financing, and made full use of internal and external financing channels, ensuring capital security and controlling financing costs.

Financial Capital

Financing Patterns

Equity Financing

With reference to the Company's needs for business development, through equity financing, we consolidated the long-term capital of the Company. The overall capital structure of the Company was optimized according to changes in the external environment. The ability to resist the risk of fluctuations in the external economic and financial environment was consolidated and enhanced, which promoted the sustainable development of the Company's business. For those projects with huge capital expenditure and good earnings forecasts, we will prudently consider the use of equity financing to balance the risks and to enhance shareholders' value.

We plan to conduct an initial public offering of A shares for no more than 10% of the total share capital of the Company after issuance in the PRC. The funds raised will be used for the construction of Yangjiang Units 5 and 6 and Fangchenggang Units 3 and 4 as well as replenishing the working capital of the Company. Upon the approval from the Board and general meeting, we submitted application materials including the A Share offering prospectus to the CSRC for the purpose of A Share offering and received a notice of acceptance in respect thereof issued by the CSRC on June 22, 2018. The CSRC is reviewing the A share offering in accordance with legal procedures. After completion of fund-raising, our financial strength will be improved, thereby appropriately reducing the finance costs and further enhancing the financial support capacity for the development of nuclear power projects. For details, please refer to the relevant announcements published in February, April, June and September 2018 and the relevant circulars published in March and July 2018.

Under the premise of guaranteeing control of the Company and the safety of nuclear power production and operation, we responded to the trend of mixed ownership reform, and actively explored the diversification of shareholding of subsidiaries. External capital was introduced, which optimized the ownership structure and corporate governance, thereby capitalising on the synergy between different business segments. In February 2018, we completed an equity transfer whereby Fangchenggang Nuclear invested by Shenzhen Guotong. For details, please refer to the relevant circulars and announcements of the Company in April 2018.

Debt Financing

We strive to maintain diversified types of debt financing to establish a financing model with a mixture of short, medium and long-term funds, a combination of direct financing and indirect financing, and the coexistence of various channels to provide a sound and economic source of funding for the Company. In the course of debt financing, we always follow the balance of cost and safety principle. We seek to obtain competitive financing cost, but the minimum financing cost is not the only goal, otherwise it would impair our financing safety and the service quality we received.

Diversified Financing Types

Diversified financing types can avoid reliance on a single financing channel and enable us to have adequate options for different types of capital requirements. In view of our large-scale long-term investments and according to our matching assets and liabilities principle, our debt financing instruments are dominated by long-term bank borrowings, as supplemented by short-term bank borrowings and debt financing as well as borrowings from other financial institutions. The major debt financing types of the Group include bank borrowings (accounting for approximately 90%), bond financing (accounting for approximately 5%), entrusted loans and insurance debt financing, etc. As compared with the end of 2017, the Group's total borrowings during the year ended December 31, 2018 (the "**Reporting Period**") increased by RMB1,744.4 million, mainly because of the increase in borrowings due to the Group's construction of NPPs. In 2018, the Company optimized debt structure and reduced financing costs by measures such as increasing the scale of direct financing. We also seized market opportunities and issued four tranches of medium-term notes in an aggregate amount of RMB4,000.00 million. At the same time, we optimized payment terms management, and actively promoted note payment in view of not increasing pressure on refinancing. By replacing cash settlement with settlement through commercial bill of exchange, we reduced capital utilization and extended payment term, increasing capital use efficiency.

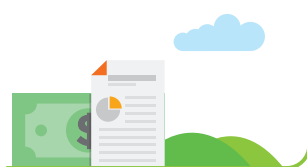
Borrowings from Banks and Other Financial Institutions

We meet our stable capital requirements for long-term and for investments in nuclear power projects mainly through long-term bank borrowings. Reasonable loan terms and repayment schedule are defined to match our long-term cash flows, reduce refinancing risk and ensure the safety of our overall debt. At the same time, we use short-term bank borrowings to bridge the shortfall of working capital, and meet different funding requirements through a combination of insurance debt financing and financing lease.

Domestic Debenture Financing

The Company is a legal entity incorporated in the PRC and is qualified for the domestic public offering of debentures. Our available options in the domestic market mainly include ultra short-term financing notes, short-term financing notes, medium-term notes and corporate bonds, which can meet the requirements of working capital, debt repayment and capital expenditure of projects. The Group's outstanding debentures as at December 31, 2018, and the Group's repaid debentures in 2018 were as follows:

Financial Capital



Corporate bonds

The Company has two corporate bonds with a total face value of RMB4,500.0 million transferred from the controlling shareholder CGNPC (with a term of 10-15 years) which were used for the construction of Lingdong Nuclear Power Station and Yangjiang Nuclear Power Station respectively.



Medium-term notes

In April 2018, the Company issued two tranches of medium-term notes. Total financing amount was RMB2,000 million with a term of 3 years and used for repayment of borrowings for subsidiaries;

In August 2018, the Company issued one tranche of medium-term notes. The financing amount was RMB1,000 million with a term of 3 years and used for repayment of borrowings for subsidiaries;

In October 2018, the Company issued one tranche of medium-term notes. The financing amount was RMB1,000.0 million with a term of 3 years and used for repayment of borrowings for subsidiaries.



Ultra short-term financing notes

In March 2017, Yangjiang Nuclear, a subsidiary of the Company, registered ultra short-term financing notes of RMB2,000.0 million with the National Association of Financial Market Institutional Investors, which was intended to replenish working capital and repay debt for Yangjiang Nuclear;

In September 2017, Fangchenggang Nuclear, a subsidiary of the Company, registered ultra short-term financing notes of RMB1,000.0 million with the National Association of Financial Market Institutional Investors, which was intended to replenish the working capital and repay debt for Fangchenggang Nuclear.



Private placement notes ("PPNs")

Taishan Nuclear, a subsidiary of the Company, issued three tranches of PPNs before its acquisition in a total amount of RMB2,100.0 million. The terms of these PPNs were all three years. The proceeds were used for construction of Taishan Nuclear Power Station. Two tranches of PPNs issued in 2014 amounting to RMB1,600.0 million in total were repaid in 2017. PPNs issued in 2015 amounting to RMB500.0 million were repaid in 2018.

Yangjiang Nuclear, a subsidiary of the Company, had issued five tranches of PPNs in a total amount of RMB3,000.0 million. The terms of these PPNs were all three years. The proceeds were used for construction of Yangjiang Nuclear Power Station. Among which, PPNs issued in 2015 amounting to RMB500.0 million were repaid in 2018.

Note: The details of our debentures are set out in Note (V) 34 to consolidated financial statements.

Overseas Bond Financing

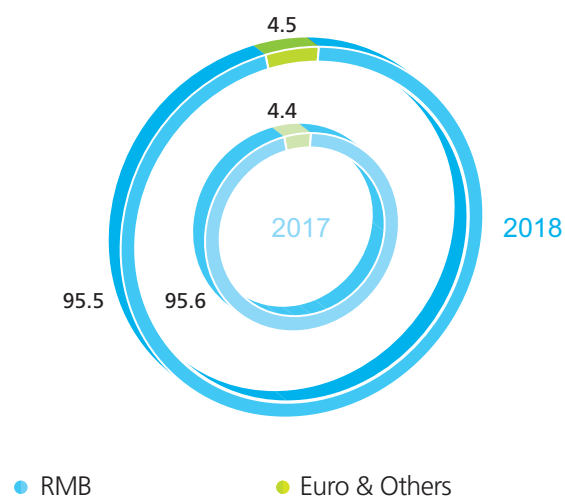
According to the Notice on Promoting the Reform of the Filing and Registration System for Issuance of Overseas Bonds by Enterprises (《關於推進企業發行外債備案登記制管理改革的通知》) promulgated by the NDRC on September 14, 2015, the Company has the ability and qualification of overseas bond financing and may issue overseas bonds subject to filings with the NDRC. The Company will consider factors including issue price, foreign exchange and tax policies, overseas investment demand and foreign exchange risks to seek opportunities for overseas bond financing activities. Besides, we will carry out international rating according to the overseas financing plan in due course. As of December 31, 2018, the Company has not carried out overseas bond financing.

Reasonable Currency and Term Structure

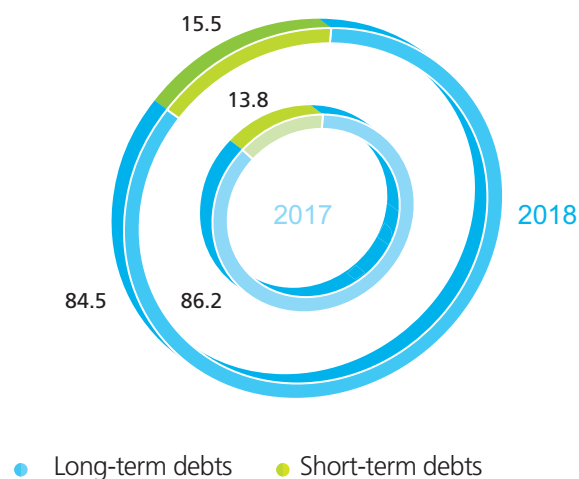
With regard to the financing currency, since revenue and cost of procurement of the Company are mainly denominated in RMB, we maintain a RMB oriented debt structure, which not only matches our operational characteristics, but also effectively prevents liquidity risks and systematic exchange rate risks of the Company. As at December 31, 2018, the proportion of borrowings that were denominated in RMB amounted to approximately 95.5%, whilst the borrowings denominated in foreign currency amounted to approximately 4.5%. Borrowings denominated in foreign currency are primarily used to procure equipment and spare parts from overseas markets as well as related services.

In view of financing terms, the construction and operation of nuclear power projects have relatively long cycles, therefore our debts mainly comprise long-term debts. Meanwhile, to meet the requirements of the Company's liquidity management, we also intend to gradually repay the project debts with the revenue generated from our projects in the future through matching the decentralized and orderly repayment schedules with long-term cash flow from the Company's nuclear power projects. In 2018, the Company continued to place emphasis on the term structure risk of our debt, which controlled the growth rate of short-term borrowings and increased the proportion of medium- and long-term debts among new debts, effectively alleviating the liquidity risk facing the Company as compared to the end of last year. As at December 31, 2018, the proportion of the Group's short-term debts accounted for approximately 15.5% of total debt, whilst long-term debts accounted for approximately 84.5%.

Debt balance analysis-by currency (%)



Debt balance analysis-by term (%)



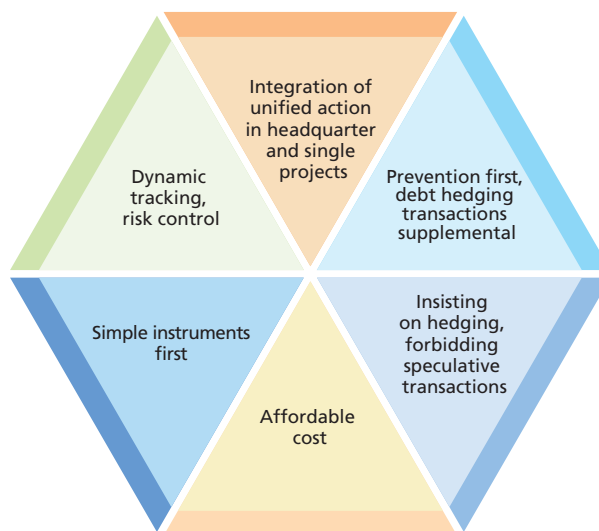
Financial Capital

Debt Risk Management

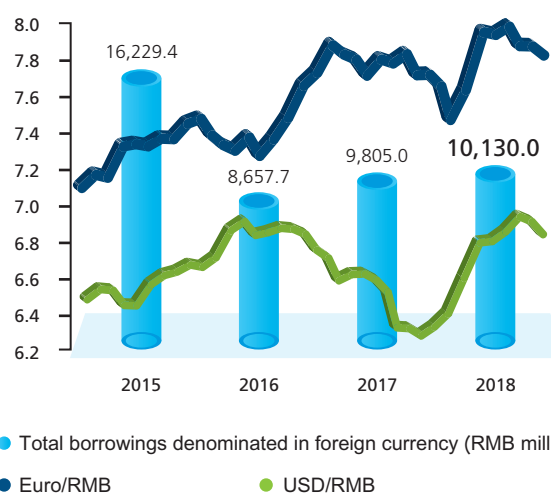
Effective response to foreign exchange rate and interest rate risks

Responding to the procurement of equipment, spare parts and related services from overseas market, the Company has accumulated some foreign currency debts in the process of nuclear power project construction. Due to fluctuations in foreign exchange rates, the foreign currency debt may affect earnings and cash flow of the Company. In order to mitigate the impact, we uphold a prudent approach to carry out debt hedging and risk prevention arrangements under a well-established debt risk management system. Our objective is cost control instead of profit, while we adhere to the principle of hedging and prohibiting speculative transactions. All the hedging transactions shall be on the basis of factual debt cash flow or guaranteed payment of commercial contracts, while simple instruments shall be mainly applied. We regularly review the positions of derivatives, monitor and report various risks with timely adjustments in accordance with the expected changes in the market.

In recent years, we adopted measures such as forward transactions, debt swaps and early repayment to reduce exchange rate exposure of foreign currency debts gradually. Exposure of foreign currency debts as at the end of the Reporting Period was mainly Euro export credit of Taishan Nuclear. Meanwhile, we managed new foreign currency debt by payments for foreign commercial contracts through spot or forward purchase of foreign exchange in RMB, and effectively reduced the impact of significant exchange rate risk. Compared with the end of 2017, the total amount of borrowings denominated in foreign currency of the Group at the end of the Reporting Period increased by RMB325.0 million. In 2019, the Company will continue to closely monitor the market and actively adopt measures to minimize the impact of foreign currency exchange rate fluctuations.



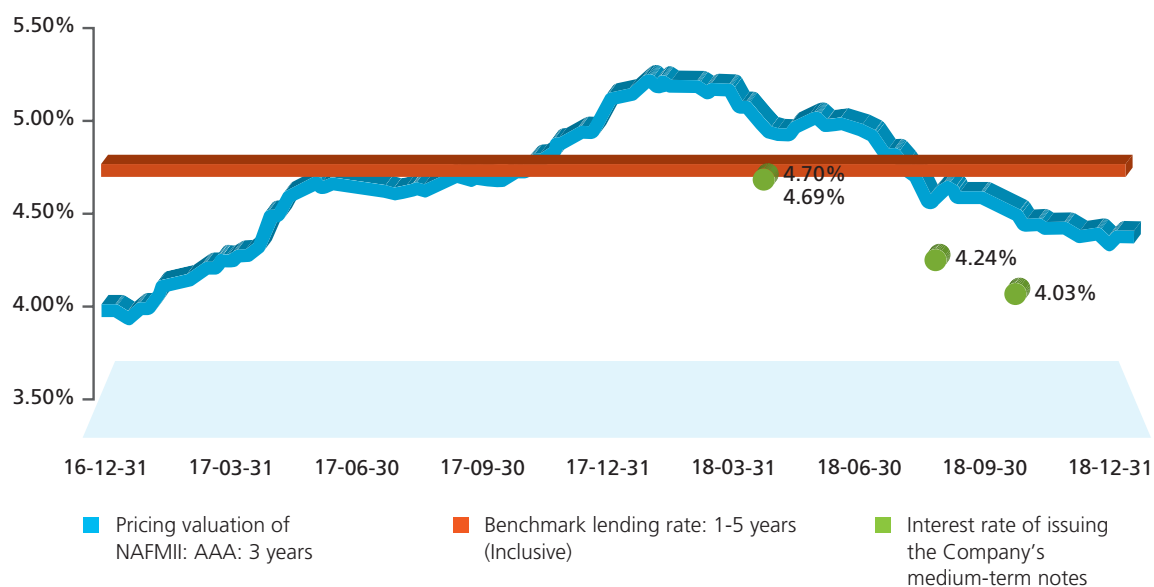
Total borrowings denominated in foreign currency and changes in RMB exchange rate



Note: As at December 31, 2018, part of foreign currency borrowings of the Group were hedged against future foreign currency inflow or hedged through forward transactions, and no actual exposure of foreign currency debts was formed.

Seize the opportunity to issue bonds and Control the financing cost

The debts of the Company were mainly long-term and medium-term floating rate debt. The floating rate debt of the Company denominated in Renminbi was mainly linked to the benchmark lending rate announced by the People's Bank of China. In 2018, the benchmark lending rate announced by the People's Bank of China remained unchanged. The financial cost of the Company's debt financing remained stable. In the second half of the year, as affected by various domestic and foreign factors, domestic market's liquidity improved and market interest rate gradually decreased, creating opportunities for the Company to optimize its debt structure and control financing cost. In order to cope with interest rate risk and control medium-term financing cost, the Company timely issued four tranches of medium-term notes amounting to a total of RMB4,000.0 million, mainly used for repayment for bank borrowings of subsidiaries. Interest rates of issuance were 4.70%, 4.69%, 4.24% and 4.03%, respectively, which were lower than comparable new external lending rates of subsidiaries, effectively controlling financing cost and reducing impact of interest rate fluctuation on the Company's operations.



Limited Recourse or Non-Recourse Financing Methods

To ensure the Company's separation from financing risks, we usually arrange nuclear power project companies as the financing entities in respect of nuclear power project financing. In principle, we do not provide guarantees to the project companies. We strictly control certain guarantees, such as warranty, security and pledge, in the financing process, and do not permit our subsidiaries and associates to provide guarantees in any form to external entities or individuals without the approval of the competent authorities of the Company. Subsidiaries and associates are also not allowed to provide guarantees for each other.

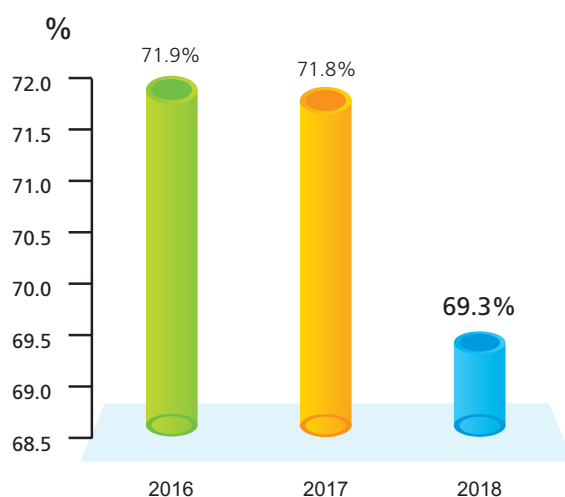
Nuclear power project companies raise debt funds by limited recourse or non-recourse financing methods. They mainly repay the principal amount and interest with sales income or other income generated from such projects. Creditors have no recourse rights or limited recourse rights to project shareholders.

Financial Capital

Proper Financial Leverage

We are concerned about our financial leverage and shall continue to undertake its optimization. On the one hand, we achieve good shareholder returns through the proper financial leverage, and on the other hand, we avoid excessive debt financing in the course of business expansion that may hurt our financial health. As at December 31, 2018, the Group's asset-liability ratio was 69.3%, slightly lower than the same period last year, which was mainly because, firstly, the Group introduced Shenzhen Guotong at the beginning of 2018; secondly, the Group's accumulated profit increased, both of which resulted in an increase of the total equity of the Group.

Asset-liability ratio

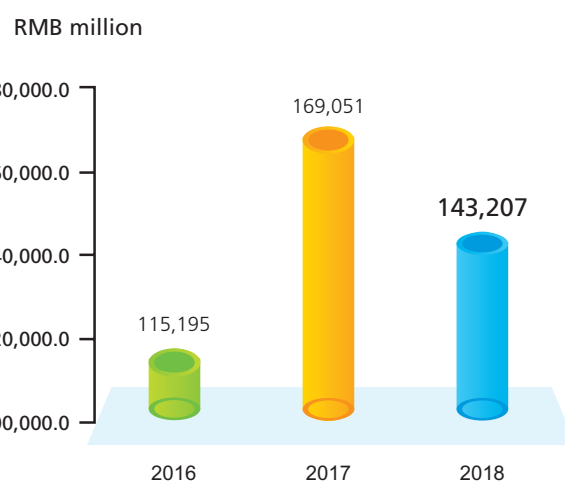


Adequate Liquidity

To manage liquidity risks, we monitor and maintain our cash as well as the level of banking facilities to ensure that such amounts can provide sufficient cash support for our operation and avoiding too much idle funds.

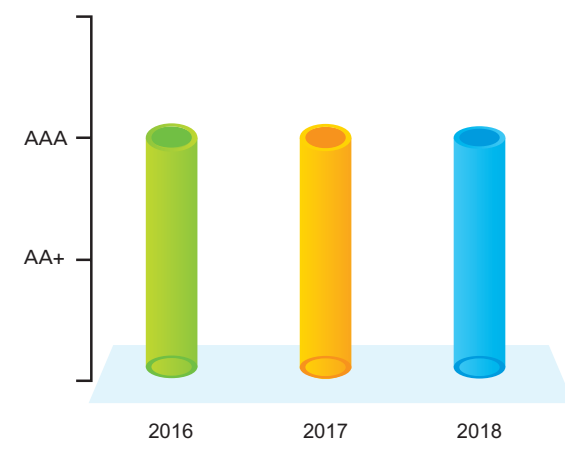
As of December 31, 2018, we had limit of unutilized general banking line of credit of approximately RMB121,693.0 million, limit of ultra short-term financing notes of RMB2,000.0 million (available for public offering), limit of medium-term financing notes of RMB6,000.0 million (available for public offering) and cash of RMB15,207.9 million, which can provide sufficient cash for the operations of the Company and mitigate the effects of fluctuations in cash flows.

Available Funds and Financing Limit



Maintaining a Good Credit Rating

Maintaining a good credit rating helps lower our cost of financing. In May 2018, China Chengxin International Credit Rating Co., Ltd. (中誠信國際信用評級有限責任公司) assessed the credit rating of the Company and maintained our AAA credit rating with stable outlook.



Environmental Capital

Our commitment to social responsibility is to continue to provide safe, reliable, clean and economical electricity for the society and to strive for a bluer sky and clearer water, which has also been the cornerstone for our sustainable development. The Company attaches great importance to the harmony between nuclear power operations and the natural environment, and always adheres to a highly responsible attitude to the environment and maintains the healthy, stable and sustainable development of the Company.

We here describe the policies and mechanisms of the Group with respect to the management of radioactive wastes and environmental monitoring. For other matters regarding the environmental management of the Group, please refer to 2018 ESG Report published by the Company.

Radioactive Waste Management

NPPs generate gaseous, liquid and solid wastes while generating electric power. These wastes are collectively called the “Three Wastes” at NPPs, among which, some wastes are radioactive and require proper management and safe disposal to protect the public and the environment. There are strict and specific regulations and requirements in all countries in respect of the disposal of radioactive wastes from NPPs and the control of the discharge of them to the environment. According to the national standard, namely “Classification of Radioactive Waste” (《放射性廢物的分類》) (GB9133-1995), radioactive wastes are divided into low-level radioactive waste, medium-level radioactive waste and high-level radioactive waste. High-level radioactive wastes from NPPs are mainly spent fuels which are used fuel assembly removed from the reactor. Such spent fuels must be reprocessed in accordance with the national unified planning. Radioactive waste management as described herein mainly refers to low to medium level radioactive waste management.

We have established a set of comprehensive radioactive waste management mechanisms which have been integrated into the whole operation process of NPPs, and control and treat radioactive wastes using international advanced technologies and standards to continuously improve our capability in respect of the treatment of the Three Wastes. Our guiding principles for nuclear waste management are “waste minimization” and “optimization of radiation protection”. We strive to minimize the amount of radioactive waste generated. We strictly comply with the laws, regulations and standards of the State in every aspect of our treatment of radioactive waste (including collection, purification and concentration, volume reduction and solidification, packaging, transportation, temporary storage on-site, centralized disposal, etc.). In terms of emission standards, we require ourselves to comply with the strictest standards. Our emissions are far lower than the levels allowed by the national emission standards. Please refer to the section “Business Performance and Analysis” for details of radioactive waste of our NPPs in 2018.

Environmental Capital

Environmental Monitoring

All of our nuclear power bases have established strict environmental monitoring system and environment routing inspection record system according to the requirements of the national regulatory authority, so as to monitor and analyze the environmental media of air, land species and marine organisms within a radius of ten kilometers of our NPPs, and to assess the environmental standard within NPP and surrounding regions and reduce the impact of NPP operation on the surrounding environment.

In addition to self-monitoring of NPPs, national regulatory authorities and third-party external organizations will also monitor the environment of NPPs.

The national regulatory authority implements strict supervision requirements on radioactive emissions from NPPs, and requests “dual-track system” monitoring to be conducted on gaseous and liquid effluents as well as the external environment in the periphery of NPPs. Such monitoring shall be carried out by the operators of NPPs and the radiation environment monitoring agencies under environmental protection systems of the provinces in which NPPs are located, respectively.

According to the long-term tracking and monitoring by the external institutions such as the Hong Kong Observatory, the monitoring results of each of our NPPs in service since its operation show that environmental radioactivity in the surrounding area has not changed compared with the background data before the NPPs commenced commercial operations, and the biological population of land and sea in these regions has not changed either, so there was no adverse impact on the environment. According to the ongoing monitoring by the national regulatory authority, the air-absorbed dose rates of environment around NPPs in operation stay within the fluctuation range of local natural background levels.



Social and Relationship Capital

The construction and operation of NPPs have a very extensive effect. We understand that the understanding, trust and support from the society, the public, shareholders and other stakeholders are critical to the Company to ensure our sustainable development.

We here mainly describe the policies and practices of the Group with respect to the society and the public. Our communication with shareholders and investors are set out in the section headed “Corporate Governance” of this Annual Report. Please refer to the 2018 ESG Report published by the Company regarding more information on the exchange between the Company and other cooperation partners as well as other matters.

Proactive Disclosure of Information

Each of the nuclear power bases managed by us has established its public information platform on nuclear and radiation safety. The information made available to the public includes monthly operating data, such as capacity factor, radiation protection, industrial safety, Level 1 fire risk incidents, Three Wastes control and monitoring of the environment, and operational events. Any operational event occurring at a nuclear power generating unit in operation must be published on such public information platform within two working days. In 2018, five operational events occurred, all of which were deviations without safety significance according to the INES, and all the relevant information was disclosed as required within the specified time.

Each of the nuclear power bases managed by us has established its own websites and social media platforms such as the official WeChat account for proactively delivering the operational information of various nuclear power bases. The Company arranges regular press conferences, interviews and site visits by invitation, theme activities and distribution of publications to provide NPPs’ related information to the main industry regulatory departments and the media, and takes public inquiries through hotlines, facsimile and e-mail. In 2018, the Company and our NPPs convened 15 press conferences.

Transparent Public Communication

We adhere to transparent communication. We constantly explore the open and transparent communication mechanisms. Our efforts in promoting the knowledge about nuclear power help the public understand all aspects of nuclear power in order to enhance the public’s confidence in nuclear power.

Participating in exhibitions In 2018, we participated in 12 major exhibitions at home and abroad, including the 3rd World Nuclear Industry Exhibition in France and the 3rd Asian Energy Technology Exhibition, etc. At the 20th China International Hi-Tech Fair, our company booth, realized the full electronic screen display for the first time, attracting a large number of visitors to stop by. In order to enhance the experience of visitors, the booth also featured a “Walk into the NPP” experience using VR and mixed reality (MR) technology.

Social and Relationship Capital

Offering courses to schools Our “Promoting Nuclear Power Science for Campus” activities started at the Hongyanhe Nuclear Power Station and have been rolled out around all nuclear power bases. In 2018, more than 120 schools covering more than 20,000 primary and secondary school students, participated in the activities.



“Promoting Nuclear Power Science for Campus” Activity



About 170 students and teachers from Huaqiao Middle School of Dapeng New District joined “Going into Daya Bay with clear waters and green mountains” ecological environmental protection experience day

Public Open Day We launched the sixth session of the “8·7 Public Open Day”. Nine “Green China People of the Year” from different industries including Guo Chengzhan, the Deputy Director of the National Nuclear Safety Administration, and Lang Yongchun, the former CCTV famous host etc., were invited by us to serve as the “Ambassador of Nuclear Power Science”. The “Green China People of the Year” is an award to the environmental protection figures from the PRC government, and also the highest award in the field of environmental protection in the PRC. The appointment of the nine “Green China People of the Year” as the “Ambassador of Nuclear Power Science” is to draw on the social influence of them, so that they can make active efforts to promote the national low-carbon development strategy in future, take an active part in the promotion of knowledge about clean energy such as nuclear power, and continue to promote the “clean, safe and environmentally friendly” energy properties of nuclear power to the public. We created and officially released the first robot for promoting the knowledge of the nuclear power industry in the PRC on the open day. The robot is equipped with an intelligent interactive question & answer function on common knowledge of nuclear power, and can interpret some boring nuclear power knowledge with vivid and interesting language, which in turn improves the interactive and interesting nature of nuclear power knowledge and enhances the effect of public communication.



Nine “Green China People of the Year” were appointed as Ambassador of Nuclear Power Science



Released the first robot for promoting the knowledge of the nuclear power industry

Win-win Community Development

We uphold the vision of “boosting the economy and benefiting the people there in which we conduct a construction project”. We actively promote community development when achieving our corporate development to build a harmonic relationship with the surroundings.

Targeted poverty alleviation

We actively respond to the national policy of targeted poverty alleviation, using our own advantages to help designated counties and villages to develop the characteristic industries to improve the lives of local residents, aiming at helping the villagers to escape poverty and set out on a road to prosperity. In 2018, Yangjiang Nuclear Power Station continued its targeted support to Kongtong Village of Yangchun City by carrying out infrastructure projects such as hardening of roads, repairing of farmland and water conservancy facilities, renovating of dilapidated homes for poor households, and made huge efforts to construct new countryside in accordance with the local government’s key work plan, to cultivate and develop probiotic chicken breeding industry in Kongtong Village of Yangchun City, and to enter supply and marketing contracts with the staff canteens in order to produce sustained and stable income for the poor households and village collective.



Yangjiang Nuclear entered into production supply and marketing contracts through the staff canteen with Kongtong Village of Yangchun City

Dedicated to social welfare

We actively participate in social and charitable activities, assist vulnerable groups in the society, and continuously serve the community.

We encourage and support employees to systematize and regularize charitable activities. In 2018, we had more than 10,000 employees volunteer and over 27,000 people participating in public service activities for over 35,000 hours.

Excellence



Corporate Governance

80	Board of Directors, Supervisory Committee and Senior Management
90	Corporate Governance Report
124	Directors' Report
139	Audit and Risk Management Committee Report
140	Remuneration Committee Report
143	Nomination Committee Report
145	Nuclear Safety Committee Report
146	Supervisory Committee Report
150	Risk Management Report



Board of Directors, Supervisory Committee and Senior Management

As at the date of this Annual Report, the biographies of our Directors, Supervisors and senior management are as follows:



Mr. Zhang Shanming

Chairman and Non-executive Director

Mr. Zhang Shanming (張善明), born in 1964, was appointed as our Chairman and non-executive Director in March 2014. He has a doctoral degree and is a senior engineer (researcher-level). Mr. Zhang is entitled to special allowance of the State Council. Mr. Zhang has more than 35 years of experience in the nuclear power industry. He served as the chairman of the board of directors of CGN Engineering from February 2006 to June 2008, as the chairman of the board of directors of CNPRI from May 2008 to June 2011, and as the chairman of the board of directors of DNMC from February 2009 to June 2011. He has been the president of CGNPC (formerly, China Guangdong Power Holding Co., Ltd. (中國廣東核電集團有限公司)) since August 2010 and a director of CGNPC since March 2014.



Mr. Gao Ligang

Executive Director and President

Mr. Gao Ligang (高立剛), born in 1965, was appointed as an executive Director and the President in March 2014. He has a master's degree and is a senior engineer (researcher-level). Mr. Gao is entitled to special allowance of the State Council. Mr. Gao has more than 30 years of experience in the nuclear power industry. He served as the general manager of DNMC from February 2004 to January 2008. He worked successively as the chairman of the board of directors and the general manager of Yangjiang Nuclear from December 2007 to October 2013. He also served as the general manager of Guangdong Taishan Nuclear Co., Ltd. (now called Taishan Nuclear) from December 2007 to October 2011, and has been the chairman of the board of directors of Taishan Nuclear since December 2007. Mr. Gao also served as the senior vice president of CGNPC from April 2011 to March 2014 and has been the chairman of General Nuclear System Limited (通用核能系統有限公司) ("GNS") since June 2016.



Mr. Tan Jiansheng
Non-executive Director

Mr. Tan Jiansheng (譚建生), born in 1959, was appointed as a non-executive Director of the Company in May 2017. He has a master's degree and is a senior economist. Mr. Tan has over 35 years of experience in the financial and energy industries and has served as the senior vice president of CGNPC since September 2000. From March 2006 to October 2009, Mr. Tan served as chairman of Ningde Nuclear and from October 2006 to August 2009 as chairman of CGNPC Uranium Resources Co., Ltd. (中廣核鈾業發展有限公司) ("CGN Uranium"). From April 2007 to January 2011, Mr. Tan served as a General Counsel of CGNPC.



Mr. Shi Bing
Non-executive Director

Mr. Shi Bing (施兵), born in 1967, was appointed as a non-executive Director of the Company in March 2014. He has a master's degree and is a senior accountant. Mr. Shi has more than 20 years of experience in finance, accounting, auditing and management in large nuclear power enterprises. Since January 2008, Mr. Shi has successively served as the deputy chief financial officer while concurrently serving as the general manager of the finance department, senior vice president while concurrently serving as deputy chief financial officer, senior vice president while concurrently serving as chief financial officer, and senior vice president of CGNPC. Mr. Shi is currently the senior vice president of CGNPC.

Board of Directors, Supervisory Committee and Senior Management



Ms. Zhong Huiling
Non-executive Director

Ms. Zhong Huiling (鍾慧玲), born in 1973, was appointed as a non-executive Director in May 2017. She has a master's degree and is a senior economist. Ms. Zhong has over 20 years of experience in finance, capital and investment management. Since 2010, Ms. Zhong has successively served as the head of the capital operation department and the asset management department of Guangdong Hengjian Investment Holding Co., Ltd. (廣東恒健投資控股有限公司) and general manager (executive director) of Guangdong Hengjian Asset Management Co., Ltd. (廣東恒健資產管理有限公司). Ms. Zhong is the secretary of the board of directors (chief asset manager) of Guangdong Hengjian Holding Investment Co., Ltd. and the chairman of Guangdong Hengjian Asset Management Co., Ltd. and Guangdong Yue Macao Cooperative Development Fund Management Ltd (廣東粵澳合作發展基金管理有限公司).



Mr. Zhang Yong
Non-executive Director

Mr. Zhang Yong (張勇), born in 1968, was appointed as a non-executive Director of the Company in May 2017. He has a master's degree, and is a senior accountant, certified public accountant in the PRC and international registered internal auditor. Mr. Zhang has more than 20 years of experience in auditing and accounting. From June 2012 to January 2017, Mr. Zhang served as the chief accountant of China Nuclear Fuel Co., Ltd. (中國核燃料有限公司) and has been the chief accountant of China National Nuclear Power Co., Ltd. (中國核能電力股份有限公司), a nuclear power generation company listed on the Shanghai Stock Exchange (stock code: 601985) since January 2017. Mr. Zhang is currently a director of CNNC Financial Leasing Co., Ltd., CNNC Finance Co., Ltd. and Global Innovation Nuclear Energy Technology Co., Ltd., and the chairman of the board of directors of CNNC Kunhua Energy Development Co., Ltd.



Mr. Na Xizhi

Independent non-executive Director

Mr. Na Xizhi (那希志), born in 1953, was appointed as an independent non-executive Director of the Company in March 2014. He has a master's degree and is a senior engineer (professor-level). Mr. Na has over 30 years of experience in conventional power management and operation. From March 2006 to April 2008, Mr. Na worked as the general manager at Huaneng Power International Inc., a company listed on the Hong Kong Stock Exchange (stock code: 902) and the Shanghai Stock Exchange (stock code: 600011), which was engaged in the development, construction and operation and management of power stations. He served as a director of Huaneng Power International, Inc. from May 2005 to May 2008, and served as the vice president at China Huaneng Group from September 2005 to April 2006 and from May 2008 to July 2013.



Mr. Hu Yiguang

Independent non-executive Director

Mr. Hu Yiguang (胡裔光), born in 1971, was appointed as an independent non-executive Director of the Company in March 2014. He has a master's degree. Mr. Hu is a senior partner and managing partner of Lifang & Partners in Beijing, the PRC, and is well versed in laws relating to the real estate and construction industry, corporate law, financial law, as well as general civil and commercial litigation and arbitration. He worked as legal counsel for the former Ministry of Railways of the PRC, China Minsheng Banking Corp., Ltd., China Everbright Bank Co., Ltd. and other enterprises and government departments. Mr. Hu also serves as an external director of Sinosteel Corporation Ltd.

Board of Directors, Supervisory Committee and Senior Management



Mr. Francis Siu Wai Keung
Independent non-executive Director

Mr. Francis Siu Wai Keung (蕭偉強), born in 1954, was appointed as an independent non-executive Director in March 2014. Mr. Siu obtained a Bachelor of Arts degree with major in economics and accounting and financial management from the University of Sheffield in the United Kingdom in July 1979. Mr. Siu is a senior fellow member of the Institute of Chartered Accountants in England and Wales and the Hong Kong Institute of Certified Public Accountants. Mr. Siu worked at KPMG for approximately 31 years. He has extensive experience in providing audit services for the PRC and overseas companies and has sound knowledge of advising on foreign direct investment in the PRC. Mr. Siu serves as an independent non-executive director in a number of listed companies: CITIC Ltd. (stock code: 267), China Communications Services Corporation Ltd. (stock code: 0552), and China International Capital Corporation Limited (stock code: 3908), each of which is listed on the Hong Kong Stock Exchange; GuocoLand Limited (stock code: GUOL), which is listed on the Singapore Exchange. Mr. Siu also serves as an independent non-executive director of BHG Retail Trust Management Pte. Ltd. and Beijing Gao Hua Securities Co., Ltd.



Mr. Chen Sui
Chairman of the supervisory committee of the Company
the ("Supervisory Committee") and non-employee representative
supervisor of the Company (the "Supervisor")

Mr. Chen Sui (陳遂), born in 1964, was appointed as the chairman of the Supervisory Committee and a non-employee representative Supervisor of the Company in May 2017. Mr. Chen has a master's degree and is a senior engineer. Mr. Chen has over 25 years of experience in strategic planning, renewable energy development, construction, operation management and energy conservation management. Mr. Chen was the deputy general manager of CGN Energy Development Co., Ltd. from October 2006 to April 2007, the general manager of CGN Wind Energy Co., Ltd. from April 2007 to June 2010, the chairman of CGN Wind Energy Co., Ltd. from September 2010 to January 2016, and the chairman of CGN Solar Energy Development Co., Ltd. and CGN Energy Conservation Industry Development Co., Ltd. from September 2010 to February 2016. Mr. Chen served as the chairman of CGN Nuclear Technology Development Co., Ltd., a company listed on the Shenzhen Stock Exchange (stock code: 0881), from July 2018 to October 2018. Mr. Chen has been the Chairman of CGN New Energy Holdings Co., Ltd. (a company listed on the Hong Kong Stock Exchange, stock code: 1811) since September 2010. Mr. Chen has been assistant to general manager and employee director of CGNPC since January 2018.



Mr. Yang Lanhe
Non-employee representative Supervisor

Mr. Yang Lanhe (楊蘭和), born in 1952, was appointed as a non-employee representative Supervisor of the Company in June 2015. He has a master's degree and is a senior engineer. Mr. Yang is entitled to special allowance of the State Council. Mr. Yang has more than 30 years of experience in the nuclear power industry. He served as secretary to the Committee of Nuclear Power Qinshan Joint Venture Co., Ltd. under the Communist Party of China from April 2003 to November 2004. From November 2004 to February 2013, he successively served as general manager and secretary to the Party Committee of Nuclear Power Qinshan Joint Venture Co., Ltd. and Qinshan Nuclear Power Co., Ltd., general manager of Qinshan Nuclear Power Station No. 3 Co., Ltd. and deputy secretary to the Party Committee of the Qinshan Nuclear Power Base.



Mr. Chen Rongzhen
Non-employee representative Supervisor

Mr. Chen Rongzhen (陳榮真), born in 1954, was appointed as a non-employee representative Supervisor of the Company in June 2015. He has a bachelor's degree and is a senior engineer. Mr. Chen is entitled to special allowance of the State Council. Mr. Chen has over 35 years of experience in the power dispatching, transmission and distribution, and power marketing industries. Mr. Chen served as deputy general manager of Guangdong Guangdong Group Co., Ltd. from November 2003 to June 2005, served as deputy general manager of Guangdong Power Grid Corporation from June 2005 to November 2007, served as the director of the market transaction department of China Southern Power Grid Co., Ltd. (中國南方電網公司 ("CSG")) from November 2007 to December 2010, and served as the deputy chief economist of CSG from December 2010 to December 2014.

Board of Directors, Supervisory Committee and Senior Management



Ms. Zhu Hui

Employee representative Supervisor

Ms. Zhu Hui (朱慧), born in 1971, was appointed as an employee representative Supervisor of the Company in March 2019. She has a master degree and is a senior accountant. Ms. Zhu has more than 20 years of experience in financial management. She served as the deputy director (presiding over the work) and director of the finance department of CNPRI from June 2007 to December 2009, as accounting management senior manager of the finance department of CGNPC from December 2009 to August 2011, as deputy director of financial sharing center (presiding over the work) of CGNPC from August 2011 to May 2014, as deputy director (presiding over the work) and director of financial sharing center of the Company from May 2014 to August 2018. She has been the director of the audit department of the Company since August 2018. She has been a supervisor of CGNPC Uranium Resources Co., Ltd. and a supervisor of CGN Capital Holdings Co., Ltd since October 2018.



Mr. Wang Hongxin

Employee representative Supervisor

Mr. Wang Hongxin (王宏新), born in 1963, was appointed as an employee representative Supervisor of the Company in June 2015. He has a master's degree and is a librarian (associate researcher level) and an accountant. Mr. Wang also has a Chinese law practice qualification certificate and corporate legal counsel practice qualification certificate. Mr. Wang has more than 25 years of experience in the nuclear power industry. Mr. Wang served as a full-time director of the governance and business department of CGNPC from January 2011 to July 2011; served as a full-time director and assistant to general manager of the legal affairs department of CGNPC from July 2011 to May 2014; served as the deputy general manager of the legal affairs department of the Company (presiding over the work) from May 2014 to February 2016; served as the deputy director of the Supervisory Department of the Company from September 2015 to July 2017. He has also been a director of CGN New Energy Holdings Co., Ltd., a company listed on the Hong Kong Stock Exchange (stock code: 1811), from July 2017 to June 2018. He served as supervisor of Hongyanhe Nuclear since November 2018. From July 2017 to December 2018, he was the deputy general manager of the corporate legal affairs department of the Company (presiding over the work), and has served as general manager of the corporate legal affairs department of the Company since December 2018.

Senior Management Members



Mr. Gao Ligang
Executive Director and President

The biography of Mr. Gao Ligang is set out in Page 80 of this Annual Report.



Mr. Su Shengbing
Vice President

Mr. Su Shengbing (蘇聖兵), born in 1962, was appointed as a Vice President of the Company in March 2014. He has a master's degree and is a senior engineer (researcher-level). Mr. Su has more than 30 years of experience in the nuclear power industry. Mr. Su served as deputy general manager at Hongyanhe Nuclear from August 2006 to May 2010, as deputy director of the general office and director of the research center at CGNPC from May 2010 to June 2011, and as deputy general manager at GNIC from June 2011 to September 2012. Mr. Su served as vice mayor of Yuxi City, Yunnan Province from September 2010 to August 2012. Mr. Su was an executive director and the general manager of CGN Operations from September 2012 to June 2018. He served as the general manager of the nuclear power operation department of the Company from May 2014 to May 2016. He has also served as the chairman of the board of directors of DNMC and GNPJVC since January 1, 2016 and served as the chairman of the board of directors of Taishan Nuclear since February 2019.

Board of Directors, Supervisory Committee and Senior Management



Mr. Yin Engang
Chief Financial Officer

Mr. Yin Engang (尹恩剛), born in 1968, was appointed as the chief financial officer of the Company in October 2017. He has a master's degree and is a senior accountant. Mr. Yin has over 20 years of experience in finance and auditing. From August 2006 to October 2007, he served as Chief Financial Officer of Hongyanhe Nuclear. From October 2007 to July 2008, he served as deputy head of the preparatory team of CGNPC Industry Investment Fund Management Co., Ltd., served as the chief financial officer of CGNPC Industry Investment Fund Management Co., Ltd. from July 2008 to March 2014, and served as the general manager of the finance department of CGNPC from March 2014 to October 2017. From March 2015 to January 2018, he served as a director of CGN New Energy Holdings Co., Ltd., a company listed on the Hong Kong Stock Exchange (stock code: 1811).



Mr. Chen Yingjian
Vice President

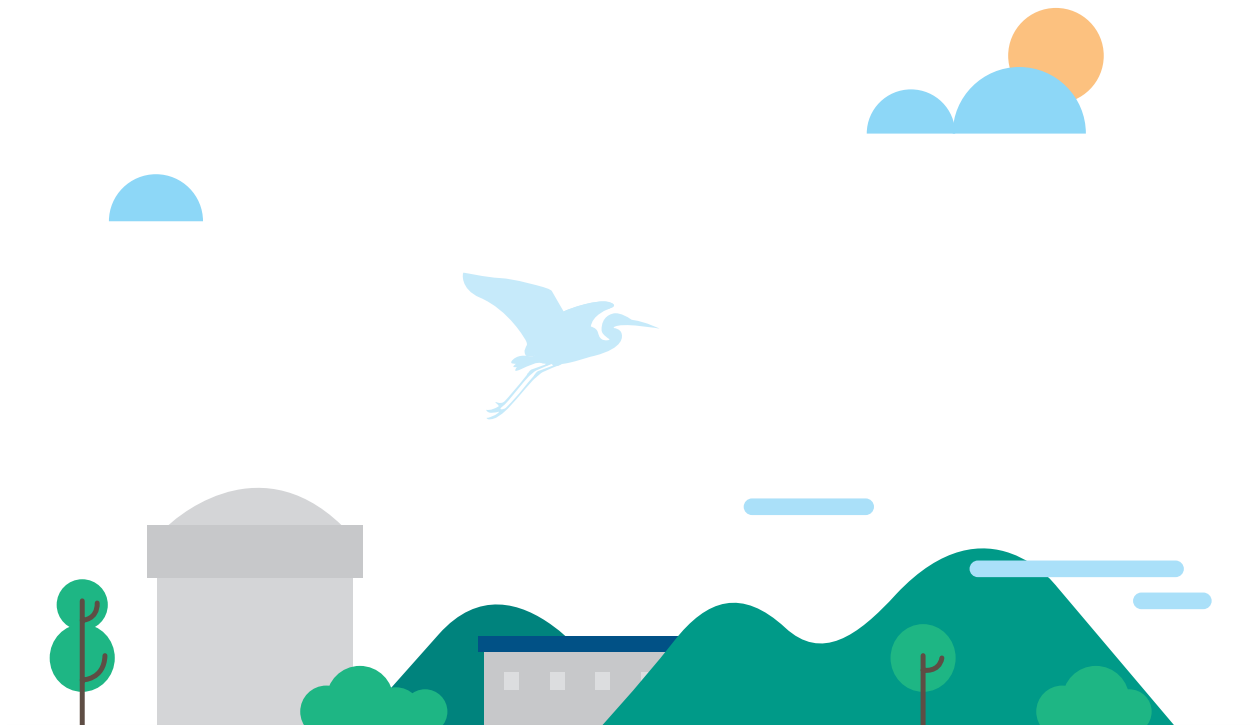
Mr. Chen Yingjian (陳映堅), born in 1962, was appointed as a Vice President of the Company in May 2018. He has a master's degree and is a senior engineer (researcher-level). Mr. Chen has more than 30 years of experience in the nuclear power industry. Mr. Chen served as assistant to general manager of Yangjiang Nuclear from March 2004 to September 2005, as director of preparatory office of Ningde Nuclear from September 2005 to June 2006, as deputy general manager of Ningde Nuclear from June 2006 to January 2011, as deputy general manager of CGN Engineering from January 2011 to February 2016, as general manager of the nuclear power project enterprise department of the Company from February 2016 to May 2016. Mr. Chen has served as executive director and general manager of CGN Engineering since February 2016, as chairman of Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. since March 2016 and as chairman and general manager of China Nuclear Power Design Co., Ltd. (Shenzhen) since April 2016 and as Chairman of China Techenergy Co., Ltd. (北京廣利核系統工程有限公司) ("Techenergy") since September 2016.



Mr. Jiang Dajin

Vice President, Joint Company Secretary and Board Secretary

Mr. Jiang Dajin (蔣達進), born in 1962, has served as a Vice President of the Company since May 2018. He has also worked as the Board secretary of the Company since November 2018 and as a joint company secretary since December 2018. He has a bachelor's degree and is a senior engineer (researcher-level). Mr. Jiang has more than 35 years of experience in the nuclear power industry. He served as an assistant to general manager and a director of design institute of CGN Engineering from January 2009 to January 2012, as a director of Yangjiang Nuclear from December 2011 to July 2018 and as a general manager of Yangjiang Nuclear from January 2012 to July 2018.

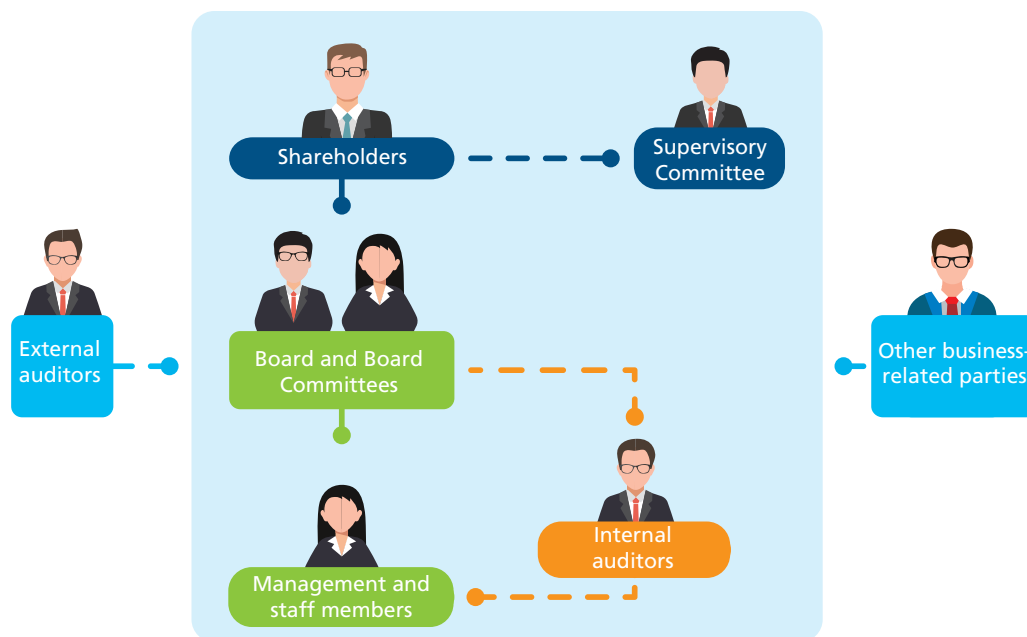


Corporate Governance Report

Corporate Governance framework

The corporate governance framework of CGN Power is designed to safeguard the interests of shareholders and it involves all the key participants in the corporate governance practices of the Company, reflecting the ways in which they relate to each other and their roles and functions in corporate governance.

Our internal governance structure comprises mainly our shareholders, the Board and the Board Committees, the Supervisory Committee, our internal auditors and our management and staff. External auditors conduct independent review and assessment on the governance of the Company to help us continuously optimize our internal governance. Meanwhile, the interactions between the Company and other business-related parties, including customers, partners, social environment and regulators, also reflect the effectiveness of our corporate governance. We are therefore fully aware of our significant corporate and social responsibilities as a public company and we need to constantly follow the best corporate governance practices.



Brief Introduction to the Corporate Governance Code of CGN Power

The Company strives to maintain a high level of corporate governance to ensure the realisation of the Company's strategy, to protect the interests of shareholders and to enhance enterprise value. The Company has complied with the Corporate Governance Code and Corporate Governance Report contained in Appendix 14 (the "**Hong Kong Stock Exchange Code**") to the Listing Rules. The Hong Kong Stock Exchange Code sets out the principles of good corporate governance and two levels of recommendations:

With respect to code provisions:

companies shall duly comply with, or give reasonable explanations for any deviations from the code provisions; and

With respect to recommended best practices:

for guidance only and companies are encouraged to comply with, or give explanations for any deviations from the recommended best practices.

In accordance with the Listing Rules and the Hong Kong Stock Exchange Code and based on the corporate governance framework of the Company, the Board has formulated the Corporate Governance Code of CGN Power Co., Ltd. (the "**Corporate Governance Code of the Company**") as the corporate governance guidelines of the Company to describe the systems, procedures and measures we adopted to ensure our corporate governance standards to meet the expectations of our shareholders and other stakeholders. The Code was reviewed and approved at the fifth meeting of the first session of the Board of Directors on November 18, 2014. Pursuant to the latest revision of the Hong Kong Stock Exchange Code and the Procedural Rules of Board of Directors of the Company, the Board approved the revision of the Corporate Governance Code of the Company on January 6, 2016, which mainly included the matters related to risk management in the duties of the audit committee and the addition of matters related to the nuclear safety committee. On March 14, 2016, the Board approved to change the name of the audit committee into the audit and risk management committee. On 14 November 2018, the Board approved the second revision of the Corporate Governance Code of the Company, which mainly considered and reflected the proposed revision requirements of the Hong Kong Stock Exchange Code, primarily including the assessment on the independence of independent Directors and their discloseable information. In accordance with the requirements of the latest revision, the Board also considered and approved the Director Nomination Policy of CGN Power Co., Ltd..

Corporate Governance Report

The Corporate Governance Code of the Company

The Corporate Governance Code of the Company is in compliance with all code provisions of the Hong Kong Stock Exchange Code, and exceeds the recommended best practices in the Hong Kong Stock Exchange Code in the following aspects.

- Our procedures for convening general meetings (such as the notice period for convening a general meeting) are subject to the stricter requirements of the PRC laws and regulations.
- We have entered into service contracts with our Directors as well as our Supervisors, which define their respective rights, obligations and responsibilities, particularly the duties of independent non-executive Directors and executive Directors. The service contracts with our Directors and Supervisors do not contain any provisions under which the Company is not allowed to terminate such contracts within one year without compensation (except for statutory compensation).
- The Company shall disclose the compliance by its controlling shareholder of its undertakings under the non-competition deed in its annual reports.
- The Company has formulated its Code for Securities Transactions by Directors and Specific Persons on terms no less strict than the Model Code for Securities Transactions by Directors of Listed Issuers (the “**Model Code**”) contained in Appendix 10 to the Listing Rules and its coverage is extended to other “specific persons”, including our Supervisors and senior management. Our Directors and specific persons shall notify the Company in writing in a timely manner and follow strict approval procedures before they deal in the securities of the Company.
- According to the authorization of the Board and the working rules of the special committees, the special committees of the Board consider and review the relevant issues and express their opinions and recommendations, and continuously enhance the decision-making support to the Board of Directors. In the meantime, the Board committees prepare their respective annual work reports and make relevant disclosure in the annual report, so as to further enhance the standardization and transparency of corporate governance.

During the year, the Company has complied with all code provisions set out in the Hong Kong Stock Exchange Code with the exception of one of the best practices recommended by the Hong Kong Stock Exchange Code (i.e. a listed company shall announce and release reports on quarterly results). However, in 2018, we released a total of four quarterly operational briefings to disclose the Company’s on-grid power generation, the operation status of the generating units in operation, the construction progress of the generating units under construction and the major events of the Company which had occurred during the relevant quarters. At the end of each quarter, we also published quarterly financial reports for the domestic market according to the requirement of the local debt securities market, and published overseas regulation announcement on the website of the Hong Kong Stock Exchange to disclose the quarterly financial position on the basis of the PRC Accounting Standards, and to appropriately indicate the differences from the International Financial Reporting Standards.

For the benefits of shareholders, we should, on the base of reporting and delivering sufficient information and data to shareholders, reduce costs and enhance efficiency as much as possible. We will review the above considerations and practices should we receive any suggestions and feedback from our shareholders. We will continue to deliver reports to shareholders in a comprehensive and timely manner through various channels, such as all kinds of periodic reports and the Company website.

Corporate Governance Practices

The Company conducts a self-assessment on corporate governance every year with the aim of reviewing the implementation of the Corporate Governance Code and locating discrepancies, while summarizing the Company's good corporate practices.

In the self-assessment on corporate governance for 2018, the corporate governance practice of the Company was reviewed and summarized. As at the end of 2018, the Company has complied with all applicable code provisions of the Hong Kong Stock Exchange Code and the Corporate Governance Code.

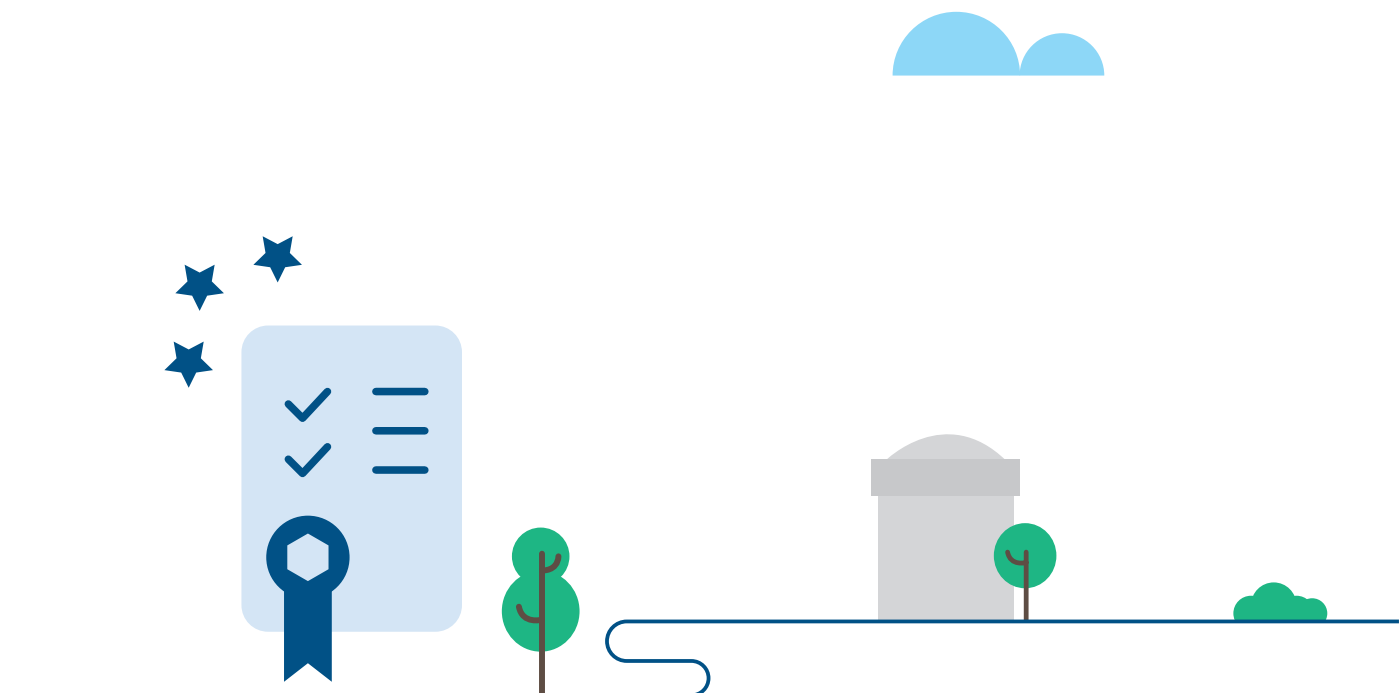
Pursuant to the analysis on the rather developed as well as newly implemented measures in respect of corporate governance, we believe that the Company has exceeded the applicable provisions under the Hong Kong Stock Exchange Code in terms of the following aspects in 2018.

- 1 We periodically formulate and review the Company's value management scheme, dedicated to establishing connection between the market, shareholders and the Company, promoting the Company's value.
- 2 In order to facilitate the Directors' prompt access to relevant information on duty performance, the Company formulated the Handbook on Duty Performance of Directors of CGN Power, providing Directors with reference for the rules and guidelines of duty performance.
- 3 As an arrangement that enables all Directors to familiarize with and get hold of the Company's business and operation, the latest business report is given on the regular Board meeting of the Company. The report is being continually optimized and improved upon, and is gradually becoming normative and mature.
- 4 The Company formulated the Standards for Preparation and Review of Board Resolutions to regulate the Board resolutions and improve their quality and compliance.
- 5 The Company formulated the Board Diversity Policy with further diversity in the composition of the second session of the Board by adding a female Director, Ms. Zhong Huiling (鍾慧玲). The Board devised the indicators for the evaluation of the Board Diversity Policy and will review them once a year.
- 6 The expenses incurred by Directors for seeking independent professional advisers have been included in the annual budget of the Company.
- 7 The Board Office of the Company prepares the plans for annual general meeting of the Company (the "AGM") and meetings of the Board and its special committees, and report to the Board, so as to enable the Directors to make reasonable time arrangement and attend the relevant meetings of the Board and AGM in person as much as possible.
- 8 The Audit and Risk Management Committee conduct special investigation and provide guidance on the internal audit of the Company.

Corporate Governance Report

The Company persists in the corporate governance practices established in the previous years, including:

- 1 The coverage of the Directors' liabilities insurance we have purchased has been extended to all directors of our subsidiaries and major affiliated companies. The maximum indemnity of the insurance policy for the renewal maintains at a relatively high level.
- 2 The Board Secretary of the Company will sort out the actions from the meeting within one week after each Board meeting and report to the Board in respect of the implementation of such actions at the next Board meeting, and continue to follow up the actions which are still within the timeframe.
- 3 In addition to disclosing Directors' interests and confirming their compliance with the Code for Securities Transactions by Directors and Specific Persons and the Model Code, we also disclose the interests of our Supervisors and the President in our securities and confirmation of their compliance with the above codes.
- 4 Through roadshows, reverse roadshows and teleconferences and other means, the Company proactively reports the business conditions of the Company to the shareholders, analysts and financial news media, which further broadens our channels of communication with shareholders to enable the shareholders to understand the operation of the Company.



Overview of Regulatory Documents on Governance and Key Rules and Regulations

We attach great importance to the effective implementation and practicability of the regulatory documents on governance and provided guidance on the governance practices of the Company. In order to further improve the quality of the Board resolutions, ensure the compliance of the procedure of consideration of the Board resolutions and provide high quality resolution for the efficient consideration and decision-making of the Board, we formulated the Standards for Preparation and Review of Board Resolutions.

We also formulated the Handbook on Duty Performance of Directors to provide further guidelines and assistance for the performance of Director's duties with diligence. Pursuant to the latest revision of the Hong Kong Stock Exchange Code, we also made revision to the Corporate Governance Code of the Company and arranged for the formulation of Director Nomination Policy of CGN Power Co., Ltd.

As at the end of 2018, our regulatory documents on governance and key rules and regulations mainly consist of:

- Articles of Association of CGN Power Co., Ltd.* (the "**Articles of Association**")
- Procedural Rules of General Meeting of CGN Power Co., Ltd.* (the "**Procedural Rules of General Meeting**")
- Procedural Rules of the Board of Directors of CGN Power Co., Ltd.* (the "**Procedural Rules of Board of Directors**")
- Procedural Rules of the Supervisory Committee of CGN Power Co., Ltd. (the "**Procedural Rules of Supervisory Committee**")
- Provisions on the Corporate Governance Authorization of CGN Power Co., Ltd. (the "**Provisions on the Corporate Governance Authorization**")
- Terms of Reference for the Audit and Risk Management Committee under the Board of Directors of CGN Power Co., Ltd.*
- Terms of Reference for the Remuneration Committee under the Board of Directors of CGN Power Co., Ltd.*
- Terms of Reference for the Nomination Committee under the Board of Directors of CGN Power Co., Ltd.*
- Terms of Reference for the Nuclear Safety Committee under the Board of Directors of CGN Power Co., Ltd.*
- Board Diversity Policy of CGN Power Co., Ltd.*
- Management Rules on Information Disclosure of CGN Power Co., Ltd.
- Management Measures on Inside Information and Insiders of CGN Power Co., Ltd.
- Management Rules on Investor Relations of CGN Power Co., Ltd.
- Management Rules on Connected Transactions of CGN Power Co., Ltd.
- Management Rules on Comprehensive Risk Management of CGN Power Co., Ltd.
- Management Rules on Internal Auditing of CGN Power Co., Ltd.
- Internal Control Manual of CGN Power Co., Ltd. (First Edition)
- Director Nomination Policy of CGN Power Co., Ltd.*
- Corporate Governance Code of CGN Power Co., Ltd.*

* Disclosed at the website of the Hong Kong Stock Exchange or the website of the Company.

Corporate Governance Report

Major amendments to the Articles of Association

China National Nuclear Corporation, a founding shareholder of the Company, completed its corporate transformation and has become a wholly state-owned company in accordance with the Approval in Relation to the Relevant Matters Concerning Restructuring of China National Nuclear Corporation (Guo Zi Gai Ge [2017] No. 1127) (《關於中國核工業集團公司改制有關事項的批覆》(國資改革 [2017] 1127號)) issued by the SASAC, after which the Chinese name of the company was changed to “中國核工業集團有限公司”. We made adjustments to the relevant content in the Articles of Association accordingly.

The revised Articles of Association was approved by the Board on July 25, 2018, and was subsequently approved at an extraordinary general meeting and came into effect on September 20, 2018. The revision was primarily in respect of the change of the Chinese name of China National Nuclear Corporation, a founding shareholder of the Company, from “中國核工業集團公司” to “中國核工業集團有限公司”.

Compliance with Domestic Regulatory Requirements

The Corporate Governance Code of the Company and the corporate governance practice of the Company were in compliance with the PRC laws and regulations, the relevant regulatory requirements of the CSRC and the Hong Kong Stock Exchange. The Company will update them on a continuous basis to remain consistent with laws and regulations. As of the end of 2018, none of the Company, the Directors, Supervisors or senior management was subject to any administrative punishment, notice of criticism or blame.

Relationship with Controlling Shareholder

Independence from Controlling Shareholder

The Company has an independent and complete business system and is able to operate independently. We are independent from our controlling shareholder in respect of our business, employees, assets, organizations and finance, etc.

Among nine directors of the Company, three non-executive directors hold positions in CGNPC. Mr. Gao Ligang, the executive Director and President, was appointed as the chairman of GNS (a subsidiary of CGNPC) in June 2016. Mr. Yin Engang, the Chief Financial Officer, was a director of CGN New Energy Holdings Co., Ltd. from March 2015 to January 2018. Vice President Mr. Chen Yingjian serves as chairman of Techenergy since September 2016. None of the other members of the senior management of the Company holds positions in CGNPC.

While maintaining our independent and complete business system and independent operating ability, we will continue to regulate our connected transactions and reduce potential horizontal competition to maximize shareholders' interests. If the Company enters into connected transactions with GNS, our Director Gao Ligang will abstain from voting.

Horizontal competition with Controlling Shareholder

We entered into a Custodian Management Framework Agreement with CGNPC on April 28, 2014, pursuant to which the Group will provide certain custodian services and will represent CGNPC in exercising certain management rights or powers over the custodian target companies.

As at December 31, 2018, the target companies under custody included: Xianning Nuclear Power Co., Ltd. (咸寧核電有限公司), Hubei Nuclear Power Co., Ltd. (湖北核電有限公司), CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司) ("**Huizhou Nuclear**"), CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司) and Techenergy.

In order to limit potential competition between CGNPC and its subsidiaries (our Company excluded, and CGNPC's associates included for purposes of the connected transactions) ("**CGN Group**") and the Group, we and CGNPC have entered into a non-competition deed, pursuant to which CGNPC has given certain non-competition undertakings to the Company (for itself and for the benefits of other members of the Group), to the effect that it would not, and it would procure that its associates and connected persons (other than any members of the Group) do not and would not, directly or indirectly, whether on its own account or in conjunction with or on behalf of any person, firm or company among other things, carry on, participate, be interested or engaged in or acquire or hold (in each case whether

as a shareholder, director, partner, agent, employee or otherwise be involved, whether for profit, reward or otherwise), any restricted business (other than the disclosed retained business of CGN Group in the Prospectus) during the agreed restricted period. Only the independent non-executive Directors may participate in deciding whether or not to accept any new business opportunity. In addition, in order to avoid potential competition between CGN Group and the Group for certain nuclear power projects retained by the former, we have obtained the right to acquire and the pre-emptive right regarding the retained business to better protect the interests of the Group.

As of the date of this Annual Report, pursuant to the non-competition deed, the Company completed the acquisition of Taishan nuclear project in 2015 and the acquisition of Fangchenggang Nuclear, Lufeng Nuclear and CGN Engineering in 2016. In 2016, three independent non-executive Directors of the Company have decided in writing that the Company will not participate in the investment by CGNPC in the nuclear power construction project located in the UK. The acquisition of Ocean Power Hebei Thermal Power and Power Sales Company were completed in April 2018.

The independent non-executive Directors will closely monitor the performance of CGNPC under the non-competition deed and the management of the Company will report to the Board on the relevant matters as and when appropriate on an ongoing basis. CGNPC confirmed that no breach of non-competition deed has been found during the reporting period.

Corporate Governance Report

Shareholders

Shareholders' Rights

Shareholders' rights are based on certain laws and regulations, such as the Company Law of the People's Republic of China, the Hong Kong Companies Ordinance and the Listing Rules. Detailed descriptions on major rights of the shareholders are set out in the Corporate Governance Code of the Company, which mainly include:

- receiving dividends and other kinds of profit distribution in proportion to their respective shareholding;
- attending or appointing proxies to attend and voting at general meetings;
- supervising the Company's operating activities and making suggestions or inquiries;
- transferring shares in accordance with the laws, administrative regulations and the Articles of Association; and
- requesting for the relevant information of the Company in accordance with the laws, administrative regulations and the Articles of Association.

To protect shareholders' interests and rights, the Company will submit separate resolutions in respect of all matters (including the election of a specific Director or Supervisor) at general meetings of the Company.

All resolutions tendered at the general meetings will be subject to voting by way of poll in accordance with the Listing Rules. The poll results will be published timely on the websites of the Company and the Hong Kong Stock Exchange after the general meetings.

Convening Extraordinary General Meetings and Submission of Proposals

According to the Articles of Association, shareholders who individually or jointly hold 10% or more of the voting shares of the Company may request for the convening of an extraordinary general meeting (the "EGM"). The relevant request may be proposed in writing to the Board requesting the Board to convene an EGM to deal with the matters specified in the request. The relevant EGM shall be held within two months after such request has been made.

According to the Articles of Association, shareholders who individually or jointly hold more than 3% of the shares of the Company may submit a proposal to the Board in writing 10 days before the date of the general meeting. The Board shall notify other shareholders within two days of receiving the proposal and include it for consideration at the general meeting. The written proposal shall be addressed to the Board at the headquarters in the PRC.

Further details about the procedures for shareholders to convene and put forward proposals at any general meeting are available on the Company's website.

Enquiries to the Board

Shareholders who intend to put forward their enquiries about the Company to the Board could email their enquiries to the email address: IR@cgnpc.com.cn.

Shareholdings

Total number of registered shareholders

Unit: accounts

	As of December 31, 2017	As of December 31, 2018
Total number of registered shareholders	3,919	3,820
Registered shareholders of H shares	3,916	3,817

Corporate Governance Report

Shareholder structure

Nature of shares	Shareholders	Number of shares held (shares)	Approximate percentage of the Company's total issued shares (%)
Domestic shares	CGNPC	29,176,641,375	64.20
	Guangdong Hengjian Investment Holdings Co., Ltd. ("Hengjian Investment")	3,428,512,500	7.54
	China National Nuclear Corporation	1,679,971,125	3.70
H shares	CLP Nuclear Power Company Limited	142,434,000	0.31
	National Council for Social Security Fund ("NSSF")	1,024,102,000	2.25
	Shareholders of other issued and sold H shares	9,997,089,000	22.00

The Hong Kong Stock Exchange has granted us a waiver from strict compliance with the requirements under the Rule 8.08(1) (d) of the Listing Rules. As described in the section headed "Waivers from Strict Compliance with the Listing Rules" of the Prospectus, the minimum public float of the Company is 24.25%. Our current minimum public float meets the requirements.

General Meetings

Pursuant to the Articles of Association, general meetings are divided into AGM and EGM. General meetings shall be convened by the Board. AGM is held once every year and within six months from the end of the preceding accounting year.

The Board shall convene an EGM within two months after the occurrence of any of the following events:

- where the number of Directors is less than the number stipulated in the Company Law of the PRC or less than two-thirds of the number specified in the Articles of Association;
- where the unrecovered losses of the Company amount to one-third of the total amount of its paid-up share capital;
- where shareholder, or shareholders who individually or jointly hold, 10% or more of the Company's issued voting shares make request(s) in writing for convening of an EGM;
- whenever deemed necessary by the Board or as requested by the Supervisory Committee;
- other circumstances provided for by relevant laws, administrative regulations, regulations of the authorities and the Articles of Association.

The shareholdings referred to item 3 above shall be calculated on the basis of the number of shares held as of the date of written request from the shareholders.

In 2018, we held three general meetings, namely the 2018 first EGM and first H/domestic shareholders' class meeting, the 2017 AGM and the 2018 second EGM. Among which, the two EGMs were convened as the Company needed to approve the resolutions (including the plan for A Share listing) pursuant to the requirements under A Share listing and the Articles of Association.

2018 First EGM	Date	April 25, 2018
	Location	Hong Kong
	Attendance	Total number of shares with voting rights represented by the shareholders attending the EGM in person or by proxy was 38,053,688,284 shares, representing approximately 83.7% of the total number of shares.
	Resolutions considered and approved	<p>Ordinary resolutions:</p> <p>The Dividend Distribution Plan for the Three Years after the A Share Offering</p> <p>The Report on the Use of Previously Raised Funds</p> <hr/> <p>Special resolutions:</p> <p>The plan for the A Share Offering</p> <p>The authorisation to deal with the specific matters relating to the A Share Offering</p> <p>The use of proceeds from the A Share Offering</p> <p>The Proposal on Price Stabilisation of A Shares of the Company for the Three Years after the A Share Offering</p> <p>The Remedial Measures for Dilution of Current Return as a result of A Share Offering and Undertakings</p> <p>The Undertakings regarding the Information Disclosed in the Prospectus for the A Share Offering</p> <p>The amendments to the Articles of Association</p> <p>The amendments to the Procedural Rules of General Meeting</p> <p>The amendment to the Procedural Rules of the Board of Directors</p> <p>The amendment to the Procedural Rules of the Supervisory Committee</p> <p>The proposals regarding the distribution of accumulated profit prior to the A Share Offering</p>

Corporate Governance Report

First H shareholders' class meeting	Date	April 25, 2018
	Location	Hong Kong
	Attendance	Total number of H shares with voting rights represented by the holders of H shares attending the H shareholders' class meeting in person or by proxy was 3,778,551,288 shares, representing approximately 33.8% of the total number of H shares.
	Resolutions considered and approved	Special resolutions: The plan for the A Share Offering The authorisation to deal with the specific matters relating to the A Share Offering The Proposal on Price Stabilisation of A Shares of the Company for the Three Years after the A Share Offering The Remedial Measures for Dilution of Current Return as a result of A Share Offering and Undertakings The Undertakings regarding the Information Disclosed in the Prospectus for the A Share Offering The proposals regarding the distribution of accumulated profit prior to the A Share Offering
First domestic shareholders' class meeting	Date	April 25, 2018
	Location	Hong Kong
	Attendance	Total number of domestic shares with voting rights represented by the holders of domestic shares attending the domestic shareholders' class meeting in person or by proxy was 34,285,125,000 shares, representing approximately 100% of the total number of domestic shares.
	Resolutions considered and approved	Special resolutions: The plan for the A Share Offering The authorization to deal with the specific matters relating to the A Share Offering The Proposal on Price Stabilization of A Shares of the Company for the Three Years after the A Share Offering The Remedial Measures for Dilution of Current Return as a result of A Share Offering and Undertakings The Undertakings regarding the Information Disclosed in the Prospectus for the A Share Offering The proposals regarding the distribution of accumulated profit prior to the A Share Offering

2017 AGM	Date	May 30, 2018
	Location	Hong Kong
	Attendance	Total number of shares with voting rights represented by the shareholders attending the AGM in person or by proxy was 37,373,646,086 shares, representing approximately 82.2% of the total number of shares.
	Resolutions considered and approved	<p>Ordinary resolutions:</p> <p>The report of the Board for the year ended December 31, 2017</p> <p>The report of the Supervisory Committee for the year ended December 31, 2017</p> <p>The annual report of the Company for the year 2017</p> <p>The audited financial statements for the year ended December 31, 2017</p> <p>The profit distribution plan for the year ended December 31, 2017</p> <p>The investment plan and capital expenditure budget for the year 2018</p> <p>The re-appointment of Deloitte Touche Tohmatsu Certified Public Accountants LLP and Deloitte Touche Tohmatsu as the domestic and international auditors of the Company, respectively, for the year 2018 until the close of the next annual general meeting of the Company, and the authorization to the Board to determine their remuneration</p> <p>The remuneration of Directors and Supervisors of the Company for the year 2018</p> <p>The 2018 Financial Services Framework Agreement and the provision of depository and loan services contemplated thereunder and the related proposed annual caps</p> <p>Special resolutions:</p> <p>The grant of a general mandate to the Board to allot, issue and deal with additional H shares during the relevant period</p>
2018 Second EGM	Date	September 20, 2018
	Location	Shenzhen
	Attendance	Total number of shares with voting rights represented by the shareholders attending the EGM in person or by proxy was 36,743,266,037 shares, representing approximately 80.8% of the total number of shares.
	Resolutions considered and approved	<p>Ordinary resolution:</p> <p>The Report on the Use of Previously Raised Funds</p> <p>Special resolution:</p> <p>The amendments to the Articles of Association</p>

Corporate Governance Report



The 2017 AGM

We are serious about the organization and convening of each general meeting. All Directors attend the general meetings to the best of their abilities and answer questions of the shareholders with the presence of witnessing lawyer(s). The external auditors of the Company also attended the AGM, and replied to questions about audit practices, preparation and contents of the auditors' report, accounting policies and independence of auditors. The 2018 AGM is expected to be held in May 2019.

Details of the major questions raised by the shareholders and the relevant replies at the general meetings are as follows:

Q

How will the A Share Offering affect the holders of H shares?

A

Without regard to other factors, the A Share Offering will, to a certain extent, dilute the earnings per share.

To safeguard the shareholders' interests, the Board has approved certain measures to be taken. Firstly, the investment schedule of investment projects will be upheld to maximum the benefits; secondly, the financial structure will be further optimized to elevate the effectiveness of the use of funds; and thirdly, the risk control mechanism will be improved to lower the risks related to fund use.

Q

The power installed capacity of CGNPC has been growing rapidly. However, the growth in profit does not keep up with the pace of increase in capacity. What are the major reasons?

A

It is true that the installed capacity in operation of the Company has been increasing with the new generating units being put into operation. Generation capacity has also been increasing correspondingly. However, the increase in profit is smaller than the increase in installed capacity and generation capacity mainly due to two factors. Firstly, with the further reforms in the national electricity market, some on-grid power generation participated in electricity market transactions. Power tariff is to a certain extent lower affecting the net profit attributable to shareholders of the parent company. Secondly, some of the new projects put into operation in recent years are joint venture projects as well as equity transfers of some projects, also affecting net profit attributable to shareholders of the parent company to some extent. However, all these are to cater to the needs of the Company's operation strategy and are beneficial to the long-term development of the Company. In future, the Company will further fulfill lean management requirements, reduce costs and increase efficiency, and continually create value for shareholders.

Communication with Shareholders and Investors

Investor relations have always been regarded as highly important by the Company, the Board of Directors and our management. The Company has established the Investor Relations Management System of CGN Power Co., Ltd., the Information Disclosure Management System of CGN Power Co., Ltd. and other systems to regulate the activities of investor relations through these systems.

The Company continues to help our shareholders to understand the Company in a timely and comprehensive manner through various communication channels. Meanwhile, we highly value the views and feedback of shareholders and investors. We earnestly consider the advice and comments of shareholders and investors on the Company's development strategy, operation and other aspects and provide feedback to the Board, the management and relevant departments of the Company through briefings, special reports and other means, in order to achieve the alignment between the Company's business development and shareholder value and to protect the interests of the shareholders, thereby achieving effective and smooth two-way communication.

Communication Activities with Shareholders and Investors

Main channels of communication with shareholders and investors and the communication activities in 2018:

- Annual report, interim report, quarterly operation briefings and ESG Report of the Company.
- AGM: The 2017 AGM was held in Hong Kong on May 30, 2018.
- Company website (www.cgnp.com.cn): An Investor Relations column has been established to publish information and materials relevant to investors.
- Results announcement conference: The 2017 annual results announcement conference was held in Hong Kong on March 9, 2018.

- Hotlines and e-mails for investor relations: Promptly reply to daily enquiries from shareholders and investors.
- Results roadshow: The Company organized the 2017 annual results roadshow in March 2018 and the 2018 interim results roadshow in August 2018.
- Investors meeting: The Company arranges interviews between the management and the investors from time to time to listen to their opinions and suggestions.
- Reverse roadshow: The Company organizes shareholders, investors, analysts and other relevant persons to conduct on-site inspections of the nuclear power bases from time to time, so that they can understand the operation and construction status of the NPPs first-hand. The Company arranged for shareholders, investors and analysts to conduct on-site inspections in Shanghai, Shenzhen and Daya Bay nuclear power base in June and December 2018 respectively.
- Analyst teleconference: The Company organizes quarterly operation status teleconferences, to provide quarterly updates on safety production and operation to shareholders, investors and analysts and answer their questions. Moreover, teleconferences will also be arranged in accordance with the operating conditions of the Company from time to time. The Company held quarterly operation teleconferences in January, April, July and October 2018 respectively.



The Company arranged for investors and analysts to conduct on-site inspections in Daya Bay nuclear power base in December 2018

Corporate Governance Report

Board of Directors

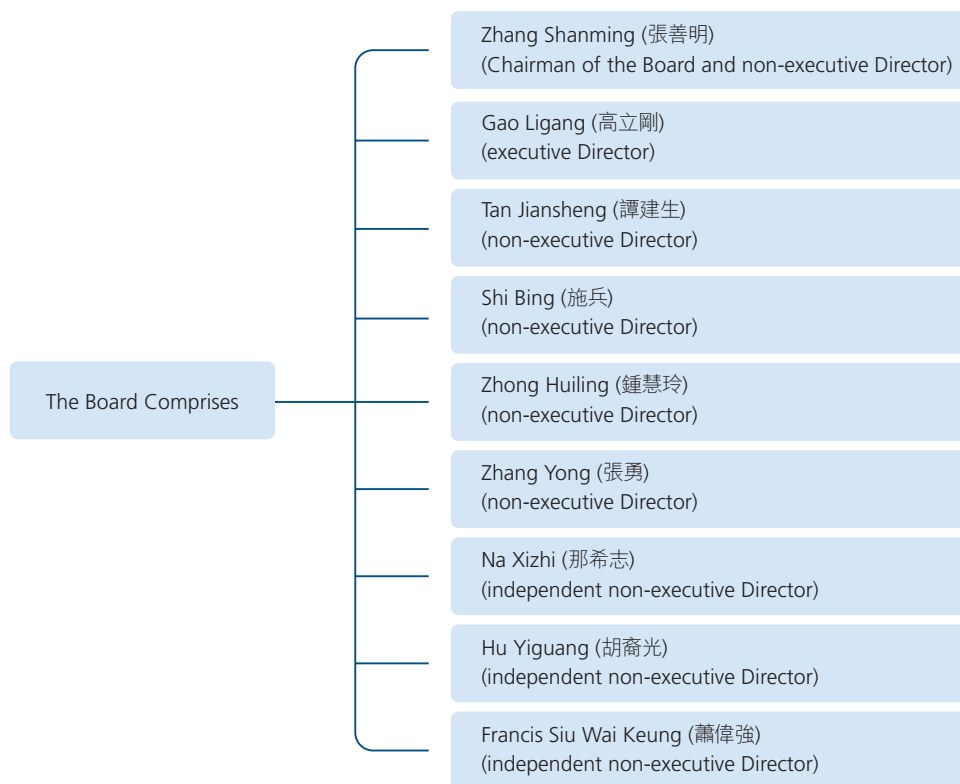
Composition of the Board of Directors

We fully recognize the benefits of diversity in Board members to the development of the Company, and the Company is committed to establishing a board with members with a diverse background. The Board formulated the Board Diversity Policy and delegated the task of reviewing the policy regularly to the Nomination Committee.

Differentiation and diversity in many aspects, such as professional skills, industry experience, ages, qualifications and genders, are reflected in the composition of the members of this session of the

Board. The members of this session of the Board possess over 20 years of experiences in the nuclear power, legal and financial industries, respectively, with one of the members being a female Director.

Pursuant to the Articles of Association, the Board of the Company comprises nine Directors, among which, except for Mr. Gao Ligang, being a Director and the President of the Company, all the remaining Directors are non-executive Directors who are independent of our management, including three independent non-executive Directors. Each of the independent non-executive Directors has confirmed that he is independent of the Company, thereby contributing to critical review and monitoring of management process.



The Directors of the Company have extensive experience in management in the power industry, financial and accounting management, legal, auditing and other fields, respectively. The Directors are fully aware of their responsibilities, rights and obligations, and will perform their duties with truthfulness, integrity and diligence.

(As of 31 December, 2018)

The Board has at all times complied with the requirements under Rules 3.10(1) and 3.10(2) of the Listing Rules for the year 2018 that at least three independent non-executive Directors have been appointed. Among them, at least one independent non-executive Director must have appropriate professional qualification or professional knowledge of accounting or professional knowledge related to financial management.

Each of the independent non-executive Directors has confirmed his independence according to Rule 3.13 of the Listing Rules, and all of them are considered as independent parties by the Company.

Since provisions of the Hong Kong Stock Exchange Code require Directors to disclose the number and nature of positions held in listed companies or entities and other material commitments, and their identities and duration of employment with the issuer, therefore, the Directors have agreed to disclose their relevant information timely to the Company.

Please refer to “Board of Directors, Supervisory Committee and Senior Management” set out on page 80 of this Annual Report for the biographical details of all Directors. Except for those disclosed in such section, no other information relating to the relationship between Directors and Supervisors and other Directors, Supervisors and senior management shall be disclosed according to the Hong Kong Stock Exchange Code.

The Board has set out the Procedural Rules of Board of Directors, which specify the terms of reference of the Board and procedures for the Board meetings, etc., and also set out special arrangements for voting on resolutions regarding major connected transactions and contracts. Directors shall not vote on any contract, transaction, arrangement or proposal in which he/she or any of his/her associates is materially interested, nor shall he/she be counted in the quorum. Where the number of the Directors who can vote on this matter is less than three, such issue shall be submitted to a general meeting for voting. In addition, the independent non-executive Directors shall provide independent opinions in accordance with laws and regulations and the Listing Rules. The Company will strictly review each resolution proposed at the Board meetings to find out whether there is any conflict of interest that requires Directors to abstain from voting and remind all Directors for confirmation before meetings. For example, our Directors Zhang Shanming, Tan Jiansheng and Shi Bing abstained from voting in the Board meeting considering the acquisition of Ocean Power, Hebei Thermal Power and Power Sales Company in 2018.

Corporate Governance Report

Duties of the Board

As the operating decision-making body of the Company, the Board performs its duties in accordance with the provisions set out in the Articles of Association. The Board is responsible for overall leadership of the Group, supervision on the Group's strategic decisions and supervision on business and performance. The Board reports its work to the general meeting, implements the resolutions resolved at the general meeting and is accountable to the general meeting. The Board has delegated the powers and responsibilities for daily management and operation of the Group to the senior management of the Group.

All Directors of the Company are aware of their joint responsibility for the Company's operations, business and development, and perform their duties in accordance with the provisions of the service contract and the Corporate Governance Code of the Company. All Directors must ensure that they have complied with the applicable laws and regulations, and devote sufficient time and efforts to handle the affairs of the Company, to act with integrity, prudence and skills and to assume their respective responsibilities.

The major responsibilities of the Board include:

- formulating strategic guideline of the Company;
- developing working targets of the management;
- evaluating the performance of the management;
- ensuring the Company implements a prudent and effective regulatory framework to evaluate and manage risks;
- performing the function of corporate governance for the Company or arranging for one or more committees to perform related duties; and
- authorising the special committees to perform relevant detailed responsibilities in accordance with the requirements of the Procedural Rules of Board of Directors and the terms of reference of the special committees.

To facilitate the Directors' access to the support for duty performance, the Company, pursuant to the Listing Rules and the Articles of Association, compiled the Handbook on Duty Performance of Directors of CGN Power, providing Directors with reference for the rules and guidelines of duty performance.

The main corporate governance duties of the Board include:

- developing and reviewing the policies and practices regarding the corporate governance of the Company;
- reviewing and monitoring the training and continuous professional development of the Directors and senior management;
- reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements;
- developing, reviewing and monitoring the rules regarding code of conduct applicable to employees and Directors; and
- reviewing the Company's compliance with the Corporate Governance Code of the Company and the Hong Kong Stock Exchange Code and the disclosure in the Corporate Governance Report.

Delegation by the Board

The Board retains the power to decide on all material matters pertaining to the Company, including: approval and supervision on all policy matters, overall strategies and budgets, internal control and risk management system, material transactions (in particular those possibly involving a conflict of interests), financial information and other major financial and operation matters. The Directors may seek independent professional advice in performing their duties at the Company's expense and are encouraged to access and consult with the Company's senior management independently. The daily management, administration and operation of the Company are delegated to the senior management. The delegated functions and responsibilities will be reviewed by the Board on a regular basis.

Board Committees

The Board established four committees with specific terms of reference, namely the Audit and Risk Management Committee, the Remuneration Committee, the Nomination Committee and the Nuclear Safety Committee. The specialized committees shall conduct study on specific matters and furnish advice and recommendations thereon as a reference for the Board in its decision-making.

Audit and Risk Management Committee

Please refer to the "Audit and Risk Management Committee Report" set out on page 139 of this Annual Report for details of the Audit and Risk Management Committee, including its composition and annual work summary.

The duties and responsibilities of the committee mainly include:

- To provide advice on the appointment, reappointment, removal and remuneration of the independent auditors;
- To review and monitor the independence and objectivity of the independent auditors as well as the effectiveness of the audit process in accordance with the applicable standards, and discuss the nature and scope of the audit with the independent auditors before the audit commences;
- To formulate and implement policies on engaging external auditors to provide non-audit services according to work needs. The Committee shall report to the Board identifying and making recommendations on any matters where action or improvement is needed;
- To review the quarterly (if any), half-year and annual financial statements to be proposed to the Board, monitoring the completeness, accuracy and fairness of the financial statements of the Company. In reviewing these financial statements, the Committee shall focus on: any changes in accounting policies and estimates, areas involving critical judgment, significant adjustments required by the independent auditors after auditing the accounts, the going concern assumptions and any qualifications, compliance with accounting standards and the relevant legal requirements;
- To consider any significant or unusual items which are reflected or required to be reflected in the reports and accounts of the Company, and give due consideration to any matters raised by the Company's accounting and finance department, compliance department or auditors;
- To discuss the review of the half-year accounts and audit of the Company by the independent auditors;
- To review the independent auditors' explanatory notes of inspection or management proposal letter (including any material queries raised by the independent auditors regarding the accounting records, financial accounts or monitoring system), and the responses to queries from the management officers of the Company;
- To communicate with the Board, senior management officers and the independent auditors in respect of the Company's financial reports on a regular basis, at least two meetings must be convened each year with the independent auditors of the Company;
- To be responsible for any important communication between internal auditors and external auditors;
- To review the Company's financial policies, internal audit system, internal control system and risk management system;
- The Audit and Risk Management Committee shall establish the relevant procedures for dealing with the following issues: receiving, retaining and dealing with complaints coming to the knowledge of the Company in relation to accounting, internal control, risk management or auditing matters; receiving or handling complaints or whistle blowing from the Company's employees on accounting or auditing matters and keeping their confidentiality;
- To complete other tasks delegated by the Board; and
- To fulfill other duties and responsibilities delegated by the securities regulatory authorities in the jurisdiction where the Company is listed.

Corporate Governance Report

Remuneration Committee

Please refer to the “Remuneration Committee Report” set out on page 140 of this Annual Report for details of the Remuneration Committee, including its composition, annual work summary, remuneration policy and remuneration of Directors, Supervisors and senior management in 2018. The duties and responsibilities of the committee mainly include:

The duties and responsibilities of the committee mainly include:

- To study the remuneration policy, structure and procedures for formulating remuneration policies (including benefits in kind, pensions and compensation payments) for Directors, Supervisors and senior management officers and make recommendations to the Board. The procedures for formulating remuneration policies shall be formal and transparent;
- To consider and make recommendation on the appraisals of Directors, Supervisors and senior management officers;
- To review and approve performance-based remuneration proposals for management officers with reference to corporate goals and objectives set by the Board;
- To approve with authority delegated by the Board or make recommendations to the Board on the remuneration and benefits of the individual executive Directors and senior management;
- To make recommendations to the Board on the remuneration of non-executive Directors;
- To consider the level of salaries paid by comparable companies, time commitment and responsibilities of the relevant individual, and other positions held by such individual in the Company when determining the remuneration and benefits for Directors, Supervisors and senior management;
- To supervise the implementation of the remuneration system for Directors, Supervisors and senior management officers of the Company;
- To review and approve the compensation arrangements for Directors, Supervisors and senior management officers for any loss or termination of office and dismissal due to misconduct;
- To ensure that none of the Directors or any of his/her associates will be involved in deciding on his/her own remuneration.

Nomination Committee

Please refer to the “Nomination Committee Report” set out on page 143 of this Annual Report for details of the Nomination Committee, including its composition and responsibilities and annual work summary.

The duties and responsibilities of the committee mainly include:

- To review the structure, size and composition (including the skills, knowledge, experience and diversity of perspectives) of the Board on a regular basis annually, and make recommendations on any proposed changes to the Board to complement the Company’s strategies;
- To recommend individuals suitable to become members of the Board, select and nominate such individuals for directorships or make recommendations thereon;
- To assess the independence of the independent non-executive Directors;
- To make recommendations to the Board for the appointment or re-appointment of Directors and succession planning for Directors, in particular the Chairman of the Board and the general manager;
- To review the Board diversity policy and any measurable objectives for implementing such Board diversity policy as may be adopted by the Board from time to time, and to review the progress of achieving relevant objectives;
- To fulfill such other duties and responsibilities delegated by the Board.

Nuclear Safety Committee

Please refer to the “Nuclear Safety Committee Report” set out on page 145 of this Annual Report for details of the Nuclear Safety Committee, including its composition and annual work summary.

The duties and responsibilities of the committee mainly include:

- To listen to presentation of the Company relating to status of nuclear safety;
- To listen to independent nuclear safety assessment reports by third-party organizations obtained by the Company;
- To implement necessary nuclear safety oversight, offer guidance and conduct research activities in accordance with the needs;
- To report observations and recommendations to the Board;
- To give appropriate response to the shareholders’ meeting on nuclear safety issues of concern;
- To fulfill such other duties and responsibilities delegated by the Board;
- To fulfill other duties and responsibilities delegated by the regulatory authorities in the jurisdiction where the Company is listed.

Particulars of Board Meetings

The Company has adopted the practice of holding Board meetings on a regular basis. The Company set out the next year’s meeting schedule one year in advance. The notice of regular Board meeting and the meeting documents signed and issued by the management or chairmen of specialized Board Committees will be sent to all Directors at least 14 days prior to the date of convening the meeting to enable them to attend the meeting, have sufficient time to familiarize themselves with the meeting content and decision-making matters and include relevant matters for consideration in the agenda.

Corporate Governance Report

During the reporting period, we convened a total of 10 Board meetings (5 regular Board meetings and 5 extraordinary Board meetings). The convening and voting procedures of such meetings were all in compliance with the requirements under the Articles of Association and the Procedural Rules of Board of Directors. Details of the meetings are as follows:

No.	Name of meeting	Date	Mode
①	Fourth meeting of the second session of the Board of Directors	January 12, 2018	Physical
②	Third extraordinary meeting of the second session of the Board of Directors	February 11, 2018	Physical
③	Fifth meeting of the second session of the Board of Directors	March 8, 2018	Physical
④	Fourth extraordinary meeting of the second session of the Board of Directors	April 25, 2018	Physical
⑤	Sixth meeting of the second session of the Board of Directors	May 29, 2018	Physical
⑥	Fifth extraordinary meeting of the second session of the Board of Directors	July 25, 2018	By teleconference
⑦	Sixth extraordinary meeting of the second session of the Board of Directors	August 13, 2018	By teleconference
⑧	Seventh meeting of the second session of the Board of Directors	August 21, 2018	Physical
⑨	Eighth meeting of the second session of the Board of Directors	November 14, 2018	Physical
⑩	Seventh extraordinary meeting of the second session of the Board of Directors	December 1, 2018	By teleconference

All resolutions proposed at above meetings were approved. Save for the resolutions passed at above general meetings, major resolutions considered and approved by the Board during this reporting period also include:

- 2018 Operational Plan
- 2018 Comprehensive Risk Management Report
- 2018 Internal Audit Plan
- Amendment to the Accounting System
- Appointment of Vice President
- Amendment to the Corporate Governance Code
- Approval for the execution of agreement in relation to the increment of electricity delivery from Daya Bay Nuclear Power Station to Hong Kong and for the adjustment of annual cap for the related continuing connected transaction
- Appointment of Board secretary and joint company secretary of CGN Power Co., Ltd.



Attendance of Directors at the Board Meetings, Board Committee Meetings and General Meetings

The table below shows details of attendance of Directors at the Board meetings, Board Committee meetings and general meetings during this reporting period.

Name	Position	Attendance/Frequency of Meetings				
		Board Meeting	Audit and Risk Management Committee meeting	Remuneration Committee meeting	Nomination Committee meeting	Nuclear Safety Committee meeting
Zhang Shanming	Chairman of the Board and Non-executive Director Member of the Nomination Committee Chairman of the Nuclear Safety Committee	10/10	—	—	3/3	2/2
Gao Ligang	Executive Director and President Member of the Nuclear Safety Committee	10/10	—	—	—	2/2
Tan Jiansheng	Non-executive Director	9/10	—	—	—	—
Shi Bing	Non-executive Director	10/10	—	—	—	—
Zhong Huiling	Non-executive Director Member of the Remuneration Committee Member of the Nuclear Safety Committee	10/10	—	4/4	—	2/2
Zhang Yong	Non-executive Director Member of the Audit and Risk Management Committee Member of the Nuclear Safety Committee	10/10	8/8	—	—	2/2
Na Xizhi	Independent non-executive Director Chairman of the Nomination Committee Member of the Audit and Risk Management Committee Member of the Nuclear Safety Committee	9/10	7/8	—	3/3	2/2
Hu Yiguang	Independent non-executive Director Chairman of the Remuneration Committee Member of the Nomination Committee	10/10	—	4/4	3/3	—
Francis Siu Wai Keung	Independent non-executive Director Chairman of the Audit and Risk Management Committee Member of the Remuneration Committee	10/10	8/8	4/4	—	—

Certain Directors failed to attend relevant meetings due to other business engagements and delegated in writing to the proxies to vote on relevant matters on their behalf.

Corporate Governance Report

Training for Directors

As stipulated by the Listing Rules, a director shall be aware of his duties. All newly appointed Directors have been provided with necessary induction training and information to ensure that they will have proper understanding of the operation and business of the Company and their responsibilities under the relevant laws, regulations and rules.

In order to provide better assistance to the Directors for performing their duties, we have actively made arrangements for the Directors to participate in trainings in relation to, among others, the business and corporate governance aspects of a listed company. Furthermore, we will provide the Directors with written information on applicable policies and regulations issued by the regulators from time to time.

In addition, the management of the Company will monthly provide the Directors with a monthly management report, which sets out the particulars such as achievements of our operating indicators, safety and environmental management, production and operation and project construction. Since 2016, we have added financial information of the Company and industry information in the monthly management report.

We will arrange the Directors to carry out on-site inspections from time to time every year to enable them to have a better understanding of our operation and business, and invite and encourage them to furnish reasonable suggestions and advice to the Company based on their respective areas of expertise.

The current Directors have received the following trainings in relation to the roles, functions and duties of directors of listed companies for the year ended December 31, 2018.

Director	Type of training		
	Reading Materials	Specific Training	On-site Inspections
Zhang Shanming	√	√	
Gao Ligang	√	√	
Tan Jiansheng	√	√	
Shi Bing	√	√	
Zhong Huiling	√	√	√
Zhang Yong	√	√	√
Na Xizhi	√	√	√
Hu Yiguang	√	√	√
Francis Siu Wai Keung	√	√	√

Reading Materials: Company Management Monthly Report

- a total of 12 issues

Specific Trainings: The Company has organized three specific trainings in 2018 which were participated by all Directors, including:

- On January 9, 2018, the seminar of “An Introduction to the Understanding of New Tasks and New Demands Regarding the State-owned Enterprise Reform Given in the 19th National Congress by the Party and the Deepening of the Reform” given by Zhou Qiaoling, the vice chairperson of the State-owned Assets Supervision and Administration Commission Reform Office.
- On May 29, 2018, the seminar of “Endeavour to Study and Comply with the Nuclear Safety Law” given by Zhao Chengkun, the vice chairman of China Nuclear Energy Association.
- On November 14, 2018, the “Dynamic Specific Training on the Latest Amendments to the Hong Kong Listing Rules in the Year of 2018” given by the legal advisors of the Company.

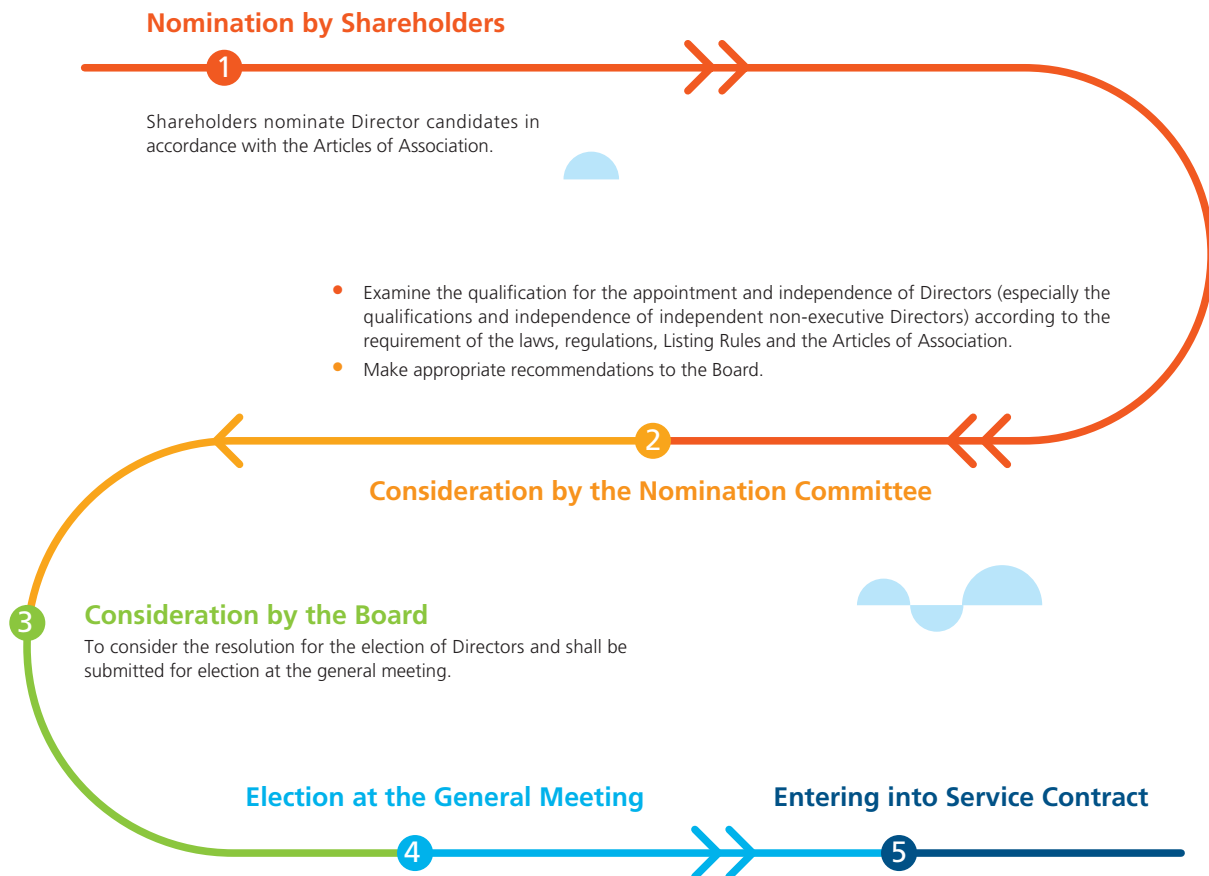
On-site Inspections: In 2018, some of the Directors and Supervisors of the Company participated in 3 inspections related to NPPs, including:

- From May 9 to 11, 2018, the Directors and Supervisors conducted on-site inspection at Dongfang Electric Corporation (中國東方電氣集團有限公司).
- From August 8 to 10, 2018, the Directors and Supervisors conducted on-site inspection at Shanghai Electric Group Co., Ltd. (上海電氣集團股份有限公司).
- From November 15 to 16, 2018, the Directors and Supervisors conducted on-site inspection at Dongfang Electric (Guangzhou) Heavy Machine Co., Ltd. (東方電氣 (廣州) 重型機器有限公司).

Appointment and Re-election of Directors

According to the Articles of Association, the Directors shall be elected at the general meeting and each term of office shall be three years, Directors must retire by rotation at least once every three years and may be re-elected for continuous appointment. The Company formulated the procedures for selection, appointment and re-election of Directors, and specified the working process and duties in appointment and re-election of Directors.

Corporate Governance Report



Directors' Undertakings

Directors have confirmed that they have devoted sufficient time and attention to the affairs of the Company during the year. All Directors have also disclosed to the Company the number and nature of their positions held in public companies or entities listed in mainland China, Hong Kong and overseas and other significant commitments, and provide the names of the public companies and entities and the time involved in working for the relevant positions.

Each of the Directors has signed the Declaration for Dealing in the Company's Securities by Directors, Supervisors and Senior Management (《董事、監事和高級管理人員買賣本公司證券聲明書》), undertaking to comply with the relevant confidentiality provisions and the securities dealing requirements, and has undertaken to obtain the

prior written approval from the Chairman of the Board or the designated Directors before dealing in the Company's securities and report and disclose the same to the Hong Kong Stock Exchange. All Directors have signed the confirmation for disclosure of interests by Directors, Supervisors and Senior Management on both Board meetings for annual and interim results. Directors shall notify the Company in writing of any changes in their personal information on a timely basis in order for the Company to timely report the same to the Hong Kong Stock Exchange and the Hong Kong Companies Registry within the prescribed period.

The Board office of the Company will regularly remind Directors to provide to the company secretary on a timely basis the information required to be disclosed in connection with matters needing disclosure by individuals under the Listing Rules.

Directors' Interest

As recorded in the register required to be kept pursuant to Section 352 of Part XV of the Hong Kong Securities and Futures Ordinance, none of the Directors held any shares of the Company or any of the Company's associated corporations as of December 31, 2018.

Model Code for Securities Transactions

The Company has formulated and adopted the Code for Securities Transactions by Directors and Specific Persons, the provisions of which are not less stringent than the Model Code in Appendix 10 to the Listing Rules. After making specific enquiries by the Company, the Directors, Supervisors and senior management of the Company have all confirmed that they have complied with the above two codes for the year 2018.

Roles of Chairman and President

According to the requirements of provision A.2.1 of the Hong Kong Stock Exchange Code, the roles of chairman and chief executive should be separated and should not be performed by the same individual. Mr. Zhang Shanming and Mr. Gao Ligang are the Chairman and the President, respectively. The Articles of Association have expressly specified the functions and powers of the Chairman and the President. The main functions and powers of the Chairman include presiding over the general meetings, convening and presiding over meetings of the Board and reviewing the implementation status of passed Board resolutions. The main functions and powers of the President include being in charge of the Company's production, operation and management.

Pursuant to the Articles of Association, the President shall coordinate the implementation of the passed Board resolutions and report his/her work to the Board; the Chairman shall prepare the Directors' Report on behalf of the Board and submit the same to the Company's AGM for consideration.

Directors' Financial Reporting Responsibilities in respect of Financial Statements

The Directors acknowledge their responsibilities for preparing the financial statements of the Company for the year ended December 31, 2018 which give a true and fair view of the affairs of the Company and the Group and of the Group's results and cash flows.

The management has provided the necessary explanations and information to the Board enabling the Board to make an informed assessment on the Company's financial statements submitted to the Board for approval.

The statement made by the auditors of the Company on their reporting responsibilities in respect of the Company's financial statements is contained in "Audit Report" of this Annual Report on page 160.

Supervisory Committee

Please refer to the "Supervisory Committee Report" as set out in this Annual Report on page 146 for details of the Supervisory Committee, including its composition, duties and responsibilities and the annual work summary for the year.

Company Secretary

The Board appointed Mr. Jiang Dajin, the Vice President of the Company, as a joint company secretary. Mr. Jiang is also the Board secretary. Pursuant to the requirements under the Listing Rules, we have also engaged Mr. Lee Kwok Fai Kenneth at TMF Hong Kong Limited as a joint company secretary to provide assistance to Mr. Jiang in conducting his work. The joint company secretaries also play essential roles in supporting the Chairman, Board and Board committees by ensuring on time and precise information flow, so the Board policies, procedures and decisions are followed. The joint company secretaries have the right to advise on the corporate governance matters and assist Directors to familiarize themselves with the affairs of the Company and acquire professional development.

Corporate Governance Report

Mr. Wei Qiyang, the former Board secretary, tendered his resignation as a joint company secretary as well as the Board secretary for the reason of job reallocation. Mr. Jiang Dajin has been appointed in replacement of Mr. Wei. Ms. Mok Ming Wai also tendered her resignation as a joint company secretary, the authorized representative and the agent for acceptance of services of process in Hong Kong of the Company for work reallocation. Mr. Lee Kwok Fai Kenneth at TMF Hong Kong Limited has been appointed in replacement of Ms. Mok. Mr. Jiang Dajin, the Vice President, one of the joint company secretaries and the Board secretary of the Company, is the main contact person of the Company. The resignation of Mr. Wei and the appointment of Mr. Jiang as Board secretary came into effect on November 14, 2018. The resignation of Mr. Wei and Ms. Mok as well as the appointment of Mr. Jiang and Mr. Lee as joint company secretaries came into effect on December 5, 2018.

Details of the above are set out in the announcement of the Company dated December 5, 2018.

According to Rule 3.29 of the Listing Rules, the joint company secretaries of the Company, Mr. Jiang and Mr. Lee, had taken not less than 15 hours of relevant professional training during the financial year ended December 31, 2018.

Management and Staff

The responsibility of the management and staff of the Company is the successful implementation of strategy and direction determined by the Board, and they must observe national and local laws and regulations, and safeguard the interest of shareholders.

The delegation of specific authorities by the Board to the management is stated in the Provisions on the Corporate Governance Authorization (《治理授權規定》), and any amendment to the corporate governance authorization of the Company requires approval of the Board. The authorization delegated to the management and staff below the level of President have been stated in the provisions on the management authorization, and any amendment to the management authorization of the Company requires approval of the President.

The Staff Manual (《員工手冊》), which is prepared by the Company as an appendix to the employment contract, has the same effect as that of the employment contract. All staff who have signed employment contracts with the Company shall sign for receipt of the Staff Manual and make a statement that they have received, been aware of and will comply with all provisions set out in the Staff Manual. All management and staff are subject to the specific obligations as set out in the Staff Manual in respect of the work time, disciplines, workplace code, confidentiality and non-competition restriction, conflict of interests, value and code of conduct. All management and staff receive training on the Staff Manual on regular basis in order to ensure their understanding of the Staff Manual.

The Company has established rules and regulations on disciplinary offences of employees. The "Code of Conduct for Listed Companies", "Implementation Rules for the Implementation of the Eight Principles of the Central Government", and Administrative Measures for Integrated Supervision and Administrative Measures for the Supervision of Discipline, are also used by the Company to deal with incidents related to disciplinary offences. All management staff and employees must strictly comply therewith.

In 2018, we further optimized and improved the procedures for investigation and handling of non-compliance with relevant requirements and disciplines, and took various measures to further strengthen the comprehensive supervision and management of the Company, thereby effectively improving the system protection. Meanwhile, we strengthened promotion of honest practices among the staff through various methods, which were well received by the staff. In 2018, we found 23 breaches of discipline and regulations, all of which were handled in strict accordance with relevant system and procedures. The disciplinary actions carried out included warnings, demerits, demotions (reduction in rank), dismissals, etc. Such cases concerning non-compliance with discipline and regulations did not have significant impact on our financial statements and the overall operation. The actions taken in respect of the non-compliance with discipline and regulations provided effective reminders on honest practices and facilitated the improvement of our management. The Company has established appropriate whistleblower channels and encourages employees and related third parties (such as suppliers) to report any misconduct, malpractices or irregularity in any matters related to the Company confidentially.

We have expanded the applicable scope of the Company's Code for Securities Transactions by Directors and Specific Persons to cover Senior Management. According to specific inquiries made by the Company, all senior management confirmed that they have been in compliance with the relevant requirements throughout the year ended December 31, 2018.

The principles and details of the remuneration of senior management officers are set out in the "Remuneration Committee Report" on page 140 of this Annual Report.

The Company has attached great importance to the continuous professional development of management and staff. The details of its talent cultivation are set out in the "Human Capital" on page 55 of this Annual Report. During 2018, the Company has regularly organized management to participate in a series of trainings including special training and study for laws and regulations such as the Nuclear Safety Law.

Internal Auditors

The Company has established an internal audit department, which plays a major role in monitoring the internal governance of the Company. The Group has 70 auditing staff with professional qualifications (such as senior auditors, internal auditors with international certifications, PRC certified public accountants and members of the Association of Chartered Certified Accountants in UK).

Duties of the audit department include:

- Unrestricted access to review all aspects of the activities and internal controls of the Company;
- Specific audits on the business, procedures, expenditures and internal controls of all functional departments, business units, subsidiaries and major affiliated companies of the Company on a regular basis;
- Specific reviews or audits of areas of concern identified by management or the Audit and Risk Management Committee.

The manager of the audit department is engaged by the Board of the Company, reports directly to the Audit and Risk Management Committee and the President, and his audit opinions will be reflected directly to the Board through the Chairman of the Audit and Risk Management Committee.

During 2018, the audit department of the Company conducted specific audit on key areas of management such as internal control, production management, business management, nuclear power supplier management, network security management and financial management of the Company as well as areas of concern identified by the management, and issued reports to senior management officers.

External Auditors

Deloitte Touche Tohmatsu Certified Public Accountants LLP has been appointed as auditor for 2019 to undertake audit and interim review work for 2019. Its term of appointment will last until the conclusion of the 2019 AGM.

After the conclusion of the 2018 AGM, the Company will no longer appoint Deloitte Touche Tohmatsu as international auditor of the Company and Deloitte Touche Tohmatsu Certified Public Accountants LLP (auditor for financial statement under the Accounting Standards for Business Enterprises) will serve as the auditor of the Company, in charge of both domestic and international audit. With regard to the termination of re-appointment, Deloitte Touche Tohmatsu has confirmed that there are no matters in relation to the proposed change of international auditor which should be brought to the attention of the shareholders of the Company. The Board and the audit and risk management committee of the Company confirmed that there are no disagreements between the Company and Deloitte Touche Tohmatsu over the proposed change of international auditor. For details, please refer to the announcement of the Company dated March 12, 2019.

Deloitte Touche Tohmatsu Certified Public Accountants LLP has audited the consolidated financial statements for the year 2018 prepared by the Company in accordance with the CASBE. The auditing expenses for the Group in 2017 were about RMB7.37 million and the domestic and international auditors of the Company did not provide non-auditing services.

Corporate Governance Report

Other Stakeholders

Other stakeholders of the Company include customers, partners, social environment and regulators, details of which are set out in the 2018 ESG Report of the Company.

Internal Control

Risk Management

The Company has established a comprehensive risk management system with the principle of “Unified Leadership, Hierarchical Management”, including risk management strategy, organizational function system of risk management and risk management information system. The Company identifies the risks and adopts qualitative and quantitative approaches to analyze and categorize the risks identified based on the possibility of occurrence and seriousness of impact of risks. Based on the result of risk analysis and the risk tolerance, the Company considers relevant risks and benefits and determines the focus points and major risks that require control, based on which it formulates risk control strategies. Please refer to the “Risk Management Report” for details of risk management.

Structure of the internal control system

Based on the principle of “unified theory and methods, multi-layer establishment and divided responsibilities”, the “Basic Standards of Internal Control for Enterprises” (《企業內部控制基本規範》) and its guidelines and taking into account of the business characteristics of the Company, the Company established the standards for internal control construction and management, and formed a collaborative system of internal control within the Company.

The Board of the Company is the decision maker for internal control and is responsible for the establishment and effective implementation of sound and effective internal control. The Supervisory Committee is the supervision body for internal control, and is responsible for supervising the Board in establishment and implementation of internal control. The management is the executive body in charge of internal control and is responsible for organizing and being in charge of the daily operation of internal control.

The Company formulated and the Board of the Company approved the Internal Control Manual of CGN Power Co., Ltd. (2017, First Edition). The manual standardizes the relevant management systems and procedures of various businesses and functions of the Company, breaks down and specifies the internal control responsibilities, reasonably guarantees legal and compliant operation and management and ensures the authenticity of financial reports.

Key Elements of Internal Control	Initiatives
Internal Environment	<p>The corporate governance structure specifies the management authority at various levels</p> <p>Internal organizations and posts clearly define the allocation of responsibilities and powers</p> <p>The internal supervision system</p> <p>Corporate strategies</p> <p>Integrity and moral values and corporate culture</p> <p>Competency of staff</p>
Risk Assessment	<p>Timely identifying and systematically analyzing risks associated with the realization of internal control objectives in the process of operation activities and reasonably determines strategies in response to risks</p>
Control Activities	<p>Taking corresponding control measures and formulating internal rules, systems and procedures based on the risk assessment results to ensure the implementation of control measures</p> <p>Covering major business areas such as funding activities, procurement, sales, engineering projects management, guarantee, research and development, business outsourcing, asset management and financial reporting</p> <p>Formulating control measures from the perspectives of, among others, separation of incompatible duties, authority approval, accounting system control, property protection, budgets, operation analyses and evaluation</p>
Information and Communication	<p>Timely and accurately collecting and communicating information in relation to internal controls to ensure effective communication of information within the enterprise or between the enterprise and external parties</p>
Internal Supervision	<p>Regularly evaluating the implementation of systems and procedures</p> <p>Independent internal monitoring and auditing activities</p> <p>Self-assessment of internal control system on a regular basis</p>

Corporate Governance Report

Internal control evaluation

According to the relevant provisions of the Corporate Governance Code, we have prepared the Internal Control Assessment Proposal for 2018 of the Company (the “**Internal Control Assessment Proposal**”), which clearly provides the evaluation covers the full 2018 financial year, and determines the major units, businesses and matters to be included in the scope of evaluation as well as high-risk areas based on the risk-oriented principle. The Internal Control Assessment Proposal was approved by the Audit and Risk Management Committee of the Board in August 2018.

The Board shall be responsible for the internal control system of the Group, and has completed the review on the effectiveness of the operation of internal control system of the Group in 2018. In accordance with the approved Internal Control Assessment Proposal, entities included in the scope of the current internal control evaluation mainly comprised the Company and 14 major subsidiaries, which covered all business segments and major business areas of the Company; as of December 31, 2018, the aggregate net assets and operating revenue of the aforesaid companies represented approximately 72.5% and 91.3% of the net assets and operating revenue of the Group, respectively. None of those subsidiaries which were not included in this evaluation had business or matters which would materially affect the Company’s operation and management. Each of those entities which are included in the relevant evaluation shall, based on its own business characteristics and key points of management, follow the principles of comprehensiveness and importance to incorporate key business areas and major business processes into the scope of evaluation. Overall, high-risk areas that need to be focused on mainly include, among others, safety, quality and environmental management, research and development, construction projects, etc. The aforesaid businesses and matters included in the scope of evaluation together with high-risk areas cover the major aspects of the Company’s operational management and there is no material omission.

Based on the determination of material defects in the internal control on the Company’s financial reporting, as of the benchmark date (December 31, 2018) of the internal control evaluation report, there were no material defects in the internal controls on the financial reporting of the Company, and the Board considers that the Company has maintained effective internal control on financial reporting in all material aspects in compliance with the requirements of the Regulated System of Internal Control for Enterprises (企業內部控制規範體系) and the relevant provisions.

Based on the determination of material defects in the internal control on the Company’s non-financial reporting, as of the benchmark date (December 31, 2018) of the internal control evaluation report, the Company was not aware of any material defect in the internal control on non-financial reporting. From the benchmark date of the internal control evaluation report up to the issue date of the internal control evaluation report, there were no factors which would affect the evaluation conclusion of effectiveness of internal controls.

Monitoring inside information

The measures for the management and control of inside information by the Company are as follows:

- The Company has expressly stated in the Staff Manual that unauthorized use of confidential or inside information is strictly prohibited.
- The Company has regulated the channels of disseminating information.
- The information disclosure management system and its ancillary procedures have been formulated in order to regulate the management requirements and handling procedures of inside information.
- The relevant trainings on information disclosure have been provided to the Company's management and staff of the subsidiaries and affiliated companies on a sustained basis.

In 2018, we carried out trainings on information disclosure through various ways such as face-to-face training, video communication and internet learning, adding for this year sessions on A share-related knowledge to ensure compliance with laws and regulations on information disclosure subsequent to the A Share Offering, covering almost 90% of the staff. In addition, we regularly prepared typical punishment cases on the domestic and international capital markets for the training sessions, enhancing staff's comprehension on regulatory requirements. In 2018, we conducted random inspection on the implementation of relevant systems and procedures information disclosure of the subsidiaries and found no violation of the procedure.

Conclusion

The Company is committed to improving its corporate governance. We believe that good corporate governance lays a solid foundation for the continuous development of the Company, and is critical to creating value for our shareholders. The Company will further reinforce the good practices in corporate governance, continuously monitor the changes in relevant regulatory requirements, actively receive the opinions and recommendations from the investors and constantly optimize the corporate governance system, thereby providing powerful support to the long-term and sustainable development of the Company.

Corporate Governance

Directors' Report

Operations

Major operations: We build, operate and manage NPPs, sell electricity generated by these stations, and organize and develop the design and R&D of NPPs.

Financial Statements

For the Group's financial statements for the financial year ended December 31, 2018, please refer to page 166 to 392.

Five-Year Financial Highlights

The summary of operating results and financial information of the Group in the previous five financial years are set out in the "Financial Highlights" of this Annual Report on page 3. This summary does not form part of the audited consolidated financial statements.

Earnings and Dividends

The details about the earnings of the Group for the year are set out in the "Consolidated Income Statement" on page 172.

Details of dividend payments and policy are set out in the "Shareholder Value" in this Annual Report on page 14.

Business Review and Performance

For the analysis of business performance and its impact factors in 2018, please refer to the "Finance, Assets and Investment" from page 18 to 25 and the "Business Performance and Outlook" from page 28 to 41.

For the major risks and uncertain factors faced by the Group, please refer to the "Risk Management Report" of this Annual Report from page 150 to 157.

The business outlook of the Group is discussed in different parts of this Annual Report, including the "President's Review" from page 9 to 13, the "Business Performance and Outlook" from page 28 to 41, and the "Risk Management Report" from page 150 to 157.

The relationships between the Group and its connected persons of major business are set out in the "Directors' Report" of "Corporate Governance" of this Annual Report from page 130 to 131.

Moreover, environment-related performance and policy of the Group are set out in the part of "Environment Capital" of this Annual Report. Charity-related performance and policy of the Group are set out in the part of "Social and Relationship Capital" of this Annual Report. The discussion on compliance status of relevant laws and regulations that would have a material impact on the Group is set out in the "President's Review" from page 9 to 13, the "Business Performance and Analysis" from page 29 to 40, the "Corporate Governance Report" from page 90 to 123, and the "Supervisory Committee Report" from page 146 to 149.

Save as disclosed in "Events after the Reporting Period" on page 132, there is no event that had a significant impact on the Group's operation, financial and trading prospects from January 1, 2019 to the date of this Annual Report.

The above discussions form part of the Directors' Report.

Assets

Fixed Assets and Construction in Progress

Additions to fixed assets and construction in progress of the Group for the year amounted to a total of RMB18,902.4 million. In 2017, a total amount of RMB19,663.0 million was added to fixed assets and construction in progress. Details of changes in fixed assets and construction in progress of the Group are set out in Note (V) 15 and 16 to the Financial Statements.

Bank Borrowings and Other Borrowings

The total borrowings of the Group as of December 31, 2018 amounted to RMB222,716.8 million (2017: RMB220,972.4 million). Details of borrowings are set out in Note (V) 23, 31, 33 and 34 to the Financial Statements.

Finance Costs Capitalized

Finance costs amounting to RMB4,004.0 million (2017: RMB3,906.3 million) were capitalized by the Group during the year, the details are as set out in Note (V) 49 to the Financial Statements.

Major Subsidiaries

For the details of the Company's major subsidiaries, please refer to Note (VII) 1 to the Financial Statements and the "Business at a glance for the year" on page 4 of this Annual Report.

Share Capital

Issuance and Listing of Securities

The initial registered share capital of the Company at incorporation was RMB35,300,000,000, being divided into 35,300,000,000 Domestic Shares with a nominal value of RMB1.00 per share, and all the Domestic Shares were held by three promoters.

After the completion of the global offering and before the exercise of the over-allotment option, the registered share capital of the Company increased to RMB44,125,000,000, being made up of 34,417,500,000 Domestic Shares and 9,707,500,000 H Shares, representing approximately 78% and 22% of the registered share capital, respectively.

After full exercise of the over-allotment option under the global offering, the registered share capital of the Company increased to RMB45,448,750,000, being made up of 34,285,125,000 Domestic Shares and 11,163,625,000 H Shares, representing approximately 75.44% and 24.56% of the registered share capital, respectively.

Purchase, Sale or Redemption of the Company's Listed Shares

During the year ended December 31, 2018, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed shares.

Equity-Linked Agreements

During the year ended December 31, 2018, neither the Company nor any of its subsidiaries have entered into equity-linked agreements.

Corporate Governance

Directors' Report

Changes in the Number of Shares and Shareholding Structure during the Reporting Period

	December 31, 2017	Increase/ (decrease) due to changes during the Reporting Period	December 31, 2018
Domestic Shares	34,285,125,000	0	34,285,125,000
H Shares	11,163,625,000	0	11,163,625,000
Total number (Shares)	45,448,750,000	0	45,448,750,000

Corporate Governance

The Company's corporate governance principles and practices are set out in the "Corporate Governance Report" of this Annual Report on page 90.

Particulars of Board Meetings

The details of 2018 Board meetings of the Company are set out in "Particulars of Board Meetings" on page 111 of this Annual Report.

Directors

The biographical details of current Directors are set out in "Board of Directors, Supervisors and Senior Management" on page 80 of this Annual Report. Details of Directors' remuneration are set out in "Remuneration Committee Report" of this Annual Report on page 141.

Supervisors

The biographical details of the current supervisors are set out in "Board of Directors, Supervisory Committee and Senior Management" on page 84 of this Annual Report. Details of Supervisors' remuneration are set out in "Remuneration Committee Report" of this Annual Report on page 141.

Senior Management

At the sixth meeting of the second session of the Board of the Company, Mr. Chen Yingjian and Mr. Jiang Dajin were appointed as the Vice Presidents of the Company, who shall serve a term of three years with effect from May 29, 2018.

At the eighth meeting of the second session of the Board of the Company, Mr. Jiang Dajin was appointed as the Board Secretary and a Joint Company Secretary. The appointment of Mr. Jiang Dajin as the Board Secretary shall take effect from November 14, 2018, while the appointment as a Joint Company Secretary shall take effect from December 5, 2018.

The biographical details of the senior management are set out in "Board of Directors, Supervisory Committee and Senior Management" on page 87 of this Annual Report. Details of the remuneration of senior management are set out in the "Remuneration Committee Report" of this Annual Report on page 141.

Interests

Interests of Directors, Supervisors and Chief Executive Officers

Pursuant to the register required to be kept pursuant to Section 352 of Part XV of the Hong Kong Securities and Futures Ordinance, none of the Directors, Supervisors and Chief Executive Officers has any interests/short positions in the shares, relevant shares and debentures of the Company and its associated corporations as of December 31, 2018.

Shareholders' Interests must be Disclosed under the Hong Kong Securities and Futures Ordinance

Pursuant to Divisions 2 and 3 of Part XV of the Hong Kong Securities and Futures Ordinance, the interests/short positions of the following persons (other than the Directors, Supervisors and Chief Executive Officers of the Company) in the shares and relevant shares of the Company as at December 31, 2018 are set out in the following table.

Aggregate long positions in the shares and relevant shares of the Company

The Company had been notified of the following shareholders' interests in the shares (other than pursuant to equity derivatives such as share options, call warrants or convertible bonds) of the Company as of December 31, 2018:

Shareholders	Capacity as holder of shares	Number and Class of the Shares held in the Company	Approximate % of the Relevant Shares Classes	Approximate % of the Issued Shares of the Company
CGNPC	Beneficial owner/ Interest of controlled corporation	29,176,641,375 (Domestic Shares)	85.10%	64.20%
Hengjian Investment	Beneficial owner/ Interest of controlled corporation	3,428,512,500 (Domestic Shares)	10.00%	7.54%
NSSF	Beneficial owner	1,024,102,000 (H Shares)	9.17%	2.25%
BlackRock, Inc.	Interest of controlled corporation	581,393,893 ⁽¹⁾ (H Shares)	5.21%	1.28%

(1) Of which 3,914,000 H Shares are held under equity derivatives.

Corporate Governance

Directors' Report

Aggregate short positions in the shares and relevant shares of the Company

The Company had been notified of the following shareholders' short positions in the shares of the Company as of December 31, 2018:

Shareholders	Capacity as holder of shares	Number and Class of the Shares held in the Company	Approximate % of the Relevant Shares Classes	Approximate % of the Issued Shares of the Company
BlackRock, Inc.	Interest of controlled corporation	180,714,000 ⁽¹⁾ (H Shares)	1.62%	0.40%

(1) Of which 34,993,000 H Shares are held under equity derivatives.

Interests of Other Persons

As of December 31, 2018, the Company had not been notified of any persons other than the above shareholders who had interests or short positions in the shares or underlying shares of the Company, under Divisions 2 and 3 of Part XV of the Hong Kong Securities and Futures Ordinance.

Material Contracts with Controlling Shareholder

Save as disclosed in the section headed "Connected Transactions" of this Annual Report on page 132, none of the Company or any of its subsidiaries entered into material contracts with the controlling shareholder or any of its subsidiaries other than the Group, nor was there any material contract between the Group and the controlling shareholder or any of its subsidiaries other than the Group in relation to provision of services.

Controlling Shareholder's Interests in Material Contracts

The details of material contracts entered into between the Company and the controlling shareholder or its subsidiaries have been disclosed in "Connected Transactions" in this Annual Report on page 132.

Directors' and Supervisors' or Entities Connected with Directors' and Supervisors' Interests in Material Transactions, Arrangements and Contracts

For the year ended December 31, 2018, none of the Company or any of its subsidiaries entered into any material transactions, arrangements or contracts which the Directors and Supervisors or the entities connected with Directors and Supervisors of the Company had material interests, either directly or indirectly.

Directors' Interests in Competing Businesses

For the year ended December 31, 2018, save as disclosed below, none of the Directors or their associates had any competing interests in any business which competed or was likely to compete, either directly or indirectly, with the business of the Company:

Name of Director	Position in the Company	Other Interests
Zhang Shanming	Chairman of the Board and non-executive Director	President and Director of CGNPC
Gao Ligang	Executive Director	Chairman of the board of GNS
Tan Jiansheng	Non-executive Director	Senior Vice President of CGNPC
Shi Bing	Non-executive Director	Senior Vice President of CGNPC

Controlling Shareholder's Non-competition Undertakings

CGNPC, the controlling shareholder of the Company, has undertaken that it would not, and it would procure that its associates and connected persons (other than any members of the Group) do not and would not, directly or indirectly, whether on its own account or in conjunction with or on behalf of any person, firm or company, among other things, carry on, participate, be interested or engaged in or acquire or hold (in each case whether as a shareholder, director, partner, agent, employee or otherwise be involved, whether for profit, reward or otherwise), any restricted business during the agreed restricted period.

CGNPC confirms that it has complied with the above undertakings during the year. For the details of material contracts which provided services to the Group by CGNPC, please refer to "Connected Transactions" on page 132 in this Annual Report.

Pre-emptive Rights

There are no provisions for pre-emptive rights under the Articles of Association or the relevant laws of the PRC, under which the Company is required to issue new shares to its existing shareholders on a pro rata basis.

Distributable Reserves

As of December 31, 2018, our reserves available for distribution to our equity holders amounted to approximately RMB15,249.3 million (representing retained earnings of the parent company of approximately RMB15,249.3 million).

Management Contracts

For the year ended December 31, 2018, except for service contracts entered into with the Directors and the Supervisors, the Company did not enter into any contract in respect of the management or administration of the entire or any substantial part of the business of the Company and no such contract existed.

Major Customers and Suppliers

Major Customers

Most of our revenue comes from the sales of electricity generated by NPPs in which we have controlling interest. During the year, our total sales to the top five customers accounted for 95.4% of the Group's total revenue. Below is the information of the top five customers in descending order:

- 1、CSG (representing 59.9% of our total revenue): The Group did not hold any interest in this company. CSG is a company under the SASAC. It is engaged in the investment, construction and operation management of the power grid in South China, operation of relevant power transmission and distribution, power dispatch control, operation and maintenance of the power grid. Under a long-term agreement, we sold the electricity generated by the NPPs in Daya Bay, Ling'ao, Lingdong, Yangjiang and Fangchenggang to Guangdong Power Grid Co., Ltd. and Guangxi Power Grid Co., Ltd. under the CSG.
- 2、Fujian Electric Power Co., Ltd. (福建省電力有限公司) (representing 19.6% of our total revenue): The Group did not hold any interest in this company. Fujian Electric Power Co., Ltd. is a company under the State Grid Corporation of China. It is engaged in operation of relevant power transmission and distribution, power dispatch control, operation and maintenance of the power grid. Under a long-term agreement, we sold the electricity generated by Ningde Nuclear Power Station to Fujian Electric Power Co., Ltd.
- 3、HKNIC (representing 10.6% of our total revenue): This company is a subsidiary of CLP Holdings Ltd. (a company listed on the Hong Kong Stock Exchange (stock code: 0002), "**CLP Holdings**"), holding a 25% equity interest in Guangdong Nuclear Power Joint Venture Co., Ltd. It is a connected person of the Group. Under a long-term agreement, we sold some of the electricity generated by the Daya Bay Nuclear Power Station to HKNIC.
- 4、Hongyanhe Nuclear (representing 4.0% of our total revenue): Hongyanhe Nuclear is an associate of the Group, and is responsible for the investment, construction and operation of Hongyanhe Nuclear Power Station. We offer nuclear station construction and design, training, repairing, technical research and professional support to Hongyanhe Nuclear.
- 5、Huizhou Nuclear (representing 1.2% of our total revenue): Huizhou Nuclear is a connected person of the Group, and is wholly-owned by CGNPC. Huizhou Nuclear is a company managed by the Group as entrusted by CGNPC, and is responsible for the investment, construction and operation of Huizhou Nuclear Power Station. We provide engineering, training, technical research and professional support services to Huizhou Nuclear.

Major Suppliers

Our major suppliers include providers of nuclear fuel and related services, project construction and technical support. During the year, our purchases from the top five suppliers accounted for 37.5% of the Group's sales and services costs (excluding depreciation). Below is the information of the top five suppliers in descending order:

1. CGN Uranium (representing 14.6% of the Group's sales and services costs (excluding depreciation)): CGN Uranium is a connected person of the Group and is wholly-owned by CGNPC, and its major business is to supply full-cycle nuclear fuel and technical support to NPPs. We mainly purchase nuclear fuel and related services through CGN Uranium.
2. China Nuclear Energy Industry Corporation ("CNEIC") (representing 12.4% of the Group's sales and services costs (excluding depreciation)): The Group did not hold any interest in this company. CNEIC mainly engages in the import and export trade of uranium products and nuclear power technology and equipment, such as providing technology and equipment and supplying fuel to the major NPPs in China. We purchase processing service of enriched uranium used in producing nuclear fuel components from CNEIC.
3. CNNC Jianzhong Nuclear Fuel Co., Ltd., ("CNNC Jianzhong") (representing 7.1% of the Group's sales and services costs (excluding depreciation)): The Group did not hold any interest in this company. CNNC Jianzhong is a production base of nuclear fuel components using the condensation reflux technology in China. We purchase processing service of nuclear fuel components from CNNC Jianzhong.
4. CGN Services Group (representing 1.9% of the Group's sales and services costs (excluding depreciation)): CGN Services Group is a connected person of the Group and is wholly-owned by CGNPC, and mainly offers food and beverage, logistics, electrical and mechanical services as well as water operation and maintenance to us.
5. PICC Property and Casualty Company Limited Shenzhen Branch ("PICC Property and Casualty") (representing 1.5% of the Group's sales and services costs (excluding depreciation)): The Group did not hold any interest in this company. PICC Property and Casualty mainly offers insurance services to corporates. We take out insurances from PICC Property and Casualty, including physical losses insurance, nuclear third-party liability insurance and nuclear employers' liability insurance.

Save as disclosed above, during the year, to the knowledge of Directors, none of our Directors or Supervisors, their respective associates or any of our shareholders holding more than 5% of our issued shares, held any interest in any of our top five suppliers or top five customers.

We upheld the concept of mutual benefit and win-win cooperation, and maintained continuous and close relationship with our stakeholders including customers and suppliers. We adhere to the principles of openness, fairness, justice and compliance, so we continued to establish a comprehensive tender system and supplier management system, and improved the quality management of upstream and downstream in the industrial chain. Through constructive communication, we endeavored to balance the opinions and interests of the stakeholders, thereby setting the long-term development direction for the Company and the regions where our business operates. Please refer to the 2018 ESG Report issued by the Company for more information.

Exchange Rate

For the year ended December 31, 2018, the Group faced no major difficulties or impacts regarding its operations or capital flow due to the fluctuation of foreign exchange rate. For the risk of exchange rate fluctuations of the Company, we have been adhering to the principle of prudence, conducting timely debt hedging and risk prevention arrangements to reduce the impact of financial market volatility on the Company's operating costs, expected earnings and cash flow. For the risk management of exchange rate volatility, please refer to the section of "Financial Capital" on page 70 in this Annual Report.

Events after the Reporting Period

On January 4, 2019, the resolution on the equity transfer agreement proposed to be entered into between CGN Engineering and CGNPC was considered and approved by the Board. Pursuant to the equity transfer agreement, CGN Engineering sold 100% equity interests in Shanghai Engineering Science & Technology Co., LTD at a consideration of RMB710 million. For details, please refer to the relevant announcement of the Company dated January 4, 2019.

Connected Transactions

In 2018, we followed a principle of fairness, justice, bona fide and competitive preference in the course of our transactions with suppliers. For business with an open market, we adopted competitive procurement by continuing to require connected persons to provide us with the relevant materials, products and services through the bidding procedures for standardizing connected transactions. In the actual course of business, we signed one-off connected transaction agreements and continuing connected transaction agreements with connected persons, which constitute major connected transactions of the Group in 2018, after taking into consideration our partnership established with connected persons, familiarity with their respective businesses as well as the factors such as service quality, price and work efficiency.

One-off Connected Transaction

Due to the fact that CGNPC owns a 64.20% equity interest in the Group, under Rules 14A.07(1) and (4) of the Listing Rules, CGNPC and its associates are our connected persons. The following transactions constitute major one-off connected transactions of the Group with its connected persons.

Acquisition of equity interests in Ocean Power, Hebei Thermal Power and Power Sales Company from CGNPC

For details of Ocean Power, Hebei Thermal Power and Power Sales Company, please refer to the “Business at a glance for the year” of this Annual Report on page 4. To further consolidate the Company’s competitive edges and the leading position in the industry, seize the growth opportunities in small reactors in future and reduce competition with CGN Group, on March 8, 2018, the Company exercised the acquisition rights in respect of the target equity interest and entered into an equity transfer agreement with CGNPC and Shenzhen Nengzhihui Investment Co., Ltd. (深圳市能之匯投資有限公司), a wholly-owned subsidiary of CGNPC. Pursuant to the equity transfer agreement, CGNPC and its wholly-owned subsidiary Shenzhen Nengzhihui Investment Co., Ltd. (深圳市能之匯投資有限公司) agreed to sell and the Company agreed to purchase 100% equity interests in Ocean Power, 100% equity interests in Hebei Thermal Power and 100% equity interests in Power Sales Company.

Pursuant to the equity transfer agreement, the total consideration of the acquisition of the target equity interest amounted to approximately RMB23,501.65 million (adjusted according to the equity transfer agreement). The agreement was approved by the Board on March 8, 2018, and the transaction was completed on April 30, 2018. Ocean Power, Hebei Thermal Power and Power Sales Company have become the subsidiaries of the Company, and their financial results have been consolidated into the consolidated financial statements of the Company.

Continuing Connected Transactions

Due to the fact that: (1) CGNPC owns a 64.20% equity interest in the Group; (2) HKNIC, a wholly-owned subsidiary of CLP Holdings Ltd., and CLP Nuclear Power Operations & Management (China) Limited (中電核電運營管理(中國)有限公司) hold a 25% equity interest in Guangdong Nuclear Power Joint Venture Co., Ltd. (廣東核電合營有限公司) (a subsidiary indirectly owned as to 75% by the Company) and 12.5% equity interest in DNMC (a subsidiary indirectly owned as to 87.5% by the Company) respectively; under Rules 14A.07 (1) and (4) of the Listing Rules, CGNPC and its associates, and CLP Holdings Ltd. and its associates are our connected persons.

Corporate Governance

Directors' Report

During the year, the Company had entered into the following continuing connected transaction agreements with the connected persons as defined in the Listing Rules, and carried out the specific transactions according to the terms of such agreements. During 2018, the continuing connected transactions had been carried out as follows:

Nature of Transaction	Annual Cap for 2018 (RMB'000)	Actual Transaction Amount for 2018 (RMB'000)
General Services Framework Agreement ⁽¹⁾	Payment to the CGN Group:	
	2,320,720.00	1,614,985.07
	Receipt from the CGN Group:	
	351,858.00	185,656.33
Technical Support and Maintenance Services Framework Agreement ⁽²⁾	Payment to the CGN Group:	
	1,081,707.00	570,447.01
	Receipt from the CGN Group:	
	466,869.00	64,664.07
Supplemental Agreement to the Engineering Services Framework Agreement ⁽³⁾	Receipt from the CGN Group:	
	11,055,200.00	1,158,802.70
Renewed Financial Services Framework Agreement ⁽⁴⁾	Payment to the CGN Group in relation to settlement, entrustment loans and other financial services:	
	20,800.00	4,367.26
	Maximum daily balance of deposits placed by our Group with the CGN Group and interest income:	
	27,462,000.00	18,158,988.80
	Maximum daily balance of loans provided by the CGN Group to our Group:	
	43,784,000.00	16,343,893.04
Renewed Financial Services Framework Agreement ⁽⁵⁾	Payment to the CGN Group in relation to settlement, entrustment loans and other financial services:	
	2,000.00	1,794.80
	Maximum daily balance of deposits placed by our Group with the CGN Group and interest income:	
	23,497,000.00	16,472,253.52
	Maximum daily balance of loans provided by the CGN Group to our Group:	
	30,255,000.00	17,328,051.37
Supplemental Agreement to the Nuclear Fuel Supply and Services Framework Agreement ⁽⁶⁾	Payment to the CGN Group:	
	5,447,384.00	4,351,398.74
Electricity Supply Arrangement under the Joint Venture Contract ⁽⁷⁾	Sale of electricity to HKNIC:	
	13,070.00GWh	12,601.18GWh

- (1) It was entered into on November 21, 2014 on normal commercial terms, renewed on September 25, 2016, and the supplemental agreement to the General Services Framework Agreement was entered into on March 8, 2018, which would be valid until December 31, 2018, pursuant to which the Group and CGN Group will provide general services to each other. Pursuant to the General Services Framework Agreement, in 2018, the annual cap of total amount receivable from the CGN Group by the Group was RMB174,750,000.00. The annual cap was renewed by the supplemental agreement to the general services framework agreement signed in 2018. Please refer to the above table for relevant data.

To extend the mutual benefits from the above services, the Group and CGN Group again renewed the General Services Framework Agreement on March 8, 2018 on normal commercial terms, which would be valid until December 31, 2021, pursuant to which the Group and CGN Group will provide general services to each other.

- (2) It was entered into on November 21, 2014 on normal commercial terms, renewed on September 25, 2016, and would be valid until December 31, 2018, pursuant to which the Group and CGN Group will provide technical support and maintenance services to each other.

To extend the mutual benefits from the above services, the Group and CGN Group again renewed the Technical Support and Maintenance Services Framework Agreement on March 8, 2018 on normal commercial terms, which would be valid until December 31, 2021, pursuant to which the Group and CGN Group will provide technical support and maintenance services to each other.

- (3) It was entered into on November 21, 2014 on normal commercial terms, and the supplemental agreement to the 2014 Engineering Services Framework Agreement was entered into on September 25, 2016, which would be valid until December 31, 2019, pursuant to which the Group will provide engineering services to CGN Group. Pursuant to the 2014 Engineering Services Framework Agreement, in 2018, the annual cap of total amount payable to the CGN Group by the Group was RMB5,432,000,000.00. The annual cap was renewed by the supplemental agreement to the engineering services framework agreement signed in 2016. Please refer to the above table for relevant data.

CGN Engineering and its subsidiaries have been providing engineering services to the Group in accordance with the 2014 Engineering Services Framework Agreement in its ordinary and usual course of business since its establishment. After the acquisition of 100% equity interests in CGN Engineering from CGNPC by the Company, CGN Engineering became a subsidiary of the Company, and the transactions between CGN Engineering and its subsidiaries and the Group will no longer constitute continuing connected transactions. Following completion of the acquisition, the Group will provide engineering services to CGN Group through CGN Engineering and its subsidiaries, and CGN Group will no longer provide any engineering services to the Group.

- (4) It was entered into on November 21, 2014 on normal commercial terms, renewed on March 18, 2015, and would be valid until December 9, 2018, pursuant to which CGN Group will provide financial services to us.
- (5) It was entered into on March 18, 2015 on normal commercial terms, renewed on March 8, 2018, and would be valid until December 9, 2021, pursuant to which CGN Group will provide financial services to us.
- (6) It was entered into on November 21, 2014 on normal commercial terms and the supplemental agreement to the 2014 Nuclear Fuel Supply and Services Framework Agreement was entered into on September 25, 2016, and would be valid until December 31, 2023, pursuant to which CGN Group will provide us with nuclear fuel supplies and services. Pursuant to the 2014 Nuclear Fuel Supply and Services Framework Agreement, in 2018, the annual cap of total amount payable to the CGN Group by the Group was RMB4,796,000,000.00. The annual cap was updated by the supplemental agreement to the nuclear fuel supply and services framework agreement signed in 2016. Please refer to the above table for relevant data.
- (7) It was entered into on January 18, 1985 and renewed on September 29, 2009 and would be valid until May 6, 2034, pursuant to which the Group will sell electricity to HKNIC, and the annual cap would be in terms of electricity volume sold with GWh as the unit.

On December 31, 2013, the Group and HKNIC entered into an agreement in relation to the increased sale of electricity to HKNIC, which was valid until December 31, 2018. To extend the increased sale of electricity to HKNIC, the Group entered into the 2018 Increased Power Purchase Agreement with HKNIC on December 28, 2018 on normal commercial terms, which would be valid until December 31, 2023, pursuant to which the Group will provide increased electricity sales services to HKNIC.

Corporate Governance

Directors' Report

In addition to the above continuing connected transactions, our continuing connected transactions during 2018 include trademark license agreement, custodian service framework agreement and guarantee from CGNPC, which are exempted from the reporting, annual review, announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

Connected Transaction Management

To ensure the fairness, justice and openness of procurement business, we have formulated the internal control standards related to management of contracts and procurements, whereby all departments of the Company shall monitor and restrict each other, and the procurements that are within the scope of mandatory tendering as required by the Bidding Law and its related regulations shall be carried out through tendering in strict accordance with the relevant laws and regulations.

We have formulated a series of internal control measures. Based on the past experience in the management of connected transactions, we continuously improve the connected transaction management system and management procedures, standardize the pricing principle and method of connected transactions, manage the assignment of responsibility and decision making authority, and specify the requirements for information disclosures. During the execution of the connected transactions, we have strictly complied with the connected transaction management system and procedures. For example, we report the execution of continuing connected transactions during the year, management of connected transactions during the year and the audit opinion from external auditors to the Board on an annual basis.

In 2018, when carrying out management of connected transactions, we adopted a series of measures to ensure the compliance with relevant laws and regulations in respect of connected transactions. We continued our quarterly review on the management of connected transactions within the Group, and made analysis and corrections promptly on the problems found during review, thereby ensuring that the continuing connected transactions were conducted in compliance with the terms of the relevant framework agreement of continuing connected transactions. We put emphasis on the examination of the management of connected transactions of the Company and a dozen of its major subsidiaries, and the findings revealed that each of these companies are capable of implementing the connected transaction management system and procedures of the Company effectively. According to the Company's practice of connected transaction management ever since its listing, we have been actively exploring the possibility of connected transaction management through information technology methods, so as to consolidate relevant rules and enhance management efficiency. Meanwhile, we continued to organize trainings and exchanges for our main subsidiaries and main connected persons, and strengthened the communication with new management personnel of connected transactions in our subsidiaries, which enabled better understanding and performance of the management requirements of the Company.

The independent non-executive Directors of the Company have examined the specific implementation of the continuing connected transactions and confirmed that:

- the transactions were entered into in the ordinary and usual course of business of the Company;
- the transactions were carried out on normal commercial terms or more favorable terms;
- the transactions were carried out in accordance with the framework agreements in respect thereof, the terms of which were fair and reasonable and in the interest of our shareholders as a whole.

We have also engaged an external auditor to review the Group's continuing connected transactions to ensure that the transactions carried out under the framework agreements will be in compliance with the requirements under the Listing Rules. The Board has confirmed that the auditor has issued an unqualified letter in respect of the aforesaid continuing connected transactions in accordance with Rule 56 of Chapter 14A under the Listing Rules and reported the results in this letter to the Board, and a copy of the auditor's letter was submitted to the Hong Kong Stock Exchange. The letter stated that:

- the relevant continuing connected transactions have been approved by the Board;
- in relation to the relevant continuing connected transactions involving the provision of goods and services by the Group, nothing has come to their attention that causes them to believe that the transactions were not, in any material respects, in accordance with the pricing policies of the Group;
- the relevant continuing connected transactions were conducted pursuant to the relevant framework agreements governing those transactions;
- the relevant continuing connected transactions did not exceed the respective annual caps applicable to such transactions.

The Company has complied with the disclosure requirements under Chapter 14A of the Listing Rules.

Related Party Transactions

Details of the significant related party transactions carried out in the normal course of business are set out in Note (X) to the Financial Statements. Save as the connected transactions disclosed above, none of these related party transactions constitutes a discloseable connected transaction as defined under the Listing Rules.

Permitted Indemnity Provisions

At no time during the year ended December 31, 2018 and up to the date of this report, there was or is, any permitted indemnity provision being in force for the benefit of any of the Directors and Supervisors (whether made by the Company or other parties) or any of those of an associated company (if made by the Company).

The Company took out directors' liability insurance for Directors during the year. The relevant insurance covers the liability of Directors and the related costs incurred by the Directors in respect of potential legal proceedings against them arising out of corporate activities.

Auditor

The consolidated financial statements for the year have been audited by Deloitte Touche Tohmatsu Certified Public Accountants LLP, its term of appointment shall expire on the date of the AGM of the Company, and the Company has not changed its auditors for the previous four years. After the conclusion of the 2018 AGM, the Company will no longer appoint Deloitte Touche Tohmatsu as the international auditor of the Company, and Deloitte Touche Tohmatsu Certified Public Accountants LLP (auditor for financial statement under CASBE) will serve as both our domestic and international auditor.

Corporate Governance

Directors' Report

Remuneration Policy

For details of the Company's remuneration policy, please refer to the section headed "Human Capital" on page 62 and the section headed "Remuneration Committee Report" on page 141.

Remuneration of Directors and Five Individuals with the Highest Remuneration

Details of the remuneration of the Directors and the five individuals with the highest remuneration are set out in Note (X) 5(6) to the Financial Statements.

Employee Retirement Benefits

For details of the Company's employee retirement benefits, please refer to the section headed "Remuneration Committee Report" on page 141.

Charitable Donations

For the year ended December 31, 2018, the Group adhered to the national planning on poverty alleviation in the new era and make active efforts in poverty alleviation to fulfill its social responsibilities. In 2018, the Group incurred a total of RMB15,473,000 for poverty alleviation and other donations.

By order of the Board
Zhang Shanming
Chairman

March 12, 2019

Audit and Risk Management Committee Report

Composition and Duties

The members of the Audit and Risk Management Committee were appointed by the Board, comprising three members, namely Francis Siu Wai Keung (蕭偉強) (the chairman of the Audit and Risk Management Committee and an independent non-executive Director), Na Xizhi (那希志) (independent non-executive Director) and Zhang Yong (張勇) (non-executive Director). The details of their personal particulars are set out in the “Board of Directors, Supervisory Committee and Senior Management” on page 82 of this Annual Report.

The Board has delegated to the Audit and Risk Management Committee with written terms of reference prepared according to the relevant requirements of the Articles of Association, the Company Law of the PRC, the Listing Rules, A Guide for Effective Audit Committees published by the Hong Kong Institute of Certified Public Accountants. The Audit and Risk Management Committee shall be responsible for examining the regular financial statements of the Company, the appointment of independent auditors, and audit fees and other matters. The terms of reference are detailed in the Terms of Reference for the Audit and Risk Management Committee under the Board of Directors of CGN Power Co., Ltd. and available on the websites of the Company and the Hong Kong Stock Exchange. For details, please refer to the “Corporate Governance Report” on page 109 of this Annual Report.

Meetings of the Audit and Risk Management Committee shall be held at least twice a year or an extraordinary meeting shall be convened when necessary. The meetings shall discuss financial report, internal audit work plan and internal control and risk management related issues, and listen to working reports from the Company’s management, review the Company’s interim report and annual report, etc. The draft and final versions of the meeting minutes of the Audit and Risk Management Committee shall be sent to all members of the Committee for their comment and records, respectively, within a reasonable time after the meeting. The meeting minutes, upon signing by the members of the Committee present at the meeting, shall be circulated to all members of the Board. The Audit and Risk Management Committee may, if needed, engage relevant professional institutions and listen to experts’ advice from professional institutions before making decisions and recommendations to the Board.

In accordance with the latest revision to the Listing Rules in 2018, the Resolution in relation to the Approval of Revision to the Terms of Reference for the Audit and Risk Management Committee of CGN Power Co., Ltd. was considered and approved at the eighth meeting of the second session of the Board. The new and revised Terms of Reference for the Audit and Risk Management Committee under the Board of Directors supplements and refines the qualifications of committee members.

Annual Work Summary

In 2018, the Audit and Risk Management Committee convened eight meetings to consider 32 resolutions. All members expressed independent opinions, which were reported to the Board by the chairman of the committee. In addition to resolutions in relation to the interim and annual financial reports and the appointment of audit firms of the Company for 2018, the Audit and Risk Management Committee also considered the resolutions in relation to the 2018 internal audit plan of the Company and working plan of the committee. The committee also stepped up its efforts in considering the resolutions in relation to internal control and risk management, including the internal control assessment report and risk management assessment report for the year 2017, the internal control assessment plan and risk management assessment plan for the year 2018 of the Company.

Audit and Risk Management Committee
Francis Siu Wai Keung
Chairman
March 12, 2019

Remuneration Committee Report

Composition and Duties

The members of the Remuneration Committee were appointed by the Board, comprising three members, namely Hu Yiguang (胡裔光) (the chairman of the Remuneration Committee and an independent non-executive Director), Francis Siu Wai Keung (蕭偉強) (an independent non-executive Director) and Zhong Huiling (鍾慧玲) (a non-executive Director). The details of their personal particulars are set out in the “Board of Directors, Supervisory Committee and Senior Management” on page 83 of this Annual Report.

The Board has delegated to the Remuneration Committee with written terms of reference prepared according to the Articles of Association, the Company Law of the PRC, the Listing Rules and other related provisions. The Remuneration Committee shall be mainly responsible for making recommendations on the remuneration of the Directors, Supervisors and senior management of the Company and other matters. The terms of reference are detailed in Terms of Reference for the Remuneration Committee under the Board of Directors of CGN Power Co., Ltd. and available on the websites of the Company and the Hong Kong Stock Exchange. For details, please refer to the “Corporate Governance Report” on page 110 of this Annual Report.

Meetings of the Remuneration Committee shall be held at least once a year or an extraordinary meeting shall be convened where necessary. The meetings shall discuss the annual work plan and listen to the work report of the Company’s management, review the report of the Remuneration Committee as well as formulate the remuneration allocation plan and methods, etc. The Remuneration Committee may, if needed, engage professionals and listen to expert advice from professional institutions before making decisions and recommendations to the Board.

Annual Work Summary

In 2018, the Remuneration Committee convened four meetings, of which two were on-site meetings and two were convened by teleconference, to consider nine resolutions. Independent opinions were expressed at each committee meeting, which were reported to the Board by the chairman of the committee. The committee attached great importance to the 2018 performance assessment plan for the President, Vice President and other senior management officers, and had detailed discussions on and consideration of the specific assessment criteria. The performance assessment plan for the President and other senior management officers, which was proposed to the Board for approval, ensured that the Company achieved its operational objectives in 2018, and was reasonably challenging, which further motivated the President and other senior management officers to create greater value for the Company.

Remuneration for Directors, Supervisors and Senior Management

The remuneration for the directors appointed by the controlling shareholder and the participating shareholders of the Company shall be paid by the company they work for. The remuneration for the independent non-executive Directors appointed by the Company is determined by factors such as the size of the Company, the industry in which the Company operates, and with reference to the appointments held by a Director in the Board Committees.

The remuneration for executive directors of the Company is determined in accordance with the remuneration requirements of the Company.

The remuneration for the supervisors appointed by the controlling shareholder of the Company shall be paid by the company they work for. The remuneration for employee representative supervisors is determined in accordance with the remuneration requirements of the Company. The remuneration for non-employee representative supervisors is determined by factors such as the size of the Company and the industry in which the Company operates.

The remuneration of senior management of the Company is determined in accordance with the remuneration requirements of the Company.

The Directors (except for independent non-executive Directors) and senior management officers of the Company are eligible for the Scheme of the Company.

The sum of remunerations for Directors, Supervisors and senior management in 2018 are set out below. For details of the remuneration for Directors, Supervisors and senior management and the details of the remunerations for the five individuals with the highest remuneration in 2018, please refer to Note (X) 5(6) to the financial statements.

	Fees RMB'000	Salaries, other allowances and discretionary bonus RMB'000	Pension scheme* contributions RMB'000	Total RMB'000
Directors	1,600	889	91	2,580
Supervisors	300	2,108	159	2,567
Senior management	—	4,608	345	4,953

- * Pension scheme: The Group contributes a certain proportion of the salaries of all the staff for their basic pension insurance according to the national and local regulations on pensions, and the staff will collect their pension according to the local policies upon retirement. In addition, the Company has also launched a corporate pension plan. According to the plan, the Company will contribute an amount not exceeding 5% of the individually contracted remuneration per month and the individuals will contribute an amount not exceeding one-third of the contribution from the Company, and the staff can collect such pension from their individual accounts each month upon retirement. Other than this, the Company has no more responsibilities for the pension scheme of the staff.

Remuneration Committee Report

The details of remuneration for senior management officers of the Company for 2018 are set out below:

	Fees RMB'000	Salaries, other allowances and discretionary bonus RMB'000	Pension scheme* contributions RMB'000	Total RMB'000
Gao Ligang	—	889	91	980
Su Shengbing	—	1,360	81	1,441
Chen Yingjian*	—	679	52	731
Jiang Dajin*	—	565	52	617
Yin Engang	—	1,079	82	1,161
Wei Qiyang [#]	—	925	78	1,003

* Mr. Chen Yingjian and Mr. Jiang Dajin were appointed as Vice Presidents in the sixth meeting of the second session of the Board for a term of three years, with effect from May 29, 2018.

[#] Mr. Wei Qiyang, the former Board secretary, tendered his resignation as the Board secretary for the reason of job reallocation. Mr. Jiang Dajin has been appointed in replacement of Mr. Wei. The resignation of Mr. Wei and the appointment of Mr. Jiang as Board secretary came into effect on November 14, 2018.

Remuneration Committee
Hu Yiguang
Chairman
March 12, 2019

Nomination Committee Report

Composition and Duties

The members of the Nomination Committee were appointed by the Board, comprising three members, namely Na Xizhi (那希志) (the chairman of the Nomination Committee and an independent non-executive Director), Zhang Shanming (張善明) (the Chairman and a non-executive Director) and Hu Yiguang (胡裔光) (an independent non-executive Director). Their personal particulars are set out in the “Board of Directors, Supervisory Committee and Senior Management” on page 83 of this Annual Report.

The Board has delegated to the Nomination Committee with written terms of reference prepared according to the Articles of Association, the Company Law of the PRC, the Listing Rules and other related provisions. The Nomination Committee shall be responsible for reviewing the structure of the Board on a regular basis, making recommendations on the members of the Board and senior management officers, verifying the independence of independent non-executive Directors and other matters. The terms of reference are detailed in the Terms of Reference for the Nomination Committee under the Board of Directors of CGN Power Co., Ltd. and available on the websites of the Company and the Hong Kong Stock Exchange. For details, please refer to the “Corporate Governance Report” on page 110 of this Annual Report.

Meetings of the Nomination Committee shall be held at least once a year or an extraordinary meeting shall be convened where necessary. The meetings shall review the composition of the Board and the policy on Board diversity and discuss the annual work plan, etc. The Nomination Committee may, if needed, engage relevant professional institutions and listen to their advice before making decisions and recommendations to the Board.

Annual Work Summary

In 2018, the Nomination Committee convened three meetings, of which two were on-site meetings and one was convened by teleconference, to consider four resolutions. The Nomination Committee considered and approved the appointment of the Vice President, the Board Secretary and the Company Secretary of the Company, and reviewed and considered the qualifications of senior management candidates to be proposed to the Board for appointment. Such opinions were reported to the Board by the chairman of the committee.

The Nomination Committee reviewed and considered that: the current session of the Board comprises of nine Directors, which meets the statutory requirement; the Board has a reasonable structure, the skills, knowledge, experience and diversity of Directors meet the governance requirements, and all independent non-executive Directors are able to express independent opinions on connected transactions and other matters; the current session of the Board has one female Director, which further strengthened the Board diversity; the independent non-executive Directors have confirmed their independence by signing the independence confirmation letters, and the Company has yet to receive any personal information feedback from the independent non-executive Directors which will affect their independence.

Nomination Committee Report

Policy on Board Diversity

The Board has approved the Board Diversity Policy of CGN Power Co., Ltd. (《中國廣核電力股份有限公司董事會成員多元化政策》), setting forth: (1) purpose of the policy; (2) outlook; (3) principles; (4) candidates of the Board should be considered for various factors including but not limited to gender, age, culture and education background, race, professional experience, skills, knowledge and term of services; and (5) review and report, etc. The policy is available on the Company's website.

Pursuant to the Board Diversity Policy of the Company of CGN Power Co., Ltd., the Company formulated the assessment indicators for reviewing the structure and composition of the Board, including age, gender and profession. The relevant indicators complied with the Listing Rules and the Board Diversity Policy of the Company.

Director Nomination Policy

The Board has approved the Director Nomination Policy of CGN Power Co., Ltd. (《中國廣核電力股份有限公司董事提名政策》) at the eighth meeting of the second session of the Board on November 14, 2018, setting forth (1) the responsibility of director selection; (2) the nomination body for directors; (3) the nomination procedure for directors; (4) the qualifications of independent non-executive Directors; (5) the resignation and term of office of directors, the re-election and selection of new session of the Board, and other matters.

The policy is available on the Company's website.

The Nomination Committee formulated the assessment indicators for performance of Directors, which includes the inspections, training sessions and meetings (including meetings of the Board and its special committees) attended by the Directors.

Nomination Committee

Na Xizhi

Chairman

March 12, 2019

Nuclear Safety Committee Report

Composition and Duties

The members of the Nuclear Safety Committee were appointed by the Board, comprising five members, namely Zhang Shanming (張善明) (the chairman of the Nuclear Safety Committee, Chairman of the Board and a non-executive Director), Gao Ligang (高立剛) (an executive director), Zhong Huiling (鍾慧玲) (a non-executive director), Zhang Yong (張勇) (a non-executive director) and Na Xizhi (那希志) (an independent non-executive director). Their biographical details are set out in the “Board of Directors, Supervisory Committee and Senior Management” of this Annual Report on page 80.

The Board has delegated to the Nuclear Safety Committee with written terms of reference prepared according to the Articles of Association, the Company Law of the PRC, the Production Safety Law of the PRC, the Listing Rules and other related provisions. The Nuclear Safety Committee shall be responsible for receiving the report on nuclear safety of the Company and the assessment report on the Company by third party institutions and other matters. The terms of reference are detailed in Terms of Reference for the Nuclear Safety Committee under the Board of Directors of CGN Power Co., Ltd. and available on the websites of the Company and the Hong Kong Stock Exchange. For details, please refer to the “Corporate Governance Report” on page 111 of this Annual Report.

Meetings of the Nuclear Safety Committee shall be held at least twice a year. The meetings shall discuss the nuclear safety management plan of the Company and listen to working reports from the Company’s relevant departments. The Nuclear Safety Committee may, if needed, engage relevant professional institutions and listen to experts’ advice from professional institutions before making recommendations to the Board.

Annual Work Summary

In 2018, the Nuclear Safety Committee convened two on-site meetings on January 12 and August 21 to consider four resolutions, namely, the Safety Management of the Company, Domestic and Overseas Benchmarking in accordance with WANO and Improvement Measures, the Management of Nuclear Power Equipment and the Improvement Plans for Works Quality Control. All members expressed independent opinions, which were reported to the Board by the chairman of the committee.

Under the strong support from the Nuclear Safety Committee, the Company embarked on continuous programs during the Nuclear Safety Management Improvement Year, including the establishment of a work organization to manage major equipment, the commencement of benchmarking work, the systematic safety upgrade of units, achieving continuous growth in the percentage in WANO advanced benchmark for three consecutive years and organizing a thorough study of the Nuclear Safety Law.

The Nuclear Safety Committee considered that the safety management work of the Company in 2018 was practical with a focus on enhancing equipment management. In addition, with consistent transparency in the nuclear safety culture, safety performance indicators were gradually increasing. The Nuclear Safety Committee will continue to facilitate the improvement of safety management, and ensure that the operational objectives of the Company are achieved.

Nuclear Safety Committee
Zhang Shanming
Chairman
March 12, 2019

Supervisory Committee Report

Composition

The Company has five Supervisors, of which two are employee representative Supervisors and three are non-employee representative Supervisors. Ms. Zhu Hui (朱慧) and Mr. Wang Hongxin (王宏新) were appointed as employee representative Supervisors, while Mr. Chen Sui (陳遂) (the Chairman of the Supervisory Committee), Mr. Yang Lanhe (楊蘭和) and Mr. Chen Rongzhen (陳榮真) were appointed as non-employee representative Supervisors.

Biographical details of the current Supervisors are set out in the “Board of Directors, Supervisory Committee and Senior Management” on page 84 of this Annual Report.

The Supervisory Committee shall convene at least two regular meetings per year, and extraordinary meetings of the Supervisory Committee when considered necessary by the Chairman of Supervisory Committee or proposed by other Supervisors. Members of the Supervisory Committee perform their supervisory duties and responsibilities pursuant to the laws, regulations, the Articles of Association and the mandate granted by the general meeting, and shall be accountable to the general meeting, in order to protect the interests of the shareholders, the Company and the legitimate interests of staff against infringements.

Duties and Responsibilities

- To review the Company’s financial position;
- To supervise Directors and senior management to ensure that they do not act in contravention of any law, administrative regulation or the Articles of Association in performing their duties, and to advise on dismissal of Directors or senior management who are in breach of laws, administrative regulations, the Articles of Association or resolutions of the general meetings;
- To demand Directors or senior management to rectify their error if they have acted in a harmful manner to the Company’s interest;

- To check and inspect the financial information such as the financial reports, business reports and profit distribution plans to be submitted by the Board to the general meetings, and to engage, in the Company’s name, certified public accountants or practicing auditors to assist in reviewing such information should any doubt arise in respect thereof;
- To make proposals at a general meeting;
- To propose to convene an EGM; where the Board fails to perform the duties in relation to convening or chairing a general meeting as required by the Company Law of the PRC, to convene and chair a general meeting;
- To propose to convene an extraordinary Board meeting;
- To represent the Company in negotiations with or in bringing actions against a Director or senior management;
- To investigate into any abnormalities in operation of the Company; if necessary, to engage accounting firms, law firms and other professional institutions to assist its work, and the expenses incurred shall be borne by the Company;
- To perform other duties and powers as stipulated in the Articles of Association.

Annual Work Summary

During the reporting period, the Supervisory Committee convened six meetings, all of which were on-site meetings. The Supervisors attended all on-site meetings of the Board, and focused on the review of the annual and interim financial reports and profit distribution plan of the Company. The Chairman of the Supervisory Committee attended or appointed Supervisor representatives to attend all general meetings and supervised the voting results of the general meeting.

During 2018, the meetings convened by the Supervisory Committee were as follows:

Number	Meeting	Date	Method of Convening	Attendance/ Number of Supervisors
1	Fourth meeting of the second session of the Supervisory Committee	January 11, 2018	Physical	5/5
2	Fifth meeting of the second session of the Supervisory Committee	February 11, 2018	Physical	5/5
3	Sixth meeting of the second session of the Supervisory Committee	March 7, 2018	Physical	5/5
4	Seventh meeting of the second session of the Supervisory Committee	May 29, 2018*	Physical	4/5
5	Eighth meeting of the second session of the Supervisory Committee	August 21, 2018**	Physical	4/5
6	Ninth meeting of the second session of the Supervisory Committee	November 14, 2018	Physical	5/5

* Mr. Wang Hongxin did not attend the seventh meeting of the second session of the Supervisory Committee due to other business affairs

** Mr. Chen Sui did not attend the eighth meeting of the second session of the Supervisory Committee due to other business affairs

The Supervisory Committee reviewed matters for the Board's regular meetings. In particular, pursuant to its responsibilities, the Supervisory Committee reviewed the following contents and expressed its opinions, and all resolutions requiring voting were passed by the Supervisory Committee by voting.

Report of the Supervisory Committee of the Company for 2017
Annual Report of the Company for 2017
Annual Results Announcement of the Company for 2017
Financial Report of the Company for 2017
Profit Distribution Plan of the Company for 2017
Amendment to the Accounting System of the Company
Interim Financial Report of the Company for 2018
Interim Report of the Company for 2018
Interim Results Announcement of the Company for 2018

Supervisory Committee Report

During 2018, the attendance of the Supervisors of the Company at on-site Board meetings was as follows:

Name	Position	Attendance at the Board meetings as observers/ Number of Meetings
Chen Sui	Non-employee representative Supervisor/Chairman of the second session of the Supervisory Committee	4/7
Yang Lanhe	Non-employee representative Supervisor	5/7
Chen Rongzhen	Non-employee representative Supervisor	7/7
Cai Zihua*	Employee representative Supervisor	7/7
Wang Hongxin	Employee representative Supervisor	6/7

* Mr. Cai Zihua ceased to serve as employee representative Supervisor on March 8, 2019.

We arrange for Supervisors to receive training on the Company's business and corporate governance and carry out relevant on-site inspections with them from time to time to enable the Supervisors to have a better understanding of our operations and business and better perform their duties as Supervisors.

In 2018, the trainings received and the inspections conducted by the Supervisors of the Company were as follows:

Name	Position	Training received	Inspection conducted
Chen Sui	Non-employee representative Supervisor/Chairman of the second session of the Supervisory Committee	√	—
Yang Lanhe	Non-employee representative Supervisor	√	√
Chen Rongzhen	Non-employee representative Supervisor	√	√
Cai Zihua*	Employee representative Supervisor	√	—
Wang Hongxin	Employee representative Supervisor	√	—

* Mr. Cai Zihua ceased to serve as employee representative Supervisor on March 8, 2019.

Independent Opinions on the Lawful Operation of the Company

The Company operates in compliance with the law and its substantial decisions are made in compliance with relevant laws and regulations. The internal control system established by the Company meets the demands of management. The Board and the management of the Company are able to operate regularly in strict compliance with the PRC Company Law, the PRC Securities Law, the Articles of Association and relevant regulations of Hong Kong, performing their duties and responsibilities with integrity and diligence, and carefully implemented resolutions passed and mandates granted at general meetings. The Company's decisions and operating activities were in compliance with the laws and regulations and the Articles of Association. During the reporting period, no violation of the laws, regulations and the Articles of Association committed by the Board and the management of the Company was identified and no harm was inflicted on the interests of the Company.

Independent Opinions on the Financial Information of the Company

The financial statements of the Company give an objective, true and fair view of the financial position and the operating results of the Company in all material aspects are true and reliable under its regulated financial auditing and sound internal control system.

Independent opinions of the Company's internal control system

In accordance with the requirements of the relevant provisions of the Basic Standards of Internal Control for Enterprises (《企業內部控制基本規範》), upon adequate verification of the Company's internal control operation, the Supervisory Committee is of the view that the existing internal control system of the Company has complied with the currently applicable laws, regulations and regulatory requirements, and can exercise effective control over risks in all material respects; and that the Internal Control Assessment Report of the Company for 2018 (《公司2018年度內部控制評價報告》) has given an objective and true view of the establishment, operation, inspection and supervision of the internal control system of the Company.

The Supervisory Committee of the Company will continue to diligently and duly perform its supervisory duties in strict compliance with the PRC Company Law, the Articles of Association and the State's relevant laws and regulations, so as to enhance the Company's standard operation and safeguard the lawful interests of the Company and its shareholders.

Supervisory Committee
Chen Sui
Chairman
March 11, 2019

Risk Management Report

Philosophy of Risk Management

We focus on the development of strategies and objectives. We face various internal and external risks during the development process of the Company. We need to proactively identify and manage risks to mitigate, avoid, transfer or manage the effects resulting from such risks, while at the same time enhance the effect and efficiency of operation, to create and protect the Company's values. In this respect, the Company has strived to improve its comprehensive risk management structure, strengthening the Company's ability in risk management and nurturing a sound risk management culture. We focus on the identification, analysis, assessment and management of relevant risks to create a safe, healthy, efficient and environment-friendly working environment for employees and contractors, while ensuring the safety and health of the public and minimizing the impacts on environment. Risk management is implemented throughout every aspect of business management and operational process. Every employee of the Company is a safeguard to risk management.

At the strategic planning level, the Company's overall risk management system is supervised by the Board. The Company focuses on the assessment of major risks relating to business development, so as to provide better support for the implementation of corporate strategic planning and business development.

At the daily operational level, risk management promotes the full implementation of the Company's policy and procedures and the major measures adopted to achieve management objectives, so as to protect the effectiveness of business management, lower the uncertainties in achieving business objectives, and ensure the Company is in compliance with the related laws and regulations.

Objectives, Strategies, System and Procedure of Risk Management

Objectives and Strategies of Risk Management

The risk tolerance of the Company refers to the level of risk that the Company is willing to undertake in order to achieve its own strategic and business objectives. The Board of the Company is responsible for assessing the risk the Company is willing to tolerate. The assessment is mainly based on the Company's values, goals and resources, and must follow the requirements of the laws and regulations. The reasonable level of risk that is acceptable by the Company must conform to its development strategy and can be fully understood and controlled and will not place the Company under the following risks:

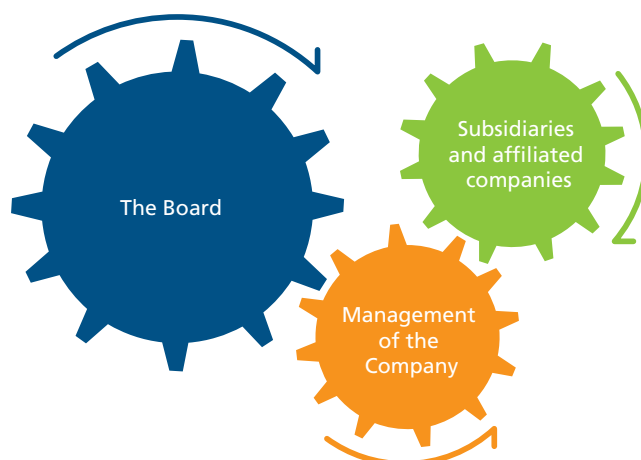


We set up a risk management team to assess risks and rank them on the monthly meeting, while requiring each business unit to identify the consequences and likelihood of risks, set up risk control targets, and take corresponding risk prevention strategies.

Corporate Governance

Risk Management Report

System of Risk Management



The Company's risk management system:

- to promote full identification and delivery of risk information to support the Board's access to risk information;
- to ensure the effective operation of the risk management system and clarifying the roles and responsibilities for risk management;
- the following three different roles and responsibilities are included.

Decision making and monitoring	The Board <ul style="list-style-type: none"> • To consider annual risk management report, to supervise, assess and inspect the effectiveness of the operation of the Company's internal overall risk management system; • To monitor the major risks for the year and fulfill the management responsibilities of major risks; • To discuss risk management and internal control system with the management, ensuring that management has fulfilled its obligation on the establishment of effective system; • To study the significant or unusual matters reflected or to be reflected in the Company's report and accounts, and to make adequate reference to matters proposed by the Company's subordinate accounting and finance department, supervision department or auditors; • To study the important findings of risk management and internal control matters and the relevant measures taken by the management. 	
Setting goals and solutions	Management of the Company	The President <ul style="list-style-type: none"> • To continuously improve the risk management system; • To understand and know the significant risks which the Company faces and their current state, and to approve major risk management solutions of the Company; • To continuously supervise and evaluate the effectiveness of establishing and operating the Company's comprehensive risk management system.
		Risk Management Department <ul style="list-style-type: none"> • To promote and facilitate the normal operation of the Company's comprehensive risk management and related risk management workflow; • To organize and coordinate the routine work of the comprehensive risk management; • To guide and supervise each unit to carry out comprehensive risk management; • To prepare the risk monitoring reports, and the quarterly and annual risk assessment reports by the Company.
Execution and reporting	Other departments and business units of the Company, its subsidiaries and affiliated companies: <ul style="list-style-type: none"> • To be responsible for the comprehensive risk management duties within the unit's business operation; • To manage the specific risks of the unit; • To submit the unit's monthly risk monitoring reports and annual risk management reports; • To organize the risk assessment of the unit according to the supervision of the Risk Management Department; • To organize the investigations, assessments and analyses on the relevant risk incidents before, during and after they take place in the unit respectively. 	

The Procedure of Risk Management

The Company's risk management procedures:	
<ul style="list-style-type: none"> To incorporate the Company's social responsibility, economic operation and development prospects. To make reference to the risk management contents of IAEA-TECDOC-1209. To make reference to the risk management framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). To make continuous improvement to comply with the leading standard and practice in the industry, including ISO 31000:2009 risk management – principles and guidelines. To cultivate sound risk management culture and establish a sound and comprehensive risk management system, by focusing on the overall development and operational objectives and through implementing basic procedures of risk management in all segments of corporate management and in the course of business operation, in order to provide reasonably assured processes and methods for achieving the overall targets of risk management 	
Assessment of the Company	<ul style="list-style-type: none"> To identify significant risks which may affect the Company's business development and operation during the Company's annual business planning. To analyse the internal and external situations for the next year by the Risk Management Department through procedures such as collecting, screening and sorting to find out significant risks the Company will face, and incorporate counter-measures against the significant risks identified into the Company's business plans to ensure that appropriate management or monitoring measures will be adopted to avoid the negative effects of material risks on the Company's business development and operation. After being considered at a specific meeting organized by the President, the resulting annual risk management report will be submitted to the Audit and Risk Management Committee and the Board for review.
Quarterly risk monitoring	<ul style="list-style-type: none"> To identify significant risks, prepare the quarterly risk monitoring reports and submit to the Board for review.
Monthly risk monitoring	<ul style="list-style-type: none"> The major business departments and major business units of the Company will prepare the monthly risk monitoring reports for their own units as the basis for risk information collection. The Risk Management Department will assign the risk management team to assess and rank risks. They will conduct special reports and discussions on the risks that revealed a tendency of negative changes in the previous month, selectively track risks that reveal a tendency of negative changes in the current month, and request the relevant business department or business unit to handle in a timely manner. The Risk Management Department will prepare a monthly risk monitoring report based on pre-screened and sorted risks and the implementation of monitoring objectives, and submit to the President and the Chairman for reporting the risk status of the current month.
Risk management during the business development process	<ul style="list-style-type: none"> In the process of the Company's development, when business units conduct major investment, business units must identify significant risks and put forward corresponding counter-measures. °

We will identify new risks through risk information collection from the basic level to the top level in daily risk monitoring, and assign the risk management team to prepare monthly risk monitoring report and identify the ranking changes of major risks, and identify the undiscovered risks that may arise so as to address the impacts of risk changes for the year. Meanwhile, we will understand and discover new risks through various channels during the process of daily business development and operation. We will timely analyze the situation of new risks brought out by external environmental changes, formulate and adopt corresponding measures. The new risks identified in internal operation and external environment which are recognized as significant risks after evaluation and analysis will be listed as key risks under monitoring until such risks are eliminated.






Risk Management Report







Key Risk Management Initiatives in 2018

We firmly adhered to the same concept on risk management, continued to improve risk management system by strengthening the active identification, regular assessment and active management of risk events, and setting up a dedicated risk management team to manage risks as well as other effective management measures, facilitated each department of the Company to transit from risk warning to active management of risk, and consolidated the front line of risk management and prevention.

In 2018, the Company actively responded to the internal and external challenges and opportunities. According to the changes of internal and external environment, we analyzed the situations, explored internal drivers, made active response and captured the opportunities to resolve the impact of internal and external uncertainties on the Company's development.







In 2018, we have identified the following major risks in the actual business development and have taken corresponding measures:

Description of risks	Key changes	Key measures
Safe and stable operation of multiple bases		
<p>As new units have continuously been put into commercial operation, simultaneous operation and management of multiple bases have brought us many challenges.</p> <p>As multiple bases and multiple units outages interacted and overlapped, resource coordination and control needs to be strengthened.</p> <p>As part of our nuclear plant units have operated for more than 10 years, and it takes some time to inspect the new units, the assurance of reliability of equipment of multiple bases is also an issue we need to focus on.</p>	 <ul style="list-style-type: none"> In 2018, a total of 22 units are in operation, an increase of 2 unit year-on-year. 	<ul style="list-style-type: none"> Continue to carry out the promotion of the Nuclear Safety Law and refresher education of safety on all staff, and further carry out the "Upholding compliance and fighting against non-compliance" activities. We are committed to cultivating masters in key skill areas, formulating and implementing skill competition programs in various professional fields, and improving staff skills. Strengthen online safety supervision, carry out ranking of equipment reliability, selection of responsible person of major equipment and other activities to improve equipment management, and ensure the safe operation of units in operation.
<div>  Lower than the risk level of last year   Same as the risk level of last year  Higher than the risk level of last year </div>		

Description of risks	Key changes	Key measures
Risks of sales of electricity		
<p>The NPPs under our operation and management were affected by the local economic development, local demand for electricity, accelerated power market reform and local power generation policies of the places in which they are located, posing challenges to the nuclear power bases in terms of sales of electricity.</p>	 <ul style="list-style-type: none"> The changes in trading mechanism of electricity arising from the power market reform influence electricity output and prices. As the increase of electricity demand slowed down, power grids request the units to operate at lower efficiency levels during holidays, the heating provision periods in winter and flood seasons because of surplus electricity. Government and power grid projects affect power transmission, lowering the efficiency levels of the units. Power grids request the units to operate at lower power levels due to typhoons. 	<ul style="list-style-type: none"> Establish a coordination mechanism with regional power stations which assumes responsibilities at different levels, pursue more planned output, follow up new electricity reform policies and situations (trading of power generation rights, direct power supply, etc.) and formulate response plans. Formulate and implement corresponding solutions to lower and avoid the chances of deloading occurring during holidays. Enhance marketing strength in the power market in each region, so as to obtain a bigger market share. Strengthen communication and coordination with national competent departments, local governments and power grid, actively keep up with the trend of power market reform.
Controls on projects under construction		
<p>Safety and quality control, progress control and cost control of nuclear power projects under construction are the challenges faced by us.</p>	 <ul style="list-style-type: none"> We managed six nuclear power units under construction With strengthened regulation in nuclear safety, environmental protection and other aspects of the government, the challenge of risk management and control in relation to legal compliance will be tougher. 	<ul style="list-style-type: none"> Ensure working progress with quality, formulate special optimization measures and guarantee the project construction targets. Implement investment control objectives of HPR1000 demonstration project, strengthen the design, procurement and construction schedule control of HPR1000 demonstration project. Continue to carry out nuclear safety education, and enhance the trainings for the Company's staff and contractors to avoid human errors, improve the workers' technical skills and awareness of safety and quality.
 Lower than the risk level of last year   Same as the risk level of last year  Higher than the risk level of last year		

Corporate Governance

Risk Management Report

Description of risks	Key changes	Key measures
Financial risks		
<p>Exchange rate: As RMB exchange rate fluctuated, the foreign currency debts (mainly denominated in Euro) of the Company affected our expected earnings and cash flow.</p> <p>Debts: The changing credit policies and fluctuating market interest rates affected the debt financing and cost control of the Company.</p>	<div style="text-align: center;">   </div> <ul style="list-style-type: none"> In 2018, the RMB was slightly depreciated against the Euro, which posed challenges to the Company in risk management of foreign currency debts. <p>In 2018, the local monetary policy in China remained stable with a suitable degree of tightness. With the benchmark interest rate of RMB loans remained unchanged, the interest rate of RMB in the market gradually went downward with a reasonable and sufficient liquidity level. The Company's financing pressure was gradually relieved.</p> <ul style="list-style-type: none"> At present, the Company has a stable gearing ratio, and its cash and banking facilities are in good position. 	<ul style="list-style-type: none"> We adopted measures such as forward transactions, debt swaps and early repayment to reduce exchange rate exposure of foreign currency debts gradually. Meanwhile, the Company managed new foreign currency debt by payments for foreign commercial contracts through spot or forward purchase of foreign exchange in RMB. We meet long-term and stable capital needs of nuclear power project investment through establishment of syndicates and long-term bank loans and set a reasonable loan term and repayment schedule to match the Company's long-term cash flow, and reduce the risk of refinancing. We optimized debt structure and reduced financing cost by measures such as increasing the scale of direct financing, reducing impact of interest rate fluctuation on the Company's operations.
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Lower than the risk level of last year</p> </div> <div style="text-align: center;">   <p>Same as the risk level of last year</p> </div> <div style="text-align: center;">  <p>Higher than the risk level of last year</p> </div> </div>		

The overall nuclear safety situations are under control according to our inspection on the conditions of nuclear power generating units in operation in 2018 and the overall situations of project quality, progress and construction cost are under control without material and adverse changes according to our inspection on the conditions of projects under construction in 2018. Through reviewing the completion status of power generation plans for 2018 as well as internal and external efforts, the completion rate of the power generation plans was well guaranteed.

Outlook for 2019 and Important Measures

In 2019, the Company will face more challenges. As China is going through economic transformation, industrial restructuring, and deepening reforms in the power market, it will bring about more uncertainties to sales of electricity of the Company.

The Company will continue to promote risk management optimization actions. Based on the “13th Five-Year” plan of the Company and the operational objectives and plan for major tasks of 2019, we will identify the risks that affect us in achieving our targets, further enhance the effectiveness of the Company’s risk management, strengthen the risk management responsibility, formulate and implement risk prevention and control measures to ensure the Company achieves its development and operational objectives and creates value for the shareholders.

The overall objectives of the Company’s risk management in 2019 are: operating in compliance with laws and regulations, avoiding or reducing losses, ensuring the preservation and appreciation of assets, achieving capital return objectives and ensuring the steady operation and development of the Company.

We continue to fulfill risk management responsibilities and optimize the risk monitoring methods through internal control functions and business departments and units, so as to reduce the impacts of significant risks on our business development.

- As for safe and stable operation of multiple bases
 - √ comprehensively implement the requirements of the Nuclear Safety Law.
 - √ continue to facilitate the implementation of actions of nuclear safety independent supervision and improvement plans at the power stations.
 - √ fully utilize internal and external supervisions and play an independent supervisory role.
 - √ continuously improve the equipment management and enhance the equipment reliability
 - √ continue to carry out nuclear safety culture construction activities, play the demonstrative role of senior management and establish a long-term mechanism.
- As for risks of sales of electricity
 - √ actively facilitate the implementation of policies in relation to supporting the consumption of electricity generated by NPPs.
 - √ actively participate in the power market to increase the on-grid power generation.
- As for controls on projects under construction
 - √ adhere to the idea of “safety first and quality foremost”, continue to carry out safety and quality management and environmental protection activities.
 - √ optimize the outage schedule and avoid hurrying and idleness.
 - √ strengthen the feedback system and continuously enhance the effectiveness of feedback.
 - √ enhance progress control on design solidification and prevent claims and delay.

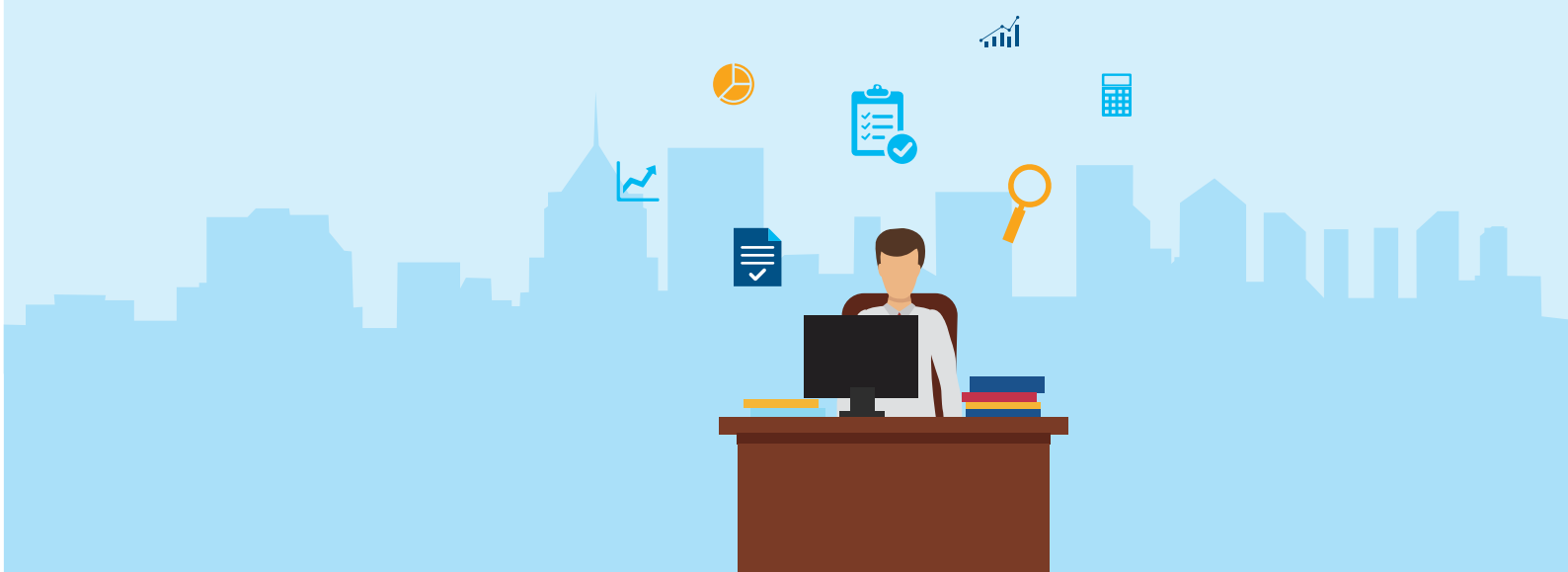
In the face of increasing uncertainties in the business environment, the Company monitor risks continuously and rigorously for the realization of the Company’s operational and strategic objectives.

Report



Financial Report

160	Audit Report
166	Consolidated Balance Sheet
169	Balance Sheet of the Parent Company
172	Consolidated Income Statement
174	Income Statement of the Parent Company
175	Consolidated Cash Flow Statement
177	Cash Flow Statement of the Parent Company
179	Consolidated Statement of Changes in Shareholders' Equity
181	Statement of Changes in Shareholders' Equity of the Parent Company
182	Notes to the Financial Statements
393	Supplementary Information





To the Shareholders of 中國廣核電力股份有限公司 CGN Power Co., Ltd.

I. Audit Opinion

We have audited the financial statements of 中國廣核電力股份有限公司 CGN Power Co., Ltd. ("CGN Power"), which comprise the consolidated balance sheet and the balance sheet of the parent company as at December 31, 2018, and the consolidated income statement and the income statement of the parent company, the consolidated cash flow statement and the cash flow statement of the parent company, and the consolidated statement of changes in shareholders' equity and statement of changes in shareholders' equity of the parent company for 2018, as well as the notes to the financial statements.

In our opinion, the accompanying financial statements, in all material respects, have been prepared in accordance with the Accounting Standards for Business Enterprises ("ASBE"), and give a fair presentation on CGN Power's consolidated financial position and the financial position of the parent company as at December 31, 2018, and the consolidated results of operations and cash flows and the results of operations and cash flows of the parent company for 2018.

II. Basis for Audit Opinion

We conducted our audit in accordance with China Standards on Auditing ("CSA"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of the audit report. We are independent of the Group in accordance with the Code of Ethics for Chinese Certified Public Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

III. Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for 2018. These matters were addressed in the context of our audit of the consolidated financial statements for 2018 as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. We have determined the matters described below to be key audit matters to be communicated in the audit report.

III. Key Audit Matters (Continued)

1. Revenue from and Cost of Construction, Installation and Design Services

As stated in Note (V) 44 to the financial statements, the revenue from construction, installation and design services presented in the consolidated financial statements of CGN Power for 2018 was RMB3,178,563,261.77, and the cost of construction, installation and design services was RMB3,812,574,569.31. In accordance with accounting policies, CGN Power determined the performance progress according to the proportion of actual cost in estimated total cost, and recognized contract revenue and costs according to the progress of contract performance. Notwithstanding that the management reviewed and revised the estimates of both contract revenue and costs for the construction contracts as the contract progresses, the actual outcome of the contracts in terms of its total revenue and costs may be different from the estimation and this will have financial impacts on profit recognized. We identified recognition of revenue from and cost of construction, installation and design services as a key audit matter in the consolidated financial statements for 2018 due to the significant management judgement and estimation required in the determination of the budgeted contract costs of the projects as well as the completion progress of construction works.

Our main audit procedures in relation to the above key audit matter included:

- Testing operation effectiveness on key internal control over recognition of revenue from and cost of construction, installation and design services;
- Evaluating the appropriateness of the contract budget of the projects estimated by CGN Power by (i) discussing with the personnel who prepares the budgets to understand how the project budgets were prepared, and (ii) assessing the reliability of the budget revisions on a sample basis;
- Evaluating the authenticity of the costs incurred during the year by checking the original documents of construction, installation and design services projects, on sample basis; and
- Recalculating revenue from contracts based on recalculation of the percentage of completion on sample basis, and comparing with contract revenue recognized.

III. Key Audit Matters (Continued)

2. Measurement of Provision for Nuclear Power Plant Decommissioning

As stated in Note (V) 36 to the financial statements, the provision for nuclear power plant decommissioning presented in the consolidated financial statements of CGN Power as at December 31, 2018 was RMB3,689,783,017.22. CGN Power has incurred obligations to handle the decommissioning of its nuclear power plants in accordance with the relevant regulatory requirements in the People's Republic of China (the "PRC"). Management of CGN Power exercised their judgements to determine the timing of decommissioning, the amount of future decommissioning expenditure and discount rate to estimate the costs provision associated with these obligations. The amount of future decommissioning expenditure is estimated by reference to the decommissioning activities and actual cost incurred in shutting down a nuclear facility in other jurisdictions with adjustments for factors such as increase in labour cost, advanced technology, and the most recent developments in relevant laws and regulations. We identified the measurement of provision for nuclear power plant decommissioning as a key audit matter in the consolidated financial statements for 2018 due to the significant management judgement and estimation required in determining the amount of the provision.

Our main audit procedures in relation to the above key audit matter included:

- Reviewing nuclear power plant decommissioning relevant documents and meeting with the experts who prepared and reviewed the nuclear power plant decommissioning model, to obtain an understanding of the management's process in developing the decommissioning plan and to assess their professional competence;
- Evaluating the compliance and feasibility of the decommissioning plans prepared by management by comparing it with the relative state regulations and United States Nuclear Regulatory Commission's decommissioning fees model issued;
- Assessing the reasonableness of methods and assumptions used in the decommissioning fees model based on our knowledge of the business and industry; Comparing difference on major costs and expenses in decommissioning fees models between the PRC and the United States and analyzing the differences in currencies, staff costs, nuclear power technologies for different nuclear power plants and safe disposal fees of radioactive waste to assess the reasonableness of source data and results of the decommissioning fees model;
- Assessing the reasonableness of the discount rates used by the management based on our knowledge of the business and industry with reference to the current market risk-free rate of interest and the industry specific risk factors; and
- Reviewing the sensitivity analysis on the key factors in decommissioning fees model performed by CGN Power, and evaluating the appropriateness of key assumptions used by the management.

IV. Other Information

The management of CGN Power is responsible for the other information. The other information comprises the information included in the 2018 Annual Report of CGN Power, but does not include the financial statements and our audit report thereon.

Our audit opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

V. Responsibilities of Management and Those Charged with Governance for the Financial Statements

The management of CGN Power is responsible for the preparation of the financial statements that give a fair view in accordance with ASBE, and the design, implementation and maintenance of internal control that is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing CGN Power's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the management either intend to liquidate CGN Power or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing CGN Power's financial reporting process.

Audit Report

VI. Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our audit opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with CSA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- (1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- (2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- (3) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- (4) Conclude on the appropriateness of the management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on CGN Power's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause CGN Power to cease to continue as a going concern.

VI. Auditor's Responsibilities for the Audit of the Financial Statements (Continued)

- (5) Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- (6) Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within CGN Power to express an audit opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for 2018 and are therefore the key audit matters. We describe these matters in the audit report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in the audit report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

**Deloitte Touche Tohmatsu Certified
Public Accountants LLP**
Shanghai, China

Chinese Certified Public Accountants
(The engagement partner)
Yang Yumin

Chinese Certified Public Accountants
Zhang Yehua

March 12, 2019

Financial Report

Consolidated Balance Sheet

As at December 31, 2018

Unit: RMB

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Assets				
Current Assets:				
Cash at bank and in hand	(V)1	15,207,936,762.52	12,386,827,010.72	12,386,827,010.72
Derivative financial assets	(V)2	4,753,642.10	1,486,635.64	1,486,635.64
Bills receivable and accounts receivable	(V)3	6,649,380,976.65	6,448,248,256.22	6,455,449,463.32
Prepayments	(V)4	5,128,948,753.87	5,956,944,721.06	5,956,944,721.06
Other receivables	(V)5	907,577,214.54	1,532,214,773.38	1,532,214,773.38
Inventories	(V)6	21,372,255,356.38	19,738,836,983.09	26,558,036,864.75
Contract assets	(V)7	3,409,787,026.47	3,341,739,828.96	/
Non-current assets due within one year	(V)8	3,659,033.86	1,248,496.91	1,248,496.91
Other current assets	(V)9	2,703,617,527.46	3,012,443,166.92	3,012,443,166.92
Total current assets		55,387,916,293.85	52,419,989,872.90	55,904,651,132.70
Non-current assets:				
Available-for-sale financial assets	(V)10	/	/	195,310,350.00
Long-term equity investments	(V)11	10,203,023,176.92	8,494,770,583.53	8,363,631,040.45
Other investment in equity instruments	(V)12	422,689,500.00	509,184,500.00	/
Other non-current financial assets	(V)13	812,257.18	1,857,052.64	/
Investment properties	(V)14	210,346,041.36	239,670,411.82	239,670,411.82
Fixed assets	(V)15	210,850,206,582.15	159,147,244,593.48	159,147,244,593.48
Construction in progress	(V)16	74,624,722,113.05	115,285,710,535.35	115,285,710,535.35
Intangible assets	(V)17	4,719,796,447.25	4,581,473,985.13	4,581,473,985.13
Development costs	(V)18	1,962,455,756.90	1,645,279,271.67	1,645,279,271.67
Goodwill	(V)29	419,242,673.32	419,242,673.32	419,242,673.32
Long-term deferred expenses	(V)20	1,734,658,492.05	1,938,904,964.08	1,938,904,964.08
Deferred tax assets	(V)21	1,774,868,398.17	1,587,266,716.35	1,587,266,716.35
Other non-current assets	(V)22	6,244,932,628.08	7,990,314,033.25	7,992,171,085.89
Total non-current assets		313,167,754,066.43	301,840,919,320.62	301,395,905,627.54
Total assets		368,555,670,360.28	354,260,909,193.52	357,300,556,760.24

The notes form an integral part of these financial statements.

The financial statements from p.166 to 394 were signed by the following responsible persons:

Zhang Shanming
Legal Representative
(Director)

Gao Ligang
Director

Yin Engang
Chief Financial Officer

Cheng Chao
Head of the
Accounting
Department

Unit: RMB

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Liabilities and shareholders' equity				
Current liabilities:				
Short-term loans	(V)23	16,296,240,042.13	19,392,821,406.87	19,392,821,406.87
Derivative financial liabilities	(V)24	2,724,971.67	29,930,116.11	29,930,116.11
Bills payable and accounts payable	(V)25	18,247,064,570.09	17,344,673,545.04	17,344,673,545.04
Receipts in advance	(V)26	2,058,361.07	—	5,104,185,934.33
Contract liabilities	(V)27	835,799,748.43	1,619,524,674.53	/
Employee benefits payable	(V)28	42,616,433.80	37,010,301.56	37,010,301.56
Taxes payable	(V)29	1,431,294,200.96	1,174,163,665.64	1,174,163,665.64
Other payables	(V)30	4,507,638,498.41	5,046,292,288.85	5,046,292,288.85
Non-current liabilities due				
within one year	(V)31	18,295,109,240.17	11,075,406,593.09	11,075,406,593.09
Other current liabilities	(V)32	964,545,364.41	1,221,690,823.91	1,221,690,823.91
Total current liabilities		60,625,091,431.14	56,941,513,415.60	60,426,174,675.40
Non-current liabilities:				
Long-term loans	(V)33	179,639,946,139.80	183,512,482,979.08	183,512,482,979.08
Bonds payable	(V)34	8,488,044,399.25	6,995,866,518.52	6,995,866,518.52
Including: Preference shares		—	—	—
Perpetual bonds		—	—	—
Long-term employee benefits payable	(V)35	102,267,273.40	65,988,743.31	65,988,743.31
Provisions	(V)36	4,001,531,754.01	3,244,865,740.27	3,244,865,740.27
Deferred income	(V)37	1,395,854,838.75	995,286,142.41	995,286,142.41
Deferred tax liabilities	(V)21	1,177,284,416.72	1,207,762,861.44	1,160,681,738.94
Total non-current liabilities		194,804,928,821.93	196,022,252,985.03	195,975,171,862.53
Total liabilities		255,430,020,253.07	252,963,766,400.63	256,401,346,537.93

Consolidated Balance Sheet

As at December 31, 2018

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Shareholders' equity:				
Share capital	(V)38	45,448,750,000.00	45,448,750,000.00	45,448,750,000.00
Capital reserve	(V)39	3,350,519,181.82	3,314,215,773.99	3,314,215,773.99
Other comprehensive income	(V)40	699,854,140.51	743,265,664.54	403,233,865.89
Specific reserve	(V)41	197,139,693.40	131,413,773.45	131,413,773.45
Surplus reserve	(V)42	3,341,495,665.44	2,712,326,934.84	2,712,326,934.84
Retained earnings	(V)43	18,077,156,831.53	12,896,430,805.68	12,838,530,033.75
Total equity attributable to shareholders of the parent company		71,114,915,512.70	65,246,402,952.50	64,848,470,381.92
Non-controlling interests		42,010,734,594.51	36,050,739,840.39	36,050,739,840.39
Total shareholders' equity		113,125,650,107.21	101,297,142,792.89	100,899,210,222.31
Total liabilities and shareholders' equity		368,555,670,360.28	354,260,909,193.52	357,300,556,760.24

Balance Sheet of Parent Company

As at December 31, 2018

Unit: RMB

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Assets				
Current Assets:				
Cash at bank and in hand	(XV)1	9,730,127,897.47	7,201,335,054.79	7,201,335,054.79
Bills receivable and accounts receivable	(XV)2	691,807,188.60	677,368,789.97	677,368,789.97
Prepayments	(XV)3	12,051,211.58	13,006,334.79	13,006,334.79
Other receivables	(XV)4	1,267,952,919.05	3,341,225,419.60	3,341,225,419.60
Non-current assets due within one year	(XV)5	4,000,000,000.00	—	—
Other current assets	(XV)6	5,882,030,284.53	5,963,971,498.53	5,963,971,498.53
Total current assets		21,583,969,501.23	17,196,907,097.68	17,196,907,097.68
Non-current assets:				
Debt investments	(XV)7	6,088,000,000.00	4,600,000,000.00	/
Long-term receivables	(XV)8	—	—	4,600,000,000.00
Long-term equity investments	(XV)9	78,003,718,957.43	75,731,521,878.15	75,600,382,335.07
Fixed assets	(XV)10	37,287,554.98	35,731,549.44	35,731,549.44
Construction in progress	(XV)11	60,323,650.73	57,617,276.17	57,617,276.17
Intangible assets	(XV)12	240,506,543.32	216,262,669.01	216,262,669.01
Development costs	(XV)13	773,743,861.01	357,277,696.47	357,277,696.47
Other non-current assets	(XV)14	39,060,484.23	638,180,544.23	638,180,544.23
Total non-current assets		85,242,641,051.70	81,636,591,613.47	81,505,452,070.39
Total assets		106,826,610,552.93	98,833,498,711.15	98,702,359,168.07

Financial Report

Balance Sheet of Parent Company

As at December 31, 2018

Unit: RMB

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Liabilities and shareholders' equity				
Current liabilities:				
Short-term loans	(XV)15	9,604,850,094.84	8,814,455,203.67	8,814,455,203.67
Bills payable and accounts payable	(XV)16	429,277,843.18	384,812,096.76	384,812,096.76
Receipts in advance	(XV)17	—	—	1,376,000.00
Contract liabilities	(XV)18	4,384,800.02	1,376,000.00	—
Employee benefits payable	(XV)19	2,544,490.66	2,509,002.45	2,509,002.45
Taxes payable	(XV)20	5,322,716.15	4,657,095.36	4,657,095.36
Other payables	(XV)21	214,251,001.67	119,936,561.41	119,936,561.41
Total current liabilities		10,260,630,946.52	9,327,745,959.65	9,327,745,959.65
Non-current liabilities:				
Bonds payable	(XV)22	8,488,044,399.25	4,495,866,518.52	4,495,866,518.52
Including: Preference shares		—	—	—
Perpetual bonds		—	—	—
Long-term employee benefits payable	(XV)23	8,355,898.21	10,309,029.96	10,309,029.96
Deferred tax liabilities		—	—	—
Total non-current liabilities		8,496,400,297.46	4,506,175,548.48	4,506,175,548.48
Total liabilities		18,757,031,243.98	13,833,921,508.13	13,833,921,508.13

Unit: RMB

	NOTES	December 31, 2018	January 1, 2018 (Restated)	December 31, 2017 (Restated)
Shareholders' equity:				
Share capital	(V)38	45,448,750,000.00	45,448,750,000.00	45,448,750,000.00
Capital reserve	(XV)24	24,441,698,121.44	24,441,727,207.50	24,441,727,207.50
Surplus reserve	(XV)25	2,929,804,225.34	2,300,635,494.74	2,300,635,494.74
Other comprehensive income		—	131,139,543.08	—
Retained earnings	(XV)26	15,249,326,962.17	12,677,324,957.70	12,677,324,957.70
Total shareholders' equity		88,069,579,308.95	84,999,577,203.02	84,868,437,659.94
Total liabilities and shareholders' equity		106,826,610,552.93	98,833,498,711.15	98,702,359,168.07

Financial Report

Consolidated Income Statement

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
I. Operating revenue	(V)44	50,827,919,184.43	45,633,453,920.64
Less: Operating costs	(V)44	28,503,854,609.56	25,185,044,094.56
Taxes and surcharges	(V)45	632,770,128.93	627,556,194.70
Selling expenses	(V)46	102,120,591.17	92,234,493.13
Administrative expenses	(V)47	2,362,898,123.90	2,282,682,092.32
Research and development expenses	(V)48	1,019,825,909.61	773,886,060.89
Finance costs	(V)49	6,000,868,773.69	6,106,623,054.60
Including: Interest expenses		5,943,755,683.21	6,104,789,952.20
Interest income		254,816,814.36	206,879,219.46
Asset impairment losses	(V)50	107,189,032.49	385,197,778.65
Credit impairment losses	(V)51	(223,491,277.23)	/
Add: Other gains	(V)52	1,563,140,899.78	1,513,456,994.20
Investment income	(V)53	1,044,558,662.97	2,312,138,173.13
Including: Income from investment in associates and joint ventures		1,029,509,833.39	602,635,840.38
Gains from changes in fair value	(V)54	16,076,115.36	207,443,679.60
Gains (Loss) from disposal of assets	(V)55	106,649.90	(6,236,182.25)
II. Operating profit		14,945,765,620.32	14,207,032,816.47
Add: Non-operating income	(V)56	7,639,433.82	4,290,905.13
Less: Non-operating expenses	(V)57	53,929,295.75	43,064,331.77
III. Total profit		14,899,475,758.39	14,168,259,389.83
Less: Income tax expenses	(V)58	1,217,798,428.26	1,444,071,829.16
IV. Net profit		13,681,677,330.13	12,724,187,560.67
(I) Classified by continuity of operations			
1.Net profit from continuing operations		13,681,677,330.13	12,724,187,560.67
2.Net profit from discontinued operations		—	—
(II) Classified by ownership			
1.Net profit attributable to shareholders of the parent company		8,702,632,650.82	9,564,092,697.56
2.Non-controlling interests		4,979,044,679.31	3,160,094,863.11

Unit: RMB

Item	NOTES	2018	2017 (Restated)
V. Other comprehensive income, net of tax	(V)60	225,716,697.62	(546,518,290.50)
Other comprehensive income attributable to shareholders of the parent company, net of tax		154,367,152.58	(439,187,291.66)
(I) Other comprehensive income that will not be reclassified to profit or loss		(58,991,366.47)	(3,182,500.00)
1. Change arising from remeasurement of defined benefit plan		(880,250.00)	(3,182,500.00)
2. Other comprehensive income that cannot be transferred to profit or loss under the equity method		66,639,133.53	—
3. Change in fair value of investment in other equity instruments		(124,750,250.00)	/
(II) Other comprehensive income that may be reclassified to profit or loss		213,358,519.05	(436,004,791.66)
1. Other comprehensive income that can be transferred to profit or loss under the equity method		(788,366.06)	(114,301,295.16)
2. Translation differences arising from translation of foreign currency financial statements		214,146,885.11	(321,703,496.50)
Other comprehensive income attributable to non-controlling interests, net of tax		71,349,545.04	(107,330,998.84)
VI. Total comprehensive income		13,907,394,027.75	12,177,669,270.17
Total comprehensive income attributable to shareholders of the parent company		8,856,999,803.40	9,124,905,405.90
Total comprehensive income attributable to non-controlling interests		5,050,394,224.35	3,052,763,864.27
VII. Earnings per share			
(I) Basic earnings per share		0.191	0.210
(II) Diluted earnings per share		N/A	N/A

Income Statement of Parent Company

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
I. Operating revenue	(XV)27	572,320,051.24	535,271,473.36
Less: Operating costs	(XV)27	636,255,717.03	479,911,286.30
Taxes and surcharges	(XV)28	541,186.00	64,681.60
Administrative expenses	(XV)29	424,014,601.48	428,617,152.93
Research and development expenses	(XV)30	45,098,311.91	108,526,449.27
Finance costs	(XV)31	299,208,278.34	474,641,342.43
Including: Interest expenses		462,810,657.80	644,471,047.81
Interest income		130,221,772.67	226,462,633.70
Asset impairment losses	(XV)32	—	378,844.13
Credit impairment losses	(XV)33	24,042,004.48	/
Add: Other gains		1,701,951.36	3,809,812.10
Investment income	(XV)34	6,949,613,442.53	5,789,949,150.59
Including: Income from investment in associates and joint ventures		301,823,485.66	133,220,107.51
Gains from changes in fair value	(XV)35	3,149,636.77	103,467,694.78
II. Operating profit		6,097,624,982.66	4,940,358,374.17
Add: Non-operating income	(XV)36	10,001.10	110,000.00
Less: Non-operating expenses	(XV)37	3,726,354.32	3,024,000.00
III. Total profit		6,093,908,629.44	4,937,444,374.17
Less: Income tax expenses	(XV)38	—	—
IV. Net profit		6,093,908,629.44	4,937,444,374.17
(I) Net profit from continuing operations		6,093,908,629.44	4,937,444,374.17
(II) Net profit from discontinued operations		—	—
V. Other comprehensive income, net of tax		66,639,133.53	—
VI. Total comprehensive income		6,160,547,762.97	4,937,444,374.17

Consolidated Cash Flow Statement

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
I. Cash flows from operating activities:			
Cash received from the sales of goods and rendering of services		59,218,814,432.32	54,079,940,310.55
Tax rebate received		1,408,739,578.92	1,500,762,978.87
Other cash received relating to operating activities	(V)61(1)	2,125,714,563.07	825,802,626.29
Sub-total of cash inflow from operating activities		62,753,268,574.31	56,406,505,915.71
Cash payments for goods purchased and services received		20,571,261,181.49	17,493,031,546.80
Cash payments to and on behalf of employees		6,101,472,089.41	5,258,719,663.57
Payments of various types of taxes		5,317,274,643.99	5,053,634,153.69
Other cash payments relating to operating activities	(V)61(2)	2,353,690,084.13	1,730,303,604.87
Sub-total of cash outflow from operating activities		34,343,697,999.02	29,535,688,968.93
Net cash flows from operating activities	(V)62(1)	28,409,570,575.29	26,870,816,946.78
II. Cash flows from investing activities:			
Cash received from disposal of investments		—	4,399,960.00
Cash received from investment income		472,826,303.82	431,184,908.82
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		3,300,051.20	5,639,602.73
Other cash received relating to investing activities	(V)61(3)	2,648,093,810.86	509,268,698.56
Sub-total of cash inflow from investing activities		3,124,220,165.88	950,493,170.11
Cash paid to purchase and construct fixed assets, intangible assets and other long-term assets		16,630,592,555.53	19,146,771,364.09
Cash paid for investments		554,696,300.00	498,737,350.00
Net cash paid for acquisition of subsidiaries and other business	(V)62(2)	235,016,511.04	5,536,329,688.08
Other cash paid relating to investing activities	(V)61(4)	2,085,959,934.25	373,029,876.82
Sub-total of cash outflow from investing activities		19,506,265,300.82	25,554,868,278.99
Net cash flow from investing activities		(16,382,045,134.94)	(24,604,375,108.88)

Consolidated Cash Flow Statement

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
III. Cash flows from financing activities:			
Cash receipts from capital contributions		3,133,527,632.00	1,103,187,793.71
Including: Cash receipts from capital contributions by minority shareholders of subsidiaries		3,133,527,632.00	1,103,187,793.71
Cash received from borrowings		46,403,674,935.17	67,920,906,293.04
Other cash received relating to financing activities	(V)61(5)	577,200,000.00	5,263,911,440.00
Sub-total of cash inflow from financing activities		50,114,402,567.17	74,288,005,526.75
Cash repayments of borrowings		44,519,343,830.91	60,036,129,653.97
Cash payments for distribution of dividends or profits or settlement of interest expenses		16,134,792,807.96	14,664,927,288.70
Including: Payments for distribution of dividends or profits to minority shareholders of subsidiaries		2,907,150,095.68	2,388,160,120.30
Other cash payments relating to financing activities	(V)61(6)	370,289,616.37	21,956,480.02
Sub-total of cash outflow from financing activities		61,024,426,255.24	74,723,013,422.69
Net cash flow from financing activities		(10,910,023,688.07)	(435,007,895.94)
IV. Effect of foreign exchange rate changes on cash and cash equivalents		167,756,862.76	(160,392,318.92)
V. Net increase in cash and cash equivalents		1,285,258,615.04	1,671,041,623.04
Add: Opening balance of cash and cash equivalents	(V)62(3)	10,352,460,227.68	8,681,418,604.64
VI. Closing balance of cash and cash equivalents	(V)62(3)	11,637,718,842.72	10,352,460,227.68

Cash Flow Statement of Parent Company

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
I. Cash flows from operating activities:			
Cash received from the sales of goods and rendering of services		591,149,627.36	440,125,476.20
Other cash received relating to operating activities	(XV)39(1)	127,241,836.39	80,855,990.35
Sub-total of cash inflow from operating activities		718,391,463.75	520,981,466.55
Cash payments for goods purchased and services received		316,890,402.41	409,143,758.51
Cash payments to and on behalf of employees		365,510,772.59	336,412,829.44
Payments of various types of taxes		541,186.00	64,681.60
Other cash payments relating to operating activities	(XV)39(2)	327,014,932.34	271,114,227.17
Sub-total of cash outflow from operating activities		1,009,957,293.34	1,016,735,496.72
Net cash flows from operating activities		(291,565,829.59)	(495,754,030.17)
II. Cash flows from investing activities:			
Cash received from disposal of investments		6,148,000,000.00	16,288,411,765.00
Cash received from investment income		8,018,406,999.18	8,407,432,209.26
Other cash received relating to investing activities	(XV)39(3)	701,884,560.00	100,000,000.00
Sub-total of cash inflow from investing activities		14,868,291,559.18	24,795,843,974.26
Cash paid to purchase and construct fixed assets, intangible assets and other long-term assets		587,278,633.01	312,745,976.33
Cash paid for investments		12,476,001,368.00	11,554,209,556.29
Net cash paid for acquisition of subsidiaries and other business		235,016,511.04	5,536,329,688.08
Other cash paid relating to investing activities	(XV)39(4)	1,554,177,305.84	805,863,462.71
Sub-total of cash outflow from investing activities		14,852,473,817.89	18,209,148,683.41
Net cash flow from investing activities		15,817,741.29	6,586,695,290.85

Financial Report

Cash Flow Statement of Parent Company

For the year ended December 31, 2018

Unit: RMB

Item	NOTES	2018	2017 (Restated)
III. Cash flows from financing activities:			
Cash received from borrowings		7,685,280,269.77	9,534,378,513.92
Sub-total of cash inflow from financing activities		7,685,280,269.77	9,534,378,513.92
Cash repayments of borrowings		2,906,885,378.60	8,747,762,924.55
Cash payments for distribution of dividends or profits or settlement of interest expenses		3,473,289,631.17	3,003,505,502.23
Other cash payments relating to financing activities	(XV)39(5)	995,150.00	11,085,434.49
Sub-total of cash outflow from financing activities		6,381,170,159.77	11,762,353,861.27
Net cash flow from financing activities		1,304,110,110.00	(2,227,975,347.35)
IV. Effect of foreign exchange rate changes on cash and cash equivalents		50,430,820.98	(61,060,021.31)
V. Net increase in cash and cash equivalents		1,078,792,842.68	3,801,905,892.02
Add: Opening balance of cash and cash equivalents	(XV)40(1)	7,101,335,054.79	3,299,429,162.77
VI. Closing balance of cash and cash equivalents	(XV)40(1)	8,180,127,897.47	7,101,335,054.79

Consolidated Statement of Changes in Shareholders' Equity

For the year ended December 31, 2018

Unit: RMB

Item	2018							
	Attributable to shareholders of the Parent Company							Total shareholders' equity
	Share capital	Capital reserve	Other comprehensive income	Specific reserve	Surplus reserve	Retained earnings	Non-controlling interests	
I. Balance at December 31, 2017	45,448,750,000.00	3,084,215,773.99	403,233,865.89	131,413,773.45	2,712,118,338.94	13,139,256,274.10	36,107,886,568.35	101,026,874,594.72
Add: Changes in accounting policies	—	—	340,031,798.65	—	—	57,900,771.93	—	397,932,570.58
Business combination under common control	—	230,000,000.00	—	—	317,537.01	(859,816.88)	—	229,457,720.13
Others	—	—	—	—	(108,941.11)	(299,866,423.47)	(57,146,727.96)	(357,122,092.54)
II. Balance at January 1, 2018	45,448,750,000.00	3,314,215,773.99	743,265,664.54	131,413,773.45	2,712,326,934.84	12,896,430,805.68	36,050,739,840.39	101,297,142,792.89
III. Changes in the current year	—	36,303,407.83	(43,411,524.03)	65,725,919.95	629,168,730.60	5,180,726,025.85	5,959,994,754.12	11,828,507,314.32
(I) Total comprehensive income	—	—	154,367,152.58	—	—	8,702,632,650.82	5,050,394,224.35	13,907,394,027.75
(II) Shareholders' contributions and reduction in capital	—	36,303,407.83	—	—	—	—	2,773,704,572.01	2,810,007,979.84
1. Contributions in ordinary shares from shareholders	—	—	—	—	—	—	93,586,930.41	93,586,930.41
2. Business combination under common control	—	(235,016,511.04)	—	—	—	—	—	(235,016,511.04)
3. Others	—	271,319,918.87	—	—	—	—	2,680,117,641.60	2,951,437,560.47
(III) Profit distribution	—	—	—	—	609,390,862.94	(3,699,907,433.92)	(1,864,104,042.24)	(4,954,620,613.22)
1. Transfer to surplus reserve	—	—	—	—	609,390,862.94	(609,390,862.94)	—	—
2. Distribution to shareholders	—	—	—	—	—	(3,090,516,570.98)	(1,864,104,042.24)	(4,954,620,613.22)
(IV) Transfer of shareholders' equity	—	—	(197,778,676.61)	—	19,777,867.66	178,000,808.95	—	—
1. Other comprehensive income	—	—	(197,778,676.61)	—	19,777,867.66	178,000,808.95	—	—
Transfer of retained profits	—	—	—	—	—	—	—	—
(V) Specific reserve	—	—	—	65,725,919.95	—	—	—	65,725,919.95
1. Transfer to specific reserve in the year	—	—	—	217,848,331.82	—	—	—	217,848,331.82
2. Amount utilized in the year	—	—	—	(152,122,411.87)	—	—	—	(152,122,411.87)
IV. Balance at December 31, 2018	45,448,750,000.00	3,350,519,181.82	699,854,140.51	197,139,693.40	3,341,495,665.44	18,077,156,831.53	42,010,734,594.51	113,125,650,107.21

Financial Report

Consolidated Statement of Changes in Shareholders' Equity

For the year ended December 31, 2018

Unit: RMB

Item	2017 (Restated)							
	Attributable to shareholders of the Parent Company							Total shareholders' equity
	Share capital	Capital reserve	Other comprehensive income	Specific reserve	Surplus reserve	Retained earnings	Non-controlling interests	
I. Balance at December 31, 2016	45,448,750,000.00	524,528,369.41	842,421,157.55	104,150,923.76	2,218,336,017.11	6,325,440,386.99	24,619,135,076.12	80,082,761,930.94
Add: Business combination under common control	—	230,000,000.00	—	—	—	(942,200.50)	—	229,057,799.50
Others	—	—	—	—	(71,056.70)	(238,154,100.25)	(45,778,673.09)	(284,003,830.04)
II. Balance at January 1, 2017	45,448,750,000.00	754,528,369.41	842,421,157.55	104,150,923.76	2,218,264,960.41	6,086,344,086.24	24,573,356,403.03	80,027,815,900.40
III. Changes in the current year	—	2,559,687,404.58	(439,187,291.66)	27,262,849.69	494,061,974.43	6,752,185,947.51	11,477,383,437.36	20,871,394,321.91
(I) Total comprehensive income	—	—	(439,187,291.66)	—	—	9,564,092,697.56	3,052,763,864.27	12,177,669,270.17
(II) Shareholders' contributions and reduction in capital	—	2,559,687,404.58	—	—	—	—	10,358,341,573.68	12,918,028,978.26
1. Contributions in ordinary shares from shareholders	—	—	—	—	—	—	1,103,187,793.71	1,103,187,793.71
2. Others	—	2,559,687,404.58	—	—	—	—	9,255,153,779.97	11,814,841,184.55
(III) Profit distribution	—	—	—	—	494,061,974.43	(2,811,906,750.05)	(1,933,722,000.59)	(4,251,566,776.21)
1. Transfer to surplus reserve	—	—	—	—	494,061,974.43	(494,061,974.43)	—	—
2. Distribution to shareholders	—	—	—	—	—	(2,317,844,775.62)	(1,933,722,000.59)	(4,251,566,776.21)
(IV) Specific reserve	—	—	—	27,262,849.69	—	—	—	27,262,849.69
1. Transfer to specific reserve in the year	—	—	—	177,722,497.33	—	—	—	177,722,497.33
2. Amount utilized in the year	—	—	—	(150,459,647.64)	—	—	—	(150,459,647.64)
IV. Balance at December 31, 2017	45,448,750,000.00	3,314,215,773.99	403,233,865.89	131,413,773.45	2,712,326,934.84	12,838,530,033.75	36,050,739,840.39	100,899,210,222.31

Financial Report

Statement of Changes in Shareholders' Equity of Parent Company

For the year ended December 31, 2018

Unit: RMB

Item	2018					
	Share capital	Capital reserve	Other comprehensive income	Surplus reserve	Retained earnings	Total shareholders' equity
I. Balance at December 31, 2017	45,448,750,000.00	24,441,727,207.50	—	2,300,744,435.85	12,678,305,427.76	84,869,527,071.11
Add: Changes in accounting policies	—	—	131,139,543.08	—	—	131,139,543.08
Others	—	—	—	(108,941.11)	(980,470.06)	(1,089,411.17)
II. Balance at January 1, 2018	45,448,750,000.00	24,441,727,207.50	131,139,543.08	2,300,635,494.74	12,677,324,957.70	84,999,577,203.02
III. Changes in the current year	—	(29,086.06)	(131,139,543.08)	629,168,730.60	2,572,002,004.47	3,070,002,105.93
(I) Total comprehensive income	—	—	66,639,133.53	—	6,093,908,629.44	6,160,547,762.97
(II) Shareholders' contributions and reduction in capital	—	(29,086.06)	—	—	—	(29,086.06)
1. Business combination under common control	—	(29,086.06)	—	—	—	(29,086.06)
(III) Profit distribution	—	—	—	609,390,862.94	(3,699,907,433.92)	(3,090,516,570.98)
1. Transfer to surplus reserve	—	—	—	609,390,862.94	(609,390,862.94)	—
2. Distribution to shareholders	—	—	—	—	(3,090,516,570.98)	(3,090,516,570.98)
(IV) Transfer of shareholders' equity	—	—	(197,778,676.61)	19,777,867.66	178,000,808.95	—
1. Other comprehensive income Transfer of retained profits	—	—	(197,778,676.61)	19,777,867.66	178,000,808.95	—
IV. Balance at December 31, 2018	45,448,750,000.00	24,441,698,121.44	—	2,929,804,225.34	15,249,326,962.17	88,069,579,308.95

Unit: RMB

	2017 (Restated)				
Item	Share capital	Capital reserve	Surplus reserve	Retained earnings	Total shareholders' equity
I. Balance at December 31, 2016	45,448,750,000.00	24,441,727,207.50	1,806,962,114.02	10,552,109,306.91	82,249,548,628.43
Others	—	—	(71,056.70)	(639,510.34)	(710,567.04)
II. Balance at January 1, 2017	45,448,750,000.00	24,441,727,207.50	1,806,891,057.32	10,551,469,796.57	82,248,838,061.39
III. Changes in the current year	—	—	493,744,437.42	2,125,855,161.13	2,619,599,598.55
(I) Total comprehensive income	—	—	—	4,937,444,374.17	4,937,444,374.17
(II) Profit distribution	—	—	493,744,437.42	(2,811,589,213.04)	(2,317,844,775.62)
1. Transfer to surplus reserve	—	—	493,744,437.42	(493,744,437.42)	—
2. Distribution to shareholders	—	—	—	(2,317,844,775.62)	(2,317,844,775.62)
IV. Balance at December 31, 2017	45,448,750,000.00	24,441,727,207.50	2,300,635,494.74	12,677,324,957.70	84,868,437,659.94

Notes to the Financial Statements

For the year ended December 31, 2018

(I) COMPANY OVERVIEW

CGN Power Co., Ltd. (the “Company”) is a joint stock company jointly established by 中國廣核集團有限公司 China General Nuclear Power Corporation (“CGNPC”), as the main promoter by way of contribution with equity of 11 companies involved in the development, investment, operation and research and development of nuclear power plants as well as certain assets and liabilities in respect of the above businesses (the “Business Contribution”), together with other promoters by way of cash contribution in accordance with relevant provisions under PRC laws and administrative regulations, with approvals from the State-Owned Assets Supervision and Administration Commission of the State Council (the “SASAC”) through the Reply on the Matters Related to the Main Business Restructuring and Listing of China General Nuclear Power Corporation (Guo Zi Gai Ge [2013] No. 1005) (國資改革[2013]1005號《關於中國廣核集團有限公司核電主業改制並上市有關事項的批覆》) dated December 4, 2013 and the Reply on the Establishment of CGN Power Co., Ltd. (Guo Zi Gai Ge [2014] No. 123) (國資改革[2014]123號《關於設立中國廣核電力股份有限公司的批覆》) dated March 14, 2014. The Company was incorporated in Shenzhen, Guangdong Province on March 25, 2014, and obtained the business license (No. 440301109037551) issued by the State Administration of Industry and Commerce.

Upon establishment, the Company’s total share capital was RMB35,300,000,000.00, which was valued by 北京中企華資產評估有限責任公司 (Beijing China Enterprise Appraisals Co., Ltd.), with final approval by the SASAC through the Reply on the Approval of the Asset Valuation Results to the Main Business Restructuring and Listing Project of China General Nuclear Power Corporation (Guo Zi Chan Quan [2014] No. 108) (《關於中國廣核集團有限公司核電主業改制並上市項目資產評估結果核准的批覆》(國資產權[2014]108號)). CGNPC contributed RMB43,017,097,508.00, including valuation of the Business Contribution at RMB40,425,171,692.47 and cash contribution of RMB2,591,925,815.53, translating into 30,040,300,000 shares of the Company at a ratio of 69.83%, representing 85.10% of the total shares; Guangdong Hengjian Investment Holding Co., Ltd. contributed RMB5,054,888,074.00, translating into 3,530,000,000 at a ratio of 69.83%, representing 10.00% of the total shares; and China National Nuclear Corporation (formally 中國核工業集團公司 China National Nuclear Corporation) (“CNNC”) contributed RMB2,476,895,156.00, translating into 1,729,700,000 at a ratio of 69.83%, representing 4.90% of the total shares.

As approved by the Reply on the Approval to Issue Overseas Listed Foreign Share of CGN Power Co., Ltd. (Zheng Jian Xu Ke [2014] No. 1165) (《關於核准中國廣核電力股份有限公司發行境外上市外資股的批覆》(證監許可[2014]1165號)) issued by China Securities Regulatory Commission on November 3, 2014, and the Letter of Consent for Listing issued by the Stock Exchange of Hong Kong Limited on December 9, 2014, the Company publicly issued overseas listed foreign shares (H shares) in December 2014 and was listed on the Main Board of the Stock Exchange of Hong Kong Limited, with an initial offering size of 8,825,000,000 overseas listed foreign shares (H shares), and 1,323,750,000 shares issued and allotted due to the exercise of over-allotment option with a nominal value of RMB1.00 per share and an issuance price of HK\$2.78 per share. Under the PRC regulations related to the disposal of state-owned shares, CGNPC, Guangdong Hengjian Investment Holding Co., Ltd. and CNNC are required to transfer the amount of domestic shares equivalent to 10% of offer shares to the National Council for Social Security Fund, totaling 1,014,875,000 shares. Upon the listing of the Company, shares held by the social security fund were translated into H shares amounting to 1,014,875,000 shares on an one-for-one basis.

The headquarters of the Company is located in Shenzhen, Guangdong Province. The parent of the Company is CGNPC. The ultimate beneficial owner of the Company is the SASAC.

The scope of business of the Company and its subsidiaries (the “Group”) mainly includes: production and supply of electricity and heat generated mainly from nuclear energy, and provision of related professional technical services; disposal of nuclear wastes; organization and implementation of the construction and management for nuclear power stations engineering projects; organization of the operation, repair and related businesses for nuclear power stations; organization of the design development and scientific research for nuclear power stations; and engagement in related investment, import and export businesses.

(I) COMPANY OVERVIEW (Continued)

For the scope of consolidated financial statements for the year, please refer to Note (VII) "INTEREST IN OTHER ENTITIES". For the changes in the scope of consolidated financial statements, please refer to Note (VI) "CHANGES IN CONSOLIDATION SCOPE".

(II) BASIS OF PREPARATION OF FINANCIAL STATEMENTS

Basis of preparation

The Group adopts the Accounting Standards for Business Enterprises and relevant requirements promulgated by the Ministry of Finance, and discloses relevant financial information in accordance with the Rules on the Preparation and Report of Information Disclosure for Companies Publicly Issuing Securities No. 15 – General Requirements for Financial Reports (Revised in 2014). In addition, the financial statements also include information disclosure according to the relevant requirements under the Hong Kong Companies Ordinance and the Listing Rules of the Stock Exchange.

Basis of accounting and principle of measurement

The Group's financial statements have been prepared on an accrual basis. Except for certain financial instruments which are measured at fair value, the financial statements are prepared under the historical cost convention. In the event that impairment of assets occurs, a provision for impairment is made accordingly in accordance with the relevant regulations.

Under historical cost method, the amount of assets was measured at the fair value of cash or cash equivalents or consideration paid at the time of purchase. Liabilities were measured at the amount of money or assets and liabilities due to the current obligations actually received, or a present obligation of the contract amount, or the measurement of cash or cash equivalents in accordance with daily activities to repay the debts of the amount expected to be paid.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Whether fair value is observable or measured by valuation techniques, the measurement and/or disclosure in these financial statements were all based on it.

Fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs, other than the Level 1 inputs, that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

Going concern

The Group has evaluated its ability of going concern for the next 12 month since December 31, 2018. There is no indication of major events that may affect the ability of going concern. Thus, the financial statements have been prepared under the assumption of going concern.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

1. Statement of compliance

The financial statements have been prepared in compliance with the Accounting Standards for Business Enterprises to truly and completely reflect consolidated and the parent company's financial position of the Company as at December 31, 2018 and consolidated and the parent company's operating results and cash flows for 2018.

2. Accounting period

The Group has adopted the calendar year as its accounting year, i.e. from January 1 to December 31.

3. Operating cycle

Operating cycle refers to period from assets purchased for production to cash or cash equivalents realized.

4. Functional currency

Apart from the functional currency of the primary economic environment of 廣東核電合營有限公司 Guangdong Nuclear Power Joint Venture Co, Ltd. ("GNPJVC"), a subsidiary of the Company, being USD, the functional currency of the primary economic environment that the Company and its other subsidiaries operate in is RMB. The Company adopts RMB to prepare the financial statements.

5. The accounting treatment of business combinations involving enterprises under common control and business combinations not involving enterprises under common control

Business combinations are classified into business combination under common control and not under common control.

5.1 Business combinations involving enterprises under common control

A business combination involving enterprises under common control is a business combination in which all of the combining enterprises are ultimately controlled by the same party or parties both before and after the combination, and that control is not transitory.

Assets and liabilities obtained in the business combination are recognized at their carrying amounts at the date of merger as recorded by the party being combined. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination and/or aggregate face values of the shares issued is adjusted to the share premium in the capital reserves. If the share premium in the capital reserve is not sufficient to absorb the difference, any excess is adjusted to retained profits.

Costs that are directly attributable to the combination are charged to profit or loss when incurred.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

5. The accounting treatment of business combinations involving enterprises under common control and business combinations not involving enterprises under common control (Continued)

5.2 Business combinations not involving enterprises under common control and goodwill

A business combination involving enterprises not under common control is a business combination in which all of the combining enterprises are not ultimately controlled by the same party or parties before and after the combination.

The combination costs shall be the fair value of the assets paid, the liabilities incurred or assumed and the equity instruments issued by the acquirer in exchange for the control over the acquiree. For business combinations not involving enterprises under common control realized step by step through multiple transactions, the cost of combination is the sum of the consideration paid at the acquisition date and the fair value at the acquisition date of the acquirer's previously held interest in the acquiree. The overhead for the business combination of the combining party, including the expenses for audit, legal services, assessment, and other administrative expenses, shall be recorded in profit or loss for the period when incurred.

5.2 Business combinations not involving enterprises under common control and goodwill (Continued)

Identifiable assets, liabilities and contingent liabilities of acquiree qualifying for the conditions of recognition acquired by the acquirer in business combination are measured at fair value on the acquisition date.

For the difference that the combination cost is larger than the portion of fair value of net identifiable assets of acquiree acquired in combination, it is recognized as goodwill as an asset, and initially measured at cost. For those with combination cost lower than the portion of fair value of net identifiable assets of acquiree acquired in combination, re-verification is first carried out on the measurement of the fair value of all identifiable assets, liabilities and contingent liabilities as well as the combination cost. For those with combination cost still lower than the portion of fair value of net identifiable assets of acquiree acquired in combination after re-verification, they are credited to profit or loss for the period.

Goodwill occurred as a result of business combination shall be recognized separately in the consolidated financial statements and measured at cost less accumulated impairment losses.

6. Basis for preparation of consolidated financial statements

The scope of consolidated financial statements is determined on the basis of control. Control is achieved when the investor has power over the investee; is exposed, or has rights to receive variable returns from its involvement with the investee; and has the ability to use its power to affect its returns. Once the relevant facts and situation changed that altered the elements define control, the Group shall re-evaluate control.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary.

For a subsidiary disposed of by the Group, the operating results and cash flows before the date of disposal (the date when control is lost) are included in the consolidated income statement and consolidated statement of cash flows, as appropriate.

For a subsidiary acquired through a business combination involving enterprises not under common control, the operating results and cash flows from the acquisition date (the date when control is obtained) are included in the consolidated income statement and consolidated statement of cash flows, as appropriate.

No matter when the business combination occurs in the reporting period, subsidiaries acquired through a business combination involving enterprises under common control are included in the Group's scope of consolidation as if they had been included in the scope of consolidation from the date when they first came under the common control of the ultimate controlling party. Their operating results and cash flows from the beginning of the earliest reporting period are included in the consolidated income statement and consolidated statement of cash flows, as appropriate.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

6. Basis for preparation of consolidated financial statements (Continued)

The significant accounting policies and accounting periods adopted by the subsidiaries are determined based on the accounting policies and accounting periods consistently set out by the Company. The effects of all intra-group transactions between the Company and subsidiaries and among the subsidiaries are eliminated on consolidation.

The portion of subsidiaries' equity that is not attributable to the parent company is treated as non-controlling interests and presented as "non-controlling interests" in the consolidated balance sheet within shareholders' equity. The portion of net profits or losses of subsidiaries for the period attributable to non-controlling interests is presented as "non-controlling interests" in the consolidated income statement below the "net profit" line item.

When the amount of loss for the period attributable to the minority shareholders of a subsidiary exceeds the minority shareholders' portion of the opening balance of owners' equity of the subsidiary, the excess amount is still allocated against non-controlling interests.

Acquisition of non-controlling interests or disposal of interest in a subsidiary that does not result in the loss of control over the subsidiary is accounted for as equity transactions. The carrying amounts attributable to owners' of the parent company and non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. The difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is adjusted to capital reserve. If the capital reserve is not sufficient to absorb the difference, the excess is adjusted against retained earnings.

Where equity interests in an acquiree are acquired in stages through multiple transactions ultimately constituting a business combination not involving entities under common control, the acquirer determines if these transactions are considered to be "a bundled transaction". If yes, these transactions are accounted for as a single transaction where control is obtained. If no, these transactions are accounted for as multiple transactions where control is obtained at the acquisition date; In this case, the acquirer remeasures its previously-held equity interests in the acquiree at their fair value on the acquisition date and recognizes any differences between such fair value and carrying amounts in profit or loss for the period. Where equity interests in an acquiree held before the acquisition date involve changes in other comprehensive income or changes in other owners' equity under equity method, they are transferred to income for the period that the acquisition date belongs to.

When the Group loses control over a subsidiary due to disposal of certain equity interest or other reasons, any retained interest is re-measured at its fair value at the date when control is lost. The difference between the aggregate of the consideration received on disposal and the fair value of any retained interest(s) and the share of the former subsidiary's net assets cumulatively calculated from the acquisition date according to the original proportion of ownership interest is recognized as investment income in the period in which control is lost, and at the same time adjusted against goodwill. Other comprehensive income associated with investment in the former subsidiary is reclassified to investment income in the period in which control is lost.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

7. Classification of joint arrangements and accounting treatment for joint ventures

There are two types of joint arrangements – joint operations and joint ventures. The type of joint arrangements is determined based on the rights and obligations of joint operators to the joint arrangements by considering the factors, such as the structure, the legal form of the arrangements, and the contractual terms, etc. A joint operation is a joint arrangement whereby the joint operators have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby the joint ventures have rights to the net assets of the arrangement.

The Group adopts the equity method to account the investment in joint ventures. For details, please refer to Note (III) 13.3.2. “Long-term equity investments accounted for using the equity method”.

8. Standards for determining cash and cash equivalents

Cash comprises cash in hand and deposits that can be readily withdrawn on demand. Cash equivalents are the Group’s short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

9. Translation of transactions and financial statements denominated in foreign currencies

9.1 Transactions denominated in foreign currencies

A foreign currency transaction is recorded, on initial recognition, by applying the spot exchange rate on the date of the transaction.

At the balance sheet date, foreign currency monetary items are translated using the spot exchange rates at the balance sheet date. Exchange differences arising from the differences between the spot exchange rates prevailing at the balance sheet date and those on initial recognition or at the previous balance sheet date are recognized in profit or loss for the period, except that (1) exchange differences related to a specific-purpose borrowing denominated in foreign currency that qualify for capitalization are capitalized as part of the cost of the qualifying asset during the capitalization period; (2) exchange differences related to hedging instruments for the purpose of hedging against foreign currency risks are accounted for using hedge accounting.

Foreign currency non-monetary items measured at historical cost are translated into the amounts in functional currency at the spot exchange rates on the dates of the transactions and the amounts in functional currency remain unchanged. Foreign currency non-monetary items measured at fair value are re-translated at the spot exchange rate on the date the fair value is determined. Difference between the re-translated functional currency amount and the original functional currency amount is treated as changes in fair value (including changes of exchange rate) and is recognized in profit and loss or as other comprehensive income.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

9. Translation of transactions and financial statements denominated in foreign currencies (Continued)

9.2 Translation of financial statements denominated in foreign currencies

For the purpose of preparing the consolidated financial statements, financial statements with USD as the functional currency are translated from the foreign currency into RMB using the following method: assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; shareholders' equity items are translated at the spot exchange rates at the dates on which such items arose; all items in the income statement as well as items reflecting the distribution of profits are translated at exchange rates that approximate the actual spot exchange rates on the dates of the transactions; the difference between the translated assets and the aggregate of liabilities and shareholders' equity items is recognized as other comprehensive income and included in shareholders' equity.

Cash flows arising from a transaction in foreign currency and the cash flows of a foreign subsidiary are translated at an exchange rate which approximates the spot exchange rate on the date of the cash flows. The effect of exchange rate changes on cash and cash equivalents is regarded as a reconciling item and presented separately in the cash flow statement as "effect of exchange rate changes on cash and cash equivalents".

The opening balances and the comparative figures of previous year are presented at the translated amounts in the previous year's financial statements.

On disposal of the Group's entire interest in a foreign operation, or upon a loss of control over a foreign operation due to disposal of certain interest in it or other reasons, the Group transfers the accumulated exchange differences arising on translation of financial statements of this foreign operation attributable to the owners' equity of the parent company and presented under shareholders' equity, to profit or loss in the period in which the disposal occurs.

In case of a disposal or other reason that results in a reduction in the proportional interest held but does not result in losing control over a foreign operation, the proportionate share of accumulated exchange differences arising on translation of financial statements are re-attributed to non-controlling interests and are not recognized in profit and loss. For partial disposals of equity interests in foreign operations which are associates or joint ventures, the proportionate share of the accumulated exchange differences arising on translation of financial statements of foreign operations is reclassified to profit or loss.

10. Financial instruments

Financial assets and financial liabilities are recognized when the Group becomes a party to the contractual provisions of the financial instrument.

For financial assets purchased and sold in regular way, the assets to be received or liabilities to be assumed are recognized on the transaction date, or disposed assets are derecognized on the transaction.

The financial assets and liabilities were initially recognized at fair value. For the financial assets and liabilities measured at fair value through profit or loss ("FVTPL"), related transaction expenses are charged to the profit or loss, for other financial assets and liabilities, related transaction expenses are included in the initial recognized amount. When initially recognized by the Group according to the Accounting Standards for Business Enterprises No.14 – Revenue" (the "New Standards for Revenue"), accounts receivable that do not contain a significant financing component or for which the financing component in the contract within 1 year is not considered are initially recognized at the transaction price defined under the revenue standard.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments

The effective interest rate method is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or interest expense over each accounting period.

The effective interest rate is the rate that exactly discounts estimated future cash flow through the expected life of the financial asset or financial liability to the book balance of a financial asset or to the amortized cost of a financial liability. In determining the effective interest rate, expected cash flow is estimated after taking into account all contract terms of financial assets or financial liabilities, including early repayment, extension, call option or other similar options, without considering expected credit loss.

The amortized cost of financial assets or financial liabilities is calculated by deducting repaid principal amount from initially recognized amount of the financial assets or financial liabilities, adding or subtracting the accumulated amortization amount which is the amortized difference between the initial recognition amount and the amount at the expiry date using the effective interest rate method, then further deducting the accumulated impairment of loss (only applicable to financial assets).

10.1 Classification, recognition and measurement of financial assets

Subsequent to initial recognition, the Group's financial assets of various categories are subsequently measured at amortized cost, fair value through other comprehensive income ("FVTOCI") or FVTPL.

If contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and the financial asset is held within the Group's business model whose objective is to hold financial assets in order to collect contractual cash flows, such asset is classified into financial asset measured at amortized cost. Such financial asset mainly includes cash at bank and in hand, bills receivable and accounts receivable, and other receivables, etc.

If contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and the financial asset is held within the Group's business model whose objective is to hold financial assets in order to collect contractual cash flows and sell the financial asset, such asset is classified into financial asset measured at FVTOCI. Such financial asset is presented as other debt investments. The debt investments due within 1 year (inclusive) from the balance sheet date are presented in non-current assets due within one year; other debt investments due within 1 year (inclusive) when they are acquired are presented in other current assets.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.1 Classification, recognition and measurement of financial assets

Apart from the derivative financial assets presented in financial assets held for trading, financial assets at FVTPL includes financial assets at FVTPL and those designated as at FVTPL. The assets due more than 1 year and expected to be held for more than 1 year are presented in other non-current financial assets.

- Both financial assets fail to qualify as at amortized cost, and those classified as at FVTOCI are classified into financial assets at FVTPL.
- On initial recognition, the Group may irrevocably designate a financial asset as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch and includes mixed contract conditions of embedded derivatives.

On initial recognition, the Group may, on the basis of individual financial asset, irrevocably designate equity instrument investments not held for trading (excluding contingent considerations) recognized in business combination not under common control as financial assets at FVTOCI. Such financial assets are stated as investment in other equity instruments.

If a financial asset meets one of the following conditions, it is considered that such asset is held by the Group for trading:

- The purpose of obtaining such financial asset is mainly for selling in the near future.
- Such financial asset is part of the identifiable financial instrument portfolio that is centrally managed at initial recognition, and there is objective evidence that short-term profit model exists in the near future.
- Such financial asset is a derivative, except for derivatives that meet the definition given in the financial guarantee contract and derivatives that are designated as effective hedging instruments.

10.1.1 Financial assets at amortized cost

Financial assets at amortized cost adopt the effective interest rate method and subsequently measured at amortized cost. Impairment or gains or losses arising from derecognition is recognized in profit or loss.

The Group adopts the effective interest rate method to recognize interest income for financial assets at amortized cost. Interest income is calculated by the carrying amount of financial assets multiplied by effective interest rate, with the following exception:

- a purchased or originated credit-impaired ("POCI") financial asset, whose interest income is calculated since initial recognition by applying the credit-adjusted effective interest rate to its amortized cost.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.1 Classification, recognition and measurement of financial assets (Continued)

10.1.2 Financial assets at FVTOCI

Except for impairment losses or gains of financial assets classified as measured at FVTOCI, and interest income and exchange gains or losses calculated at effective interest rate recognized in profit or loss, the changes in fair value of the financial asset are recognized in the other comprehensive income. The amount of the financial assets included in profit or loss for each period shall be equal to the amount it has been measured at amortized cost and included in profit or loss for each period. When the financial assets are derecognized, the accumulated gains or losses previously included in other comprehensive income shall be transferred from other comprehensive income and included in profit or loss.

After designating equity instrument investments not held for trading as financial assets at FVTOCI, changes in fair value of such financial assets are recognized in other comprehensive income. Upon derecognition, accumulated gains or losses previously recognized in other comprehensive income shall be transferred and included in retained earnings. In the duration of holding such equity instrument investments not held for trading, when the Group's right to receive dividends is established, economic benefits related to dividends are likely to flow into the Group, and the amount of dividends may be reliably measured, dividend income shall be calculated and recognized in profit or loss.

10.1.3 Financial assets at FVTPL

Financial assets at FVTPL shall be subsequently measured at fair value. Relevant gains or loss as well as dividends and interest income related to such financial assets shall be recognized in profit or loss.

10.2 Impairment of financial instruments

For financial assets measured at amortized cost, financial assets classified as measured at FVTOCI and contract assets, impairment shall be accounted for on the basis of expected credit loss and loss impairment shall be recognized, etc.

The Group makes a loss allowance against amount of expected credit losses equal to the whole life of the contract assets or accounts receivable that exclude significant financing component or do not consider the financing component in the contract within one year arising from transactions adopting the New Standards for Revenue.

As for other financial instruments, other than purchased or POCI financial assets, the Group assesses the changes in credit risk of such financial instruments since the initial recognition at each balance sheet date. If the credit risk of such financial instrument has significantly increased since initial recognition, the Group shall make loss allowance equivalent to the amount of expected credit loss during its whole life; if the credit risk of such financial instrument has not significantly increased since initial recognition, the Group shall make loss allowance equivalent to the amount of expected credit loss for the next 12 months. Apart from financial assets classified as measured at FVTOCI, increase or reversal of credit loss allowance are recognized in profit or loss as impairment losses or gains. The Group recognizes the credit loss allowance of financial assets classified as measured at FVTOCI, while allowance losses or gains are recognized in profit or loss, without deducting its carrying amount stated in the balance sheet.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.2 Impairment of financial instruments (Continued)

The Group has makes a loss allowance against amount of expected credit losses equal to the whole life in the prior accounting period. However, at the balance sheet date, the credit risk on a financial instrument has not increased significantly since initial recognition; the Group will measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. Reversed amount of loss allowance arising from such circumstances shall be included in profit or loss as impairment gains.

10.2.1 Significant increase of credit risk

The Group will make use of reasonable and supportable forward-looking information that is available to determine whether credit risk has increased significantly since initial recognition through comparing the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition.

The Group will take the following factors into consideration when assessing whether credit risk has increased significantly:

- (1) Significant changes in internal price index due to changes in credit risk.
- (2) If existing financial instruments are originated or released on the date of balance sheet as new financial instruments, significant changes in the interest rate or other terms of such financial instruments, such as in stricter contract terms, increase in collateral, or higher returns, etc.
- (3) Significant changes in external market indicators of credit risk for a particular financial instrument or similar financial instruments with the same expected life. These indicators include credit spread, credit default swap prices against the borrower, the length of time or the extent to which the fair value of a financial asset has been less than its amortized cost and other market information related to the borrower, such as changes in the price of a borrower's debt and equity instruments.
- (4) Actual or expected significant changes in external credit rating of the financial instruments.
- (5) An actual or expected internal credit rating downgrade for the borrower.
- (6) Adverse changes in business, financial or economic conditions that are expected to cause a significant change in the borrower's ability to meet its debt obligations.
- (7) An actual or expected significant change in the operating results of the borrower.
- (8) Significant increases in credit risk on other financial instruments of the same borrower.
- (9) Significant adverse change in the regulatory, economic, or technological environment of the borrower.
- (10) Significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements, which are expected to reduce the borrower's economic incentive to make scheduled contractual payments or to otherwise have an effect on the probability of a default occurring.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.2 Impairment of financial instruments (Continued)

10.2.1 Significant increase of credit risk (Continued)

- (11) Significant changes in circumstances expected to reduce the borrower's economic incentive to make scheduled contractual payments.
- (12) Expected changes in the loan contracts including an expected breach of contract that may lead to covenant waivers or amendments, interest payment holidays, interest rate step-ups, requiring additional collateral or guarantees, or other changes to the contractual framework of the financial instrument.
- (13) Significant changes in the expected performance and behavior of the borrower.
- (14) Changes in the Group's credit management approach in relation to the financial instrument.

Regardless if the above assessment indicates any significant changes in credit risk, if contractual payment of a financial instrument is over due by 30 days (inclusive), it is considered that the credit risk of such instrument has significantly increased.

10.2.2 Credit-impaired financial assets

When the Group expected occurrence of one or more events which may cause adverse impact on future cash flows of a financial asset, the financial asset will become a credit-impaired financial asset. Objective evidence that a financial asset is impaired includes the following observable events:

- (1) Significant financial difficulty of the issuer or obligor;
- (2) A breach of contract by the borrower, such as a default or delinquency in interest or principal payments;
- (3) The creditor, for economic or legal reasons relating to the borrower's financial difficulty, granting a concession to the borrower, which would not be made under any other circumstances.
- (4) It becoming probable that the borrower will enter bankruptcy or other financial reorganizations;
- (5) The disappearance of an active market for that financial asset because of financial difficulties of the issuer or the borrower;
- (6) Purchase or originate a financial asset with a large scale of discount, which reflects facts of credit loss incurred.

The Group considers that a default event has occurred when internal advice or externally obtained information indicates that financial instrument debtor is unable to fully repay the creditors including the Group, without consideration of any guarantees obtained by the Group.

Regardless of the results of the above assessment, the Group considers that a default event related to the financial instrument has occurred when contractual payment for such instrument is overdue by 90 days (inclusive).

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.2 Impairment of financial instruments (Continued)

10.2.3 Determination of expected credit loss

The Group uses a provision matrix to determine the expected credit losses for relevant financial instruments based on a collective basis of accounts receivable and contract assets. The Group classifies financial instruments into different groups based on common risk characteristics. The common risk characteristics adopted by the Group include: types of financial instrument, credit risk ratings, remaining contract terms and industry in which the debtor operates, etc.

For financial assets, a credit loss is the present value of the difference between the contractual cash flows that are due to the Group under the contract and the cash flows that the Group expects to receive.

The factors reflected in methods of measurement of expected credit losses of financial instruments include an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; time value of money; reasonable and supportable information about past events, current conditions and forecasts on future economic status at balance sheet date without unnecessary additional costs or efforts.

10.2.4 Write-down of financial assets

When the Group will no longer reasonably expect that the contractual cash flows of financial assets can be collected in aggregate or in part, the Group will directly write down the carrying amount of the financial asset. Such write-down constitutes derecognition of relevant financial assets.

10.3 Transfer of financial assets

The Group derecognizes a financial asset if one of the following conditions is satisfied: (i) the contractual rights to the cash flows from the financial asset expire; or (ii) the financial asset has been transferred and substantially all the risks and rewards of ownership of the financial asset is transferred to the transferee; or (iii) although the financial asset has been transferred, the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset but has not retained control of the financial asset.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset, and it retains control of the financial asset, it recognizes the financial asset to the extent of its continuing involvement in the transferred financial asset and recognizes an associated liability. The Group measures relevant liabilities as follows:

- For the transferred financial asset measure at amortized cost, the carrying amount of relevant liabilities equals to carrying amount of the continuously-involved transferred financial asset less amortized cost of rights retained by the Group (if the Group retains relevant right due to transfer of financial assets) plus amortized costs of the obligation assumed by the Group (if the Group retains relevant right due to transfer of financial assets), relevant liabilities shall not be designated as financial liabilities at FVTPL.
- For the transferred financial asset measure at fair value, the carrying amount of relevant liabilities equals to carrying amount of the continuously-involved transferred financial asset less fair value of rights retained by the Group (if the Group retains relevant right due to transfer of financial assets) plus fair value of the obligation assumed by the Group (if the Group retains relevant right due to transfer of financial assets), the fair value of the right and obligation is fair value measured on stand-alone basis.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.3 Transfer of financial assets (Continued)

For a transfer of a financial asset in its entirety that satisfies the derecognition criteria, the difference between the carrying amount of the financial asset transferred on the date of derecognition and the derecognition-related part of the sum of the consideration received from the transfer and any cumulative gain or loss that has been recognized in other comprehensive income, is recognized in profit or loss. If the financial assets transferred by the Group are equity instrument not held for trading designated as financial assets at FVTOCI, cumulative gain or loss that has been recognized in other comprehensive income should be transferred from other comprehensive income to retained earnings.

If a part of the transferred financial asset qualifies for derecognition, the carrying amount of the transferred financial asset is allocated between the part that continues to be recognized and the part that is continuously involved, based on the respective fair values of those parts on transfer date. The difference between the sum of the consideration received for the part derecognized and any cumulative gain or loss allocated to the part derecognized which has been previously recognized in other comprehensive income and the carrying amount allocated to the part derecognized on derecognition date; and, is recognized in profit or loss. If the financial asset transferred by the Group are designated as equity instrument investment not held for trading at FVTOCI, cumulative gains or losses previously recognized in other comprehensive income are transferred to retained earnings.

For a transfer of a financial asset in its entirety that does not satisfy the derecognition criteria, the Group will continuously recognize the transferred financial asset in its entirety. Considerations received due to transfer of assets shall be recognized as a liability upon receipts.

10.4 Classification of financial liabilities and equity instruments

Financial instruments or its constituent parts issued by the Group are classified into financial liabilities or equity instruments on the basis of the contractual arrangements and the economic substance not only its legal form, together with the definition of financial liability and equity instruments.

10.4.1 Classification, recognition and measurement of financial liabilities

On initial recognition, financial liabilities are classified into financial liabilities at FVTPL and other financial liabilities.

10.4.1.1 Financial liabilities at FVTPL

Financial liabilities at FVTPL consist of financial liabilities held for trading (including derivatives included in financial liabilities) and those designated as at FVTPL. Other than derivative financial liabilities to be set out separately, financial liabilities at FVTOCI are stated as financial liabilities held for trading.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.4 Classification of financial liabilities and equity instruments (Continued)

10.4.1 Classification, recognition and measurement of financial liabilities (Continued)

10.4.1.1 Financial liabilities at FVTPL (Continued)

If a financial liability meets one of the following conditions, it is considered that such liability is held by the Group for trading:

- The financial liability was acquired principally for the purpose of repurchasing in near future.
- The financial liability is part of a portfolio of identifiable financial instruments upon initial recognition, and there is objective evidence that a recent actual pattern of short-term profit-making exists.
- The financial liability is a derivative instrument, except for derivatives meeting the definition of financial guarantee contract, or designated as an effective hedging instrument.

A financial liability may be designated as measured at FVTPL upon initial recognition when one of the following conditions is satisfied: (i) such designation can eliminate or significantly reduce accounting mismatches; (2) conduct management and performance evaluation on groups of financial liabilities or groups of financial assets and financial liabilities on a fair value basis, in accordance with the Group's formally documented risk management or investment strategy, and report to key management personnel on that basis; or (3) qualified mixed financial instrument with embedded derivatives.

Financial liabilities held for trading are subsequently measured at fair value. Any gains or losses arising from changes in the fair value and any dividend or interest expenses paid on the financial liabilities are recognized in profit or loss.

For financial liabilities designated as measured at FVTOCI, changes in fair value arising from the Group's own changes in credit risks are recognized in other comprehensive income, while other fair value changes are recognized in profit or loss. Upon derecognition, the cumulative changing amount of fair value arising from the Group's own changes in credit risks shall be transferred to retained earnings. Any dividend or interest expenses paid on the financial liabilities are recognized in profit or loss. If make treatment on effect of the changes in own credit risks by the aforesaid means which may cause or enlarge an accounting mismatch in profit or loss, the Group will recognize all gains or losses (including the affected amount arising from changes in the own credit risk) of the financial liability into profit or loss.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.4 Classification of financial liabilities and equity instruments (Continued)

10.4.1 Classification, recognition and measurement of financial liabilities (Continued)

10.4.1.2 Other financial liabilities

Other financial liabilities, except for financial liabilities arising from transfer of financial assets does not satisfy derecognition criteria or continue involvement of transferred financial assets, are subsequently measured at amortized cost, with gain or loss arising from derecognition or amortization recognized in profit or loss.

In the event that the Group and its counterparty modify or renegotiate the contract does not result in derecognition of a financial liability subsequently measured at amortized cost but result in changes in contractual cash flows, the Group will recalculate the carrying amount of the financial liability, with relevant gain or loss recognized in profit or loss. The Group will determine carrying amount of the financial liability based on the present value of renegotiated or modified contractual cash flows discounted at the financial liability's original effective interest rate. For all costs or expenses arising from modification or renegotiation of the contract, the Group will adjust the modified carrying amount of the financial liability and make amortization during the remaining term of the modified financial liability.

10.4.2 Derecognition of financial liabilities

The Group derecognizes a financial liability (or part of it) only when the underlying present obligation (or part of it) is discharged. An agreement between the Group (an existing borrower) and an existing lender to replace the original financial liability with a new financial liability with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability.

When the Group derecognizes a financial liability or a part of it, it recognizes the difference between the carrying amount of the financial liability (or part of the financial liability) derecognized and the consideration paid (including any non-cash assets transferred or new financial liabilities assumed) in profit or loss.

10.4.3 Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued (including refinanced), repurchased, sold and cancelled by the Group are recognized as changes of equity. Change of fair value of equity instruments is not recognized by the Group. Transaction costs related to equity transactions are deducted from equity.

The Group recognizes the distribution to holders of the equity instruments as distribution of profits, and dividends paid do not affect total amount of shareholders' equity.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

10. Financial instruments (Continued)

10.5 Derivatives and embedded derivatives

Derivative financial instruments include foreign currency forward contracts, currency swap contracts, interest rate swap contracts, etc. Derivatives are initially measured at fair value on the date of signing of such contracts, and subsequently measured at fair value.

For mixed contracts consisting of derivatives and host contracts, if host contracts are financial assets, instead of separating embedded derivative instruments from the mixed contract, the Group shall assess the mixed contract as a whole in applying the accounting standards for financial asset classification.

When the host contract in the hybrid is not a financial asset while also meeting the following conditions, the Group shall separate the embedded derivative instrument from the hybrid, which is accounted for as an individual derivative financial instrument.

- (1) The economic characteristics and risks of the embedded derivative are not closely related to the host contract.
- (2) A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative.
- (3) The hybrid is not measured at FVTPL.

Where embedded derivative instrument is separated from the hybrid, the Group makes accounting treatment for the host contract according to applicable accounting standards. If the fair value of embedded derivative instrument cannot be reliably measured based on its terms and conditions, the fair value of the embedded derivative instrument shall be determined by the difference between the fair value of the hybrid and the fair value of the host contract. After applying the above method, if the fair value of the embedded derivative instrument still cannot be independently measured on the date of acquisition or the subsequent balance sheet date, the Group shall designate the hybrid as a whole as a financial instrument measured at FVTPL.

10.6 Offsetting financial assets and financial liabilities

Where the Group has a legal right that is currently enforceable to set off the recognized financial assets and financial liabilities, and intends either to settle on a net basis, or to realize the financial asset and settle the financial liability simultaneously, a financial asset and a financial liability shall be offset and the net amount is presented in the balance sheet. Except for the above circumstances, financial assets and financial liabilities shall be presented separately in the balance sheet and shall not be offset.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

11. Receivables

11.1 Receivables for which bad debt provision is individually assessed:

Reason for individual provision for bad debts	If there exists evidence that the credit risk of certain individual receivable is significant, bad debt provision is individually assessed for such receivable.
Method for bad debt provision	To be impaired individually, and the difference between the present value of the estimated future cash flows and its carrying amount is used for bad debt provision.

11.2 Receivables for which bad debt provision is collectively assessed on a portfolio basis by credit risk characteristics:

Other than receivables for which bad debt provision is individually assessed, receivables are grouped based on the similarities and relevance of the credit risk characteristics. Such credit risks usually reflect the repayment capacity of debtors under the contract terms of such assets, and relate to the future cash flow measurement of the examined assets. The basis for determination and method of determining provision for bad debt of each portfolio are as follows:

Name of portfolio	Basis of determining the portfolio
Portfolio 1	Amount from debtors simultaneously having a long-term cooperation history, no history of bad debt and sound state of operation.
Portfolio 2	Receivables other than Portfolio 1.

Bad debt provision of above portfolios is made using aging analysis:

Aging	Portfolio 1	Portfolio 2
Within 1 year (inclusive)	0.30%	0.30%
1 to 2 years	5%	10%
2 to 3 years	20%	30%
3 to 4 years	30%	50%
4 to 5 years	50%	80%
Over 5 years	100%	100%

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

12. Inventories

12.1 Classification of inventories

The Group's inventories mainly include raw materials, inventories arising from construction contracts, nuclear fuel, spare parts, products in stock, consigned processing materials, materials in transit and turnover materials. Inventories are initially measured at cost. Inventory costs include procurement costs, processing costs and other expenses incurred to enable the inventories to reach the present site and working condition.

12.2 Valuation method of inventories upon delivery

Upon delivery of inventories, actual cost of nuclear fuel is calculated using the specific identification method based on the number of refueling batches, and included in the production cost by installments at the current and the next refueling period based on the on-grid power generation. Actual cost of other inventories are calculated using the weighted average method or specific identification method.

Turnover materials are materials that can be reused many times and still be remained in original condition after gradual transfer of their value but are not recognized as fixed assets, including packaging materials, low-value and short-lived consumables and other turnover materials. Packaging materials, low-value and short-lived consumables and other turnover materials are amortized by one-time write-off.

12.3 Recognition of net realizable value of inventories and provision for inventory impairment

At the balance sheet date, inventories are calculated at the lower of cost and net realizable value. Provision for inventory impairment is made when the net realizable value is lower than the cost. Net realizable value represents the estimated selling price of inventories minus cost estimated to incur upon completion, estimated selling costs and relevant taxes during normal course of business. The net realizable value of inventory is determined based on the actual evidences obtained while the objectives of inventories holding and the impact of post balance sheet date event are also considered.

Provision for decline in value of inventories is made based on the excess of cost of inventory over its net realizable value on an item-by-item basis.

After the provision for decline in value of inventories is made, if the circumstances that previously caused inventories to be written down below cost no longer exist so that the net realizable value of inventories is higher than their cost, the original provision for decline in value is reversed and the reversal is included in profit or loss for the period.

12.4 Inventory count system

The inventory count system shall be on a perpetual basis.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

13. Long-term equity investments

13.1 Judgement criterion of determining joint control or significant influence over the investee

Control exists when the investor has power over the investee; is exposed, or has rights, to variable returns from its involvement with the investee; and has the ability to use its power over the investee to affect its returns. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. Significant influence is the power to participate in the financial and operating policy decisions of an enterprise, except to control or joint control the formulation of such policies together with other parties. In determining whether there is control or significant influence over the investee, potential voting right factors (such as the convertible corporate bonds for the period and the exercisable stock warrants for the period of the investee and other invested units held) were taken into account.

13.2 Determination of initial investment cost

For a long-term equity investment acquired through a business combination involving enterprises under common control, the initial investment cost of the long-term equity investment is the attributable share of the carrying amount of the shareholders' equity of the acquiree at the date of combination in the consolidated financial statements of the ultimate controlling party. The difference between the initial investment cost and the carrying amount of cash paid, non-cash assets transferred and liabilities assumed is adjusted to capital reserve. If the balance of capital reserve is not sufficient, any excess is adjusted to retained earnings. If the consideration of the combination is satisfied by the issue of equity securities, the initial investment cost of the long-term equity investment is the attributable share of the carrying amount of the shareholders' equity of the acquiree in the consolidated financial statements of the ultimate controlling party. The aggregate face value of the shares issued is accounted for as share capital. The difference between the initial investment cost and the aggregate face value of the shares issued is adjusted to capital reserve. If the balance of capital reserve is not sufficient, any excess is adjusted to retained earnings.

For a long-term equity investment acquired through business combination not involving enterprises under common control, the initial investment cost of the long-term equity investment is the cost of acquisition at the date of combination. For a business combination realized by more than one transactions and ultimately not under common control, different accounting methods are adopted by the criteria of whether those transactions are classified as "a bundle of transactions" or not. If yes, all transactions are deemed as one transaction getting control of the acquirer and are dealt with the relevant accounting method. If no, the Company regards the sum of carrying value of the equity investment of the acquirer plus added cost of investment as the initial cost of investment. For such carrying value of the equity investment, if it is accounted by method of equity, then the relevant other comprehensive income is not accounted for the period.

The intermediary fees incurred by the absorbing party or acquirer such as audit, legal, valuation and consulting fees, etc. and other related administrative expenses attributable to the business combination are recognized in profit or loss when they are incurred.

The long-term equity investment acquired otherwise than through a business combination is initially measured at cost. When the entity is able to exercise significant influence or joint control (but not control) over an investee due to additional investment, the cost of long-term equity investments is the sum of the fair value of previously-held equity investments determined in accordance with the Accounting Standards for Business Enterprises No. 22 – Recognition and Measurement of Financial Instruments, and the additional investment cost.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

13. Long-term equity investments (Continued)

13.3 Method for subsequent measurement and profit or loss recognition

13.3.1. Long-term equity investments accounted for using the cost method

Long-term equity investments in subsidiaries are accounted for using the cost method in the financial statements of the parent company. A subsidiary is an investee that is controlled by the Group.

Under the cost method, a long-term equity investment is measured at initial investment cost. When additional investment is made or the investment is recouped, the cost of the long-term equity investment is adjusted accordingly. Investment income is recognized in the period in accordance with the attributable share of cash dividends or profit distributions declared by the investee.

13.3.2. Long-term equity investments accounted for using the equity method

Except for all or part of the investment in associates and joint ventures classified as assets held for sale, the Group accounts for investment in associates and joint ventures using the equity method. An associate is an entity over which the Group has significant influence; a joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement.

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, no adjustment is made to the initial investment cost. Where the initial investment cost is less than the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, the difference is recognized in profit or loss for the period, and the cost of the long-term equity investment is adjusted accordingly.

Under the equity method, the Group recognizes its share of the net profit or loss and other comprehensive income made by the investee as investment income and other comprehensive income respectively, and adjust the carrying amount of the long-term equity investment accordingly; the carrying amount of the investment is reduced by the portion of any profit distributions or cash dividends declared by the investee that is distributed to the Group; the share of the changes in owners' equity of the investee other than those arising from net profit or loss, other comprehensive income and profit distribution are recognized in the capital reserve and the carrying amount of the long-term equity investment is adjusted accordingly. The Group recognizes its share of the investee's net profit or loss after making appropriate adjustments based on the fair value of the investee's individual separately identifiable assets, etc. at the acquisition date. Where the accounting policies and accounting period adopted by the investee are not consistent with those of the Group, the Group shall adjust the financial statements of the investee to conform to its own accounting policies and accounting period, and recognize investment income and other comprehensive income based on the adjusted financial statements.

For the Group's transactions with its associates and joint ventures where assets contributed or sold does not constitute a business, unrealized intra-group profits or losses are recognized as investment income or loss to the extent that those attributable to the Group's proportionate share of interest are eliminated. However, unrealized losses resulting from the Group's transactions with its associates and joint ventures which represent impairment losses on the transferred assets are not eliminated.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

13. Long-term equity investments (Continued)

13.3 Method for subsequent measurement and profit or loss recognition (Continued)

13.3.2. Long-term equity investments accounted for using the equity method (Continued)

If the assets transfer made by the Group is classified as a business transaction, fair value of the asset transferred are recognized as initial cost of the additional long-term equity investment, and the difference between initial cost of investment and carrying value of asset transferred are taken in full amount into the current profit or loss, if the investor obtained long-term equity investment but not control over the investee. If the disposal of assets made by the Group is classified as a business transaction, the difference between consideration of assets sold and carrying value of the asset are taken in full amount into the current profit or loss. If assets purchased from associates and joint ventures are classified as business transactions, then full amount of profit or loss relating to the transaction are recognized, according to the requirements under the Accounting Standards for Business Enterprise No. 20 - Business Combination.

The Group discontinues recognizing its share of net losses of the investee after the carrying amount of the long-term equity investment and any long-term interest that in substance forms part of the Group's net investment in the investee is reduced to zero, except to the extent that the Group has an obligation to assume additional losses, in which case, the expected liability shall be recognized at the obligation to be assumed and be included in investment loss incurred during the current periods. Where net profits are subsequently made by the investee, the Group resumes recognizing its share of those profits only after its share of the profits equals the share of losses not recognized.

13.4 Disposal of long-term equity investments

On disposal of a long-term equity investment, the difference between the proceeds actually received and the carrying amount is recognized in profit or loss for the period. For long-term equity investments accounted for using the equity method, if the remaining interest after disposal is still accounted for using the equity method, other comprehensive income previously recognized for using the equity method is accounted for on the same basis as would have been required if the investee had directly disposed of related assets or liabilities, and transferred to profit or loss for the period on a pro rata basis; owners' equity recognized due to changes in other owners' equity of the investee (other than net profit or loss, other comprehensive income and profit distribution) is transferred to profit or loss for the period on a pro rata basis. For long-term equity investments accounted for using the cost method, if the remaining interest after disposal is still accounted for using the cost method, other comprehensive income previously recognized for using the equity method or in accordance with the standards for the recognition and measurement of financial instruments before obtaining the control over the investee, is accounted for on the same basis as would have been required if the investee had directly disposed of related assets or liabilities, and transferred to profit or loss for the period on a pro rata basis; changes in other owners' equity in the investee's net assets recognized under the equity method (other than net profit or loss, other comprehensive income and profit distribution) is transferred to profit or loss for the period on a pro rata basis.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

13. Long-term equity investments (Continued)

13.4 Disposal of long-term equity investments (Continued)

For the remaining share equity after partial disposal which causes the Group to lose full control over the investee, equity method will be used to account and adjust for the remaining share equity as if they are accounted by the same method upon acquisition, if such equity enables the Group to exercise joint control or significant influences over the investee. If not, the difference between the fair value upon the date of losing control and the carrying value will be taken into the current profit or loss, according to the regulations of financial instrument recognition and measurement. For the other comprehensive income recognized by equity method or by financial instruments recognition and measurement before the Group takes control of the investee, the same basis the investee while disposing relative asset or liability will be adopted for accounting when the Group loses control over the investee, changes to shareholders' equity in the net asset of investee recognized by equity method, other than net profit or loss, other comprehensive income and profit distribution will be carried forward to the current profit or loss. Meanwhile, other comprehensive income and other shareholders' equity will be carried proportionately if the remaining share equity is accounted by equity method; and will be carried in full amount if the remaining share equity is accounted by financial instrument recognition and measurement.

The remaining share equity after partial disposal that causes the Group to lose joint control or significant influences over the investee are accounted by financial instrument recognition and measurement, difference between the fair value of such equity upon the date of losing control or significant influence and the carrying value will be taken into the current profit or loss. Other comprehensive income recognized using equity method for the previous share equity investment will be accounted using the same basis as the investee while disposing relative asset or liability, full amount of shareholders' equity recognized by other change to shareholders' equity other than net profit or loss, other comprehensive income or profit distribution will be taken into return on investment for the period when equity method stops being adopted.

14. Investment properties

Investment property refers to real estate held to earn rentals or for capital appreciation, or both, including leased land use rights, land use rights held and provided for transferring after appreciation and leased buildings, etc.

Investment property is initially measured at cost. Subsequent expenditures related to an investment property shall be included in cost of investment property only when the economic benefits associated with the asset will likely flow to the Group and its cost can be measured reliably. All other subsequent expenditures shall be included in profit or loss for the current period when incurred.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

14. Investment properties (Continued)

The Group adopts cost method for subsequent measurement of investment property, which is depreciated or amortized using the same policy as that for buildings and land use rights. An investment property is depreciated over its useful life using the straight-line method since the month subsequent to the one in which it is ready for intended use. The useful life, estimated net residual value rate and annual depreciation rate of each category of investment property are as follows:

Category	Useful life	Estimated net residual value rate	Annual depreciation rate
Buildings	20-50 years	5%	1.90%-4.75%

When an investment property is sold, transferred, retired or damaged, the amount of proceeds on disposal of the property net of the carrying amount and related taxes is recognized in profit or loss for the current period.

15. Fixed assets

15.1 Conditions for recognition of fixed assets

Fixed assets are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes and have a useful life of more than one accounting period. Fixed assets are only recognized when their related economic benefits are likely to flow to the Group and their cost can be reliably measured. Fixed assets are initially measured at cost and the effect of any expected costs of abandoning the asset at the end of its use is considered.

A fixed asset that is ready for its intended use but before the final account for completed project is stated at cost and depreciated based on estimated value, which will be adjusted based on actual cost upon the final account for completed project without adjustment to the depreciation already made.

Nuclear power plant decommissioning cost is recognized in the initial cost of fixed assets based on the discounted amount of the expected decommissioning expense. Two-third of the initial nuclear fueling costs as necessary expenses before the nuclear power plant is ready for its intended use are recognized in the construction cost of the nuclear power plant, and its depreciation is provided under the same method as the nuclear power plant. The remaining initial nuclear fueling costs are recognized in the inventory, and are included in the production cost by installments at the period between the initial fueling and the next refueling based on the on-grid power generation.

Subsequent expenditures incurred for the fixed asset are included in the cost of the fixed asset if it is probable that economic benefits associated with the asset will flow to the Group and the subsequent expenditures can be measured reliably. Meanwhile, the carrying amount of the replaced part is derecognized. Other subsequent expenditures are recognized in profit or loss in the period in which they are incurred.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

15. Fixed assets (Continued)

15.2 Method for depreciation of different fixed assets

Fixed assets of the Group include nuclear power facilities and non-nuclear power facilities.

15.2.1. Method for depreciation of nuclear power facilities

Method for classification and depreciation, estimated useful life and estimated net residual value of nuclear power facilities are as follows:

Except for the decommissioning costs of nuclear power facilities that is separately accounted for, other nuclear power facilities are classified into two categories, the nuclear islands, regular islands and auxiliary systems, as well as machinery, electricity, instruments, buildings and structures. Nuclear power facilities are depreciated using the units of production method, except for the buildings and structures that are depreciated using the straight-line method, since the month subsequent to the one in which it is ready for intended use. The net residual value rate of regular islands and auxiliary system machineries is 5%, and the net residual value rate of other fixed-assets categorized as nuclear power facilities is zero.

The estimated useful lives of the nuclear power facilities of the Group are as follows:

Category	Nuclear islands	Regular islands	Auxiliary systems
Machinery	30-60 years	20-30 years	20-30 years
Electricity	15-20 years	15-20 years	15-20 years
Instruments	10-15 years	10-15 years	10-15 years
Buildings	40 years	30 years	30 years
Structures	25-40 years	25 years	25 years
Decommissioning costs of nuclear power facilities	40/60 years	N/A	N/A

Calculations of depreciation by the units of production method are as follow:

Current depreciation rate=current actual on-grid power generation ÷ (current actual on-grid power generation + estimated on-grid power generation during remaining depreciation period)

Current depreciation amount=[cost of fixed assets as at the end of the period x (1 - estimated net residual value rate) – depreciated amount as at the beginning of the period – provision of fixed assets impairment] x current depreciation rate

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

15. Fixed assets (Continued)

15.2 Method for depreciation of different fixed assets (Continued)

15.2.2. Method for depreciation of non-nuclear power facilities

Non-nuclear power facilities are depreciated over its useful life using the straight-line method since the month subsequent to the one in which it is ready for intended use. The useful life, estimated net residual value rate and annual depreciation rate of fixed assets of non-nuclear power facilities as follows:

Category	Useful life	Estimated net residual value rate	Annual depreciation rate
Building and structure for administration purpose	20-50 years	5%	1.90%-4.75%
Machinery and equipment	5-15 years	5%	6.33%-19%
Transportation vehicles	5 years	5%	19%
Electronic equipment and office facilities	5 years	5%	19%

Estimated net residual value of a fixed asset is the estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset was already of the stage and in the condition expected at the end of its useful life.

15.3 Other explanations

If a fixed asset is upon disposal or no future economic benefits are expected to be generated from its use or disposal, the fixed asset is derecognized. When a fixed asset is sold, transferred, retired or damaged, the amount of any proceeds on disposal of the asset net of the carrying amount and related taxes is recognized in profit or loss for the current period.

The Group reviews the useful life and estimated net residual value of a fixed asset and the depreciation method applied at least once at each financial year-end, and account for any change as a change in an accounting estimate.

16. Construction in progress

Construction in progress is measured based on the actual cost, including all expenditures incurred for construction projects, capitalized borrowing costs for the construction in progress before it is ready for its intended use, and other related expenses during the construction period. A construction in progress is not depreciated and is transferred to fixed assets when it is ready for its intended use.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

17. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying asset are capitalized when expenditures for such asset and borrowing costs are incurred and activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced. Capitalization of borrowing costs ceases when the qualifying asset being acquired, constructed or produced becomes ready for its intended use or sale. If construction or production of assets qualifying capitalization is interrupted abnormally for a continuous period of more than 3 months, the capitalization of borrowing costs should be ceased until the assets resume construction or production. Other borrowing costs are recognized as an expense in the period in which they are incurred.

Where funds are borrowed under a specific-purpose borrowing, the amount of interest to be capitalized is the actual interest expense incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds. Where funds are borrowed under general-purpose borrowings, the Group determines the amount of interest to be capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings. During the capitalization period, exchange differences related to a specific-purpose borrowing denominated in foreign currency are all capitalized. Exchange differences in connection with general-purpose borrowings are recognized in profit or loss in the period in which they are incurred.

18. Intangible assets

18.1 Intangible assets

Intangible assets include land use rights, software, non-patented technology and sea area use rights, etc.

An intangible asset is measured initially at cost. When an intangible asset with a finite useful life is available for use, its original cost less net residual value and any accumulated impairment losses is amortized over its estimated useful life using the straight-line method. An intangible asset with an indefinite useful life is not amortized. The amortization method, years of useful life and net residual value are as follows:

Category	Amortization method	Useful life (year)
Land use rights	Straight-line method	20-50 years
Computer software	Straight-line method	5-10 years
Patent	Straight-line method	10 years
Non-patented technology	Straight-line method	10 years
Sea area use rights	Straight-line method	50 years
Others	Straight-line method	10-22 years

The estimated net residual values of intangible assets are zero. The Group shall review the finite useful life of an intangible asset and the amortization method applied at the end of the period and make adjustments when necessary.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

18. Intangible assets (Continued)

18.2 Internal research and development expenditure

Expenditure arising from the research phase is accounted for in profit or loss for the current period when incurred.

Expenses incurred during the development stage that satisfy the following conditions are recognized as intangible assets, while those that do not satisfy the following conditions are accounted for in the profit or loss for the current period:

- (1) it is technically feasible that the intangible asset can be used or sold upon completion;
- (2) there is intention to complete the intangible asset for use or sale;
- (3) the intangible asset can produce economic benefits, including there is evidence that the products produced using the intangible asset has a market or the intangible asset itself has a market; if the intangible asset is for internal use, there is evidence that there is usage for the intangible asset;
- (4) there is sufficient support in terms of technology, financial resources and other resources in order to complete the development of the intangible asset, and there is capability to use or sell the intangible asset;
- (5) the expenses attributable to the development stage of the intangible asset can be measured reliably.

If the expenses incurred during the research stage and the development stage cannot be distinguished separately, all research and development expenses incurred are accounted for in the profit or loss for the current period.

19. Impairment of long-term assets

The Group assesses at each balance sheet date whether there is any indication that any long-term equity investments, investment properties, fixed assets, construction in progress and intangible assets with a finite useful life may be impaired. If there is any evidence indicating that an asset may be impaired, recoverable amount shall be estimated for the individual asset. The intangible assets with infinite useful life and intangible assets that are not ready for intended use are tested for impairment yearly, regardless of any indication of impairment.

The recoverable amount should be estimated of the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group shall determine the recoverable amount of the asset group to which the asset belongs. The recoverable amount of an asset is determined at the higher of the net amount after deducting the disposal expenses from the assets' fair value and the current value of the assets' estimated future cash flow.

If the recoverable amount of an asset is less than its carrying amount, a provision for impairment loss of the asset will be made for the reduction and is charged to profit or loss for the current period.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

19. Impairment of long-term assets (Continued)

Goodwill is tested for impairment yearly. When conducting the impairment test for goodwill, the test is conducted through combination with its related asset group or portfolio of asset group. That is, the carrying amount of goodwill is reasonably allocated to the related asset group or each of asset group expected to benefit from the synergies of the combination from the acquisition date. If the recoverable amount of asset group or portfolio of asset group containing the allocated goodwill is lower than its carrying value, relevant impairment loss is recognized. The amount of impairment loss is first written-down and allocated to the carrying amount of the goodwill of that asset group or portfolio of asset group, and is then written down to the carrying value of all other types of assets proportionally according to the weighting of the carrying value of all other types of assets other than goodwill within asset group or portfolio of asset group.

When recognizing the impairment loss of contractual costs related assets, other assets in relation to contractual costs that are recognized pursuant to other relevant corporate accounting standards shall take priority. For contractual costs related assets, the Group shall make provisions and recognize an impairment loss to the extent that the carrying amount of an asset exceeds: (1) the remaining amount of consideration that the Company expects to receive in exchange for the goods or services to which the asset relates; (2) the estimated costs that relate to providing those goods or services.

Except for the impairment loss of contractual costs, an impairment loss once recognized shall not be reversed in a subsequent period. The Group shall, after the impairment of contractual costs has been provided, recognized in profit or loss a reversal of the impairment loss previously recognized when the impairment conditions no longer exist or have improved. However, the increased carrying amount of the asset shall not exceed the carrying amount that would have been determined if no impairment loss had been recognized previously.

20. Long-term deferred expenses

Long-term deferred expenses are expenses which have incurred but shall be amortized over the current year and subsequent years of more than one year. Long-term deferred expenses are amortized evenly over the estimated benefit period.

21. Employee benefits

21.1 Accounting treatment of short-term employee benefits

In the accounting period in which employees have rendered services, the Group shall recognize the short-term employee benefits that actually occurred as liability, and charged to profit or loss for the current period or cost of relevant assets. The Group shall recognize the amount of employee welfare that actually occurred and charged to profit or loss for the current period or cost of relevant assets. If the employee welfare expense is non-monetary welfare, it shall be measured according to its fair value.

During the accounting periods which employees rendered service, the Group makes contribution to medical insurance, work-related injury insurance, maternity insurance and other social security contributions and housing provident fund, and extracts for labour union funds and employees' education expenses as stipulated. Based on the required accrual basis and proportions in order to determine the appropriate amount of employee benefits, such employee benefits shall be recognized as corresponding liabilities, and charged to profit or loss during current period or cost of relevant assets.

In the accounting period in which employees have rendered services, the Group shall recognize the short-term employee benefits that actually occurred as liability, and charged to profit or loss for the current period or cost of relevant assets. The Group shall recognize the amount of employee welfare that actually occurred and charged to profit or loss for the current period or cost of relevant assets. If the employee welfare expense is non-monetary welfare, it shall be measured according to its fair value.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

21. Employee benefits (Continued)

21.1 Accounting treatment of short-term employee benefits (Continued)

During the accounting periods which employees rendered service, the Group makes contribution to medical insurance, work-related injury insurance, maternity insurance and other social security contributions and housing provident fund, and extracts for labour union funds and employees' education expenses extracted as stipulated. Based on the required accrual basis and proportions in order to determine the appropriate amount of employee benefits, such employee benefits shall be recognized as corresponding liabilities, and charged to profit or loss during current period or cost of relevant assets.

21.2 Accounting treatment of post-employment benefits

Post-employment benefits are classified into defined contribution plans and defined benefit plans.

For defined contribution plans, during the accounting periods which employees rendered service, the contribution payable to the plans shall be recognized as liability in profit or loss or as relevant asset cost.

For defined benefit plans, the Group assigns the welfare obligation generated from the defined benefit plans to the period of rendering services using the formula determined by the projected unit credit method, and includes it in the current profit or loss or related asset costs. Employee benefit costs generated from the defined benefit plans are categorized as follows:

- Service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- Net interest of net liabilities or net assets of defined benefit plans (including interest income of planned assets, interest expenses of defined benefit plan liabilities and effect of asset ceiling); and
- Remeasurement of changes in net liabilities or net assets of defined benefit plans.

Service cost and net interest of net liabilities or net assets of defined benefit plans are included in the current profit or loss or related asset costs. Remeasurement of changes in net liabilities or net assets of defined benefit plans (including actuarial gains or losses, return on plan assets excluding the amount included in the net interest of net liabilities or net assets of defined benefit plans, and changes to the asset ceiling excluding the amount included in the net interest of net liabilities or net assets of defined benefit plans) is included in other comprehensive income.

Deficit or surplus generated from the present value of the obligation of defined benefit plan less the fair value of defined benefit plan asset is recognized as a net liability or a net asset of defined benefit plan.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

21. Employee benefits (Continued)

21.3 Accounting treatment of termination benefits

When the Group provides termination benefits to employees, employee benefit liabilities are recognized for termination benefits, with a corresponding charge to the profit or loss for the period at the earlier of: when the Group cannot unilaterally withdraw the offer of termination benefits because of the termination plan or a curtailment proposal; or when the Group recognizes costs or expenses related to restructuring that involves the payment of termination benefits.

21.4 Accounting treatment of other long-term benefits

For other long-term benefits, when meeting the determined conditions for withdrawal and deposit plan, the Group will conduct accounting treatment according to the determined withdrawal and deposit plan. For net liabilities and net assets of other long-term benefits apart from the above, the Group will conduct accounting treatment according to the determined benefit plan. As at the end of the reporting period, employee welfare cost of other long-term employee welfare are recognized as service cost, net interest of net liabilities or net assets of other long-term employee welfare and remeasurement of changes in net liabilities or assets of other long-term employee welfare, and the total amount of which is recognized in profit or loss or as relevant asset cost.

22. Provisions

Provisions are recognized when the Group has a present obligation related to a contingency, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money. Where the effect of the time value of money is material, the best estimate of provision is determined by discounting the related future cash outflows.

Where all or some of the expenditure required to settle a provision is expected to be reimbursed by a third party, the reimbursement is recognized as a separate asset only when it is virtually certain that reimbursement will be received, and the amount of reimbursement recognized does not exceed the carrying amount of the provision.

The Group's provisions shall primarily consist of provision for nuclear power plant decommissioning and provision for low and medium level radioactive waste management.

22.1 Provision for nuclear power plant decommissioning

Provision for nuclear power plant decommissioning is the expenses expected to be incurred in the process of the Group putting nuclear reactor systems out of service safely and permanently when they reach the end of their service lives, in order to ensure staff, the public and surrounding ecological environment being not subject to the hazards of the remaining radioactive substance and other potential risks. Provision for nuclear power plant decommissioning is estimated on the basis of best estimate, and the discounted amount shall be included in the initial cost of fixed assets.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

22. Provisions (Continued)

22.2 Provision for low and medium level radioactive waste management

Provision for low and medium level radioactive waste management is the expenses expected to be incurred in respect of disposal of long-lived low and intermediate level radioactive waste and short-lived low and intermediate level radioactive waste from nuclear power plant. Provision for low and medium level radioactive waste management shall be made on the basis of best estimate by adopting the accrual-basis principle.

23. Share-based payment

The share-based payments of the Group are transactions that grant equity instruments or assume equity-instrument based liabilities for receiving services rendered by employees. The share-based payments of the Company are cash-settled share-based payments.

23.1 Cash-settled share-based payments

Cash-settled share-based payment is measured at the fair value of liabilities determined on the basis of shares or other equity instruments of the Group. As to a cash-settled share-based payment, if the right may be exercised immediately after the grant, relevant costs and expenses shall be included on the date of the grant, and the liabilities shall be increased accordingly. On each balance sheet date within the vesting period, the services obtained in the current period shall, based on the best estimate of the information about the exercisable right, be included in the relevant costs or expenses and the corresponding liabilities at the fair value of the liability undertaken by the Group. Fair value of the liabilities are remeasured and the changes are stated in profit or loss on each balance sheet date and settlement date before settlement of relevant liabilities.

23.2 Accounting treatment of the implementation, modification and termination of share-based payments

If fair value of the granted equity instrument is increased by the Group's modifications to the share-based payment plans, the increase in fair value shall be accordingly recognized in the increase in service obtained. If the quantity of the granted equity instruments is increased by such modifications, the increase in fair value shall be accordingly recognized in the increase in service obtained. Increase in the fair value of equity instrument is the difference between such fair value on the date of modification before and after the modification. If aggregate fair value of share-based payments are reduced by the modification, or that terms and conditions of share-based plan is otherwise modified to the disadvantage of the employees, it is considered that such modification never took place and accounting treatment shall continue to be made for services obtained, unless the granted equity instrument is partially or entirely cancelled by the Group.

During the vesting period, where the granted equity instrument is cancelled, the Group shall accelerate the exercise of rights thereunder, recognizing the outstanding amount for the remainder of the vesting period in profit or loss, while recognizing capital reserve. If employees or other parties can choose to fulfil the non-vesting conditions but have not fulfilled them during the pending period, then the equity-settled share-based payments are dealt with as cancelled.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

24. Safe production expenses

Safe production expenses are provided by 中廣核工程有限公司 China Nuclear Power Engineering Co., Ltd. (“CGN Engineering”) under the Measures on the Withholding and Usage of Safety Production Fees of Enterprises (Cai Qi [2012] No.16) (財企[2012]16號《企業安全生產費用提取和使用管理辦法》) jointly issued by the Ministry of Finance and the State Administration of Work Safety on February 14, 2012, recognized in the costs of relevant products or profit or loss and transferred into specific reserves. When such safe production expenses are applied and related to revenue expenditures, specific reserve is directly offset. Where fixed assets are formed from the provision of safe production expenses, expenditure incurred under the collection of items “construction in progress” are recognized as fixed assets when completed safety projects reaching the working condition for its intended use. Meanwhile, specific reserves are written down based on costs of fixed assets formed, and accumulated depreciation of the same amount shall be recognized. No further provision for depreciation shall be made for such fixed assets in subsequent periods.

25. Revenue recognition

The Group’s revenue sources mainly include the following businesses:

- (1) sales of electricity;
- (2) construction, installation and design services;
- (3) provision of labour services;
- (4) sales of goods and others.

When the Group has implemented the performance obligation in the contract, namely, when the customer acquires controls over relevant goods or services, revenues will be recognized as per transaction prices allocated to such performance obligation. Performance obligation represents the Group’s commitment to transfer distinct goods or services to the customer in the contract. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties and amounts expected to be refunded to a customer.

For performance obligations to be satisfied over time, the Group recognizes revenue over time by measuring the progress towards completion if one of the following criteria are met: (1) the customer simultaneously receives and consumes the benefits provided by the Group’s performance as the Group performs; (2) the Group’s performance creates or enhances an asset that the customer controls as the asset is created or enhanced; (3) the Group’s performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

For performance obligations to be satisfied at a certain point in time, the Group recognizes revenue at the time of acquiring control of such goods. In judging if the customer has acquired control of the goods, the Group takes into consideration: (1) the Group has a present right to payment for the goods, as in the customer has a present obligation to payment for the goods; (2) the Group has transferred the legal ownership of the good to the customer, as in the customer has acquired the legal ownership of the good; (3) the Group has transferred physical possession of the good to the customer, as in the customer is in possession of the physical good; (4) the Group has transferred the major risks and rewards of the ownership of the good to the customer, as in the customer has acquired the major risks and rewards of the ownership of the good to the customer; (5) the customer has accepted the good; and (6) other indications that the customer has acquired control of the good.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

25. Revenue recognition (Continued)

For each performance obligation satisfied over time, the Group recognizes revenue over time by measuring the progress towards completion, except when progress cannot be reasonably determined. In determination of the progress towards completion in satisfying such obligations, the Group adopts the input method or output method based on the nature of business. When the performance progress cannot be determined, the Group is expected to be reimbursed for the costs already incurred and recognize the revenue based on the costs already incurred until the performance progress can be reasonably determined.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is conditioned on factors other than passage of time. For details on accounting policies in respect of impairment of contract assets, please refer to Note (III) 10.2 "Impairment of financial instruments". The Group shall present any unconditional (i.e. if only the passage of time is required before payment of that consideration is due) rights to consideration separately as a receivable. A contract liability is an Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or the amount is due) from the customer. The contractual assets and liabilities under the same contract shall be shown on a net basis.

For sales with quality assurance clause, if an individual service is rendered to the customer under such clause beyond providing the customer with goods or services meeting the established criteria, the quality assurance clause shall constitute a single performance obligation. Otherwise, accounting treatments shall be made according to the quality assurance liability under the Accounting Standards for Business Enterprises No.13 – Contingencies.

The Group judges its status as the main responsible party or proxy in a transaction based on whether the Group had control over the good or service prior to transferring to the customer. Where the Group had control over the good or service prior to transferring to the customer, the Group is the main responsible party, and total received or receivable consideration shall be recognized as revenue; otherwise, the Group is the proxy, and the commission or fee expected to receive shall be recognized as revenue, which is determined by deducting net payable to other parties from the total received or receivable consideration.

For receipt in advance from customers for the provision of good or service, the amount shall initially be recognized as liability, and converted into revenue when relevant performance obligations are satisfied. When it is unnecessary for the Group to return the receipt in advance and the customer may forfeit all or part of his/her contractual rights, and that the Group is entitled to the amount in respect of the contractual rights forfeited by the customer, such amount shall be recognized as revenue in proportion to the pattern of rights exercised by the customer. Otherwise, the Group only recognizes such balance of the above liability as revenue when it becomes highly unlikely that customers would demand the fulfilling of the remaining performance obligation.

25.1 Revenue from sales of electricity

Revenue from sales of electricity is the primary component of revenue from sales of goods of the Group. Revenue is recognized when electricity of the Group is transferred to the grids stipulated in the electricity sales contracts, as in when the customer acquires control of the electricity.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

25. Revenue recognition (Continued)

25.2 Revenue from construction, installation and design services

The Group adopts the input method to appropriately determine the progress to completion of satisfying performance obligation for construction, installation and design services. Input method is a way to determine the progress to satisfying the performance obligation based on the Group's input, for which the Group adopts costs incurred as the indicator of input. Revenue is recognized at the amount calculated by total transaction price under the contract at the date of balance sheet multiplied by progress in satisfying the performance obligation, and further deducting recognized revenue from prior accounting periods. When progress cannot be reasonably determined and the incurred costs is expected to be compensated, revenue is recognized according to costs already incurred until the reasonable determination of progress becomes practicable.

25.3 Provision of labour service

The Group adopts the output method to appropriately determine the progress to completion of satisfying performance obligation for the provision of labour services. Output method is a way to determine the progress to satisfying the performance obligation based on the value of goods transferred to the customer, for which the Group adopts milestones reached as the indicator of output. Revenue is recognized at the amount calculated by total transaction price under the contract at the date of balance sheet multiplied by progress in satisfying the performance obligation, and further deducting recognized revenue from prior accounting periods. If the result of labour transaction cannot be reliably estimated, labour revenue is recognized at labour costs already incurred or that which can be compensated, and the labour costs incurred shall be stated as current expense. Labour costs already incurred not expected to be compensated shall not be recognized as revenue.

26. Government grants

Government grants are transfer of monetary assets and non-monetary assets from the government to the Group at no consideration. Government grants are recognized when prescribed conditions are satisfied and they will be received without uncertainties.

If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government subsidy is a non-monetary asset, it should be measured at its fair value. If its fair value cannot be obtained in a reliable way, it should be measured at its nominal amount. Government grants measured at nominal amount are directly recognized in profit or loss.

26.1 Determination basis and accounting treatment of government grants related to assets

Government grants of the Group primarily include project subsidies for research and development of small reactor and nuclear main pump operation and maintenance technology and test verification platform construction. As such government grants constitute long-term assets, they are considered as government grants related to assets.

A government grant related to an asset is recognized as deferred income, and evenly amortized to current profit or loss over the useful life of the related asset.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

26. Government grants (Continued)

26.2 Determination basis and accounting treatment of government grants related to income

Government grants of the Group primarily include value-added tax refunds. As value-added tax refunds do not constitute long-term assets, they are considered government grants related to income.

For a government grant related to income, if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognized as deferred income, and recognized in profit or loss over the period in which the related costs or loss are recognized. If the grant is a compensation for related expenses or losses already incurred, the grant is recognized immediately in profit or loss for the current period. If the nature of the government grants are difficult to differentiate, such grants are wholly classified under government grants related to income.

A government grant related to Group's business activities, is recognized as other income based on the substance of economic activities. A government grant non-related to the Group's business activities, is recognized as non-operating income.

For the repayment of a government grant already recognized, if there is any balance of related deferred income, the repayment shall be written-off against the book balance of deferred income, and any excess shall be recognized in profit or loss for the period.

27. Deferred tax assets/deferred tax liabilities

Income tax expenses include current income tax and deferred income tax.

27.1 Current income tax

At the balance sheet date, current income tax liabilities (or assets) for the current and prior periods shall be measured at the amount expected to be paid (or recovered) according to the requirements of tax laws.

27.2 Deferred tax assets and deferred tax liabilities

For temporary differences between the carrying amounts of certain assets or liabilities and their tax base, or between the nil carrying amount of those items that are not recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized using the balance sheet liability method.

Deferred tax is generally recognized for all temporary differences. Deferred tax assets for deductible temporary differences are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized. However, for temporary differences associated with the initial recognition of goodwill and the initial recognition of an asset or liability arising from a transaction (not a business combination) that affects neither the accounting profit nor taxable profits (or deductible losses) at the time of transaction, no deferred tax asset or liability is recognized.

For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

27. Deferred tax assets/deferred tax liabilities (Continued)

27.2 Deferred tax assets and deferred tax liabilities (Continued)

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates, according to tax laws, that are expected to apply in the period in which the asset is realized or the liability is settled.

Current and deferred tax expenses or income are recognized in profit or loss for the period, except when they arise from transactions or events that are directly recognized in other comprehensive income or in shareholders' equity, in which case they are recognized in other comprehensive income or in shareholders' equity; and when they arise from business combinations, in which case they adjust the carrying amount of goodwill.

At the balance sheet date, the carrying amount of deferred tax assets is reviewed and reduced if it is no longer probable that sufficient taxable profits will be available in the future to allow the benefit of deferred tax assets to be utilized. Such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

27.3 Offsetting of income tax

When the Group has a legal right to settle on a net basis and intends either to settle on a net basis or to realize the assets and settle the liabilities simultaneously, current tax assets and current tax liabilities of the Group are offset and presented on a net basis.

When the Group has a legal right to settle current tax assets and liabilities on a net basis, and deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax assets and liabilities on a net basis or to realize the assets and liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be reversed, deferred tax assets and deferred tax liabilities are offset and presented on a net basis.

28. Leases

Leases are classified as finance leases when the terms of the lease transfer substantially all the risks and rewards of ownership of the lessee. Operational lease refers to a lease other than a financial lease.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

28. Leases (Continued)

28.1. Accounting treatment of finance lease (Continued)

28.1.1. The Group as lessee under operating leases

Operating lease payments are recognized on a straight-line basis over the term of the relevant lease, and are either included in the cost of related asset or charged to profit or loss for the period. Initial direct costs incurred are charged to profit or loss for the period. Contingent rents are charged to profit or loss in the period in which they are actually incurred.

28.1.2. The Group as lessor under operating leases

Rental income from operating leases is recognized in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs with a significant amount are capitalized when incurred, and are recognized in profit or loss on the same basis as rental income over the lease term. Other initial direct costs with an insignificant amount are charged to profit or loss in the period in which they are incurred. Contingent rents are charged to profit or loss in the period in which they actually arise.

29. Changes in significant accounting policies and accounting estimates

29.1 Changes in accounting policies

From January 1, 2018, the Group commenced the adoption of the New Standards for Revenue (Cai Kuai [2017] No. 22), as well as the Accounting Standards for Business Enterprises No. 22 – Recognition and Measurement of Financial Instruments (Cai Kuai [2017] No. 7), the Accounting Standards for Business Enterprises No. 23 – Transfer of Financial Assets (Cai Kuai [2017] No. 8), the Accounting Standards for Business Enterprises No. 24 – Hedging Accounting (Cai Kuai [2017] No. 9) and the Accounting Standards for Business Enterprises No. 37 – Presentation of Financial Instruments (Cai Kuai [2017] No. 14) (the above four are collectively referred to as the “New Standards for Financial Instruments”, which were all revised by the Ministry of Finance in 2017. Besides, the financial statements have been prepared in accordance with the Notice of the Revised Format of Financial Statements for General Business Enterprises for 2018 (Cai Kuai [2018] No. 15, the “Cai Kuai No. 15 Document”) issued by the Ministry of Finance on June 15, 2018.

29.1.1 New Standards for Revenue

The New Standards for Revenue introduced a five-step method for recognition and measurement of revenue, and added more instructions on specific transactions (or matters). For details on the recognition and measurement of revenue of the Group, please refer to Note (III)25 “Revenue recognition”. Under the New Standards for Revenue, entities that adopt such standards for the first time shall adjust the retained earnings and amounts of other related items in the financial statements at the beginning of the year in which such standards are firstly adopted (i.e. January 1, 2018) for the cumulative affected amounts due to initial adoption of such standards, whereby the information in comparable period shall not be adjusted. Upon adoption of the New Standards for Revenue, the Group solely adjusts the cumulative affected amounts for the outstanding contracts on the date of initial adoption. For changes in contracts arose before the beginning of the period in which of the New Standards for Revenue are firstly adopted, the Group adopts a simplified approach, namely that the Group identifies the fulfilled and unfulfilled performance obligations, determine the transaction price and allocate such price between the fulfilled and unfulfilled performance obligations according to the final arrangement on changes in contracts.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

29. Changes in significant accounting policies and accounting estimates (Continued)

29.1 Changes in accounting policies (Continued)

29.1.1 New Standards for Revenue (Continued)

Besides the provision of more extensive disclosures of revenue transactions, impacts from the adoption of the New Standards for Revenue on relevant items on the consolidated balance sheet as at January 1, 2018 are as follows:

Unit: RMB

Item	December 31, 2017	Reclassification	January 1, 2018
Current assets:			
Bills receivable and accounts receivable	6,455,449,463.32	(7,201,207.10)	6,448,248,256.22
Inventories	26,558,036,864.75	(6,819,199,881.66)	19,738,836,983.09
Contract assets	—	3,341,739,828.96	3,341,739,828.96
Current liabilities:			
Receipts in advance	5,104,185,934.33	(5,104,185,934.33)	—
Contract liabilities	—	1,619,524,674.53	1,619,524,674.53

29.1.2 New Standards for Financial Instruments

For classification and measurement of financial assets, the New Standards for Financial Instruments require that financial assets should be classified into three categories: financial assets measured at amortized cost, financial assets at FVTOCI and financial assets at FVTPL based on the characteristics of their contractual cash flows and business models for the enterprises to manage these assets. The categories in the Original Standards for Financial Instruments including loans and receivables, held-to-maturity investments and available-for-sale financial assets have been cancelled. Investments in equity instruments not held for trading are generally categorized into financial assets at FVTPL, and are also allowed to be designated as financial assets at FVTOCI, but such designation is non-revocable, and the cumulative changes in fair value previously recognized in other comprehensive income shall not be transferred to profit or loss upon disposal.

For impairment of financial assets, the New Standards for Financial Instruments on impairment are applicable to financial assets measured at amortized cost and at FVTOCI, and contract assets. The New Standards for Financial Instruments require adoption of expected credit losses model to replace the original credit-impaired model for provision of impairment. The new impairment model adopts a three-phase model, where credit loss allowance is made based on expected credit losses within 12 months or during the whole life in view of whether the credit risks of relevant financial instruments have been significantly increased since initial recognition. For accounts receivable and contract assets, impairment provision are measured at the expected credit losses during the whole life.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

29. Changes in significant accounting policies and accounting estimates (Continued)

29.1 Changes in accounting policies (Continued)

29.1.2 New Standards for Financial Instruments (Continued)

If the recognition and measurement of financial instrument. before January 1, 2018 is inconsistent with the New Standards for Financial Instruments, the Group would adjust in accordance with the retrospective requirement under the New Standards for Financial Instruments. In case of inconsistency between the comparative figures in financial statements in prior period and requirements of the New Standards for Financial Instruments, the Group would not make adjustment. The shortfall between the original carrying amount of the financial instruments and the new carrying amount on the adoption date of the New Standards for Financial Instruments shall be recognized in retained earnings or other comprehensive income as at January 1, 2018. The effects of the Group's adoption of the New Standards for Financial Instruments on the consolidated financial statements as at January 1, 2018 are detailed in the table below.

Unit: RMB

Under the Original Standards for Financial Instruments			Under the New Standards for Financial Instruments		
Item in the financial statements	Measurement category	Carrying amount	Item in the financial statements	Measurement category	Carrying amount
Cash at bank and in hand	Amortized cost	12,386,827,010.72	Cash at bank and in hand	Amortized cost	12,386,827,010.72
Derivative financial assets	FVTPL	1,486,635.64	Derivative financial assets	FVTPL	1,486,635.64
Trade and bills receivables	Amortized cost	6,455,449,463.32	Trade and bills receivables	Amortized cost	6,448,248,256.22
Other receivables	Amortized cost	1,532,214,773.38	Other receivables	Amortized cost	1,532,214,773.38
Non-current assets due within one year (derivative financial instruments)	FVTPL	1,248,496.91	Non-current assets due within one year (derivative financial instruments)	FVTPL	1,248,496.91
Available-for-sale financial assets (investments in equity instruments)	Cost	195,310,350.00	Investments in other equity instruments	FVOCI	509,184,500.00
Other non-current financial assets (derivative financial instruments)	/	/	Other non-current financial assets (derivative financial instruments)	FVTPL	1,857,052.64
Other non-current assets (derivative financial instruments)	FVTPL	1,857,052.64	Other non-current assets (derivative financial instruments)	/	/

On the date of initial adoption (i.e. January 1, 2018), the original carrying amount of financial assets and the carrying amount of the financial assets as classified and measured in accordance with the New Standards for Financial Instruments are reconciled as follows.

Notes to the Financial Statements

For the year ended December 31, 2018

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

29. Changes in significant accounting policies and accounting estimates (Continued)

29.1 Changes in accounting policies (Continued)

29.1.2 New Standards for Financial Instruments (Continued)

Unit: RMB

Item in the financial statements	Carrying amount under the Original Standards for Financial Instruments (December 31, 2017)	Reclassification	Remeasurement	Carrying amount under the New Standards for Financial Instruments (January 1, 2018)
Investment in other equity instruments (Note 1)	—	195,310,350.00	313,874,150.00	509,184,500.00
Available-for-sale financial assets (Note 1)	195,310,350.00	(195,310,350.00)	—	—
Deferred tax liabilities (Note 1)	1,160,681,738.94	—	47,081,122.50	1,207,762,861.44
Long-term equity investments (Note 2)	8,363,631,040.45	—	131,139,543.08	8,494,770,583.53
Other comprehensive income (Note 1) (Note 2)	403,233,865.89	(57,900,771.93)	397,932,570.58	743,265,664.54
Retained earnings (Note 2)	12,838,530,033.75	57,900,771.93	—	12,896,430,805.68

Note 1: The Group has adopted the New Standards for Financial Instruments since January 1, 2018. The originally held available-for-sale financial assets were reclassified as investment in other equity instruments. On January 1, 2018, the fair value was re-measured and increased by RMB313,874,150.00. At the same time, the deferred income tax liabilities were adjusted by RMB47,081,122.50 and the other comprehensive income was adjusted by RMB266,793,027.50.

Note 2: CGN Industry Investment Fund Phase I Co., Ltd. (中廣核一期產業投資基金有限公司) ("CGN Fund Phase I"), an associate of the Group, has adopted the New Standards for Financial Instruments from January 1, 2018, and the originally held available-for-sale financial assets were reclassified as investment in other equity instruments and re-measured. The Group adjusted the carrying value of long-term equity investments by RMB131,139,543.08 based on its shareholding. At the same time, other comprehensive income was adjusted by RMB131,139,543.08.

CGN Finance Co., Ltd. (中廣核財務有限責任公司) (the "Finance Company"), an associate of the Group, has adopted the New Standards for Financial Instruments since January 1, 2018. The originally held available-for-sale financial assets were reclassified as financial assets at FVTPL. The Group transferred the cumulative recognized changes in fair value of RMB57,900,771.93 from other comprehensive income to retained earnings at the beginning of the period based on its shareholding.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

29. Changes in significant accounting policies and accounting estimates (Continued)

29.1 Changes in accounting policies (Continued)

29.1.2 New Standards for Financial Instruments (Continued)

On the date of initial adoption (i.e. January 1, 2018), the original impairment provision of financial assets and the impairment provision classified and measured in accordance with the New Standards for Financial Instruments are reconciled as follows.

Unit: RMB				
Item	Impairment provision under the original standards for financial instruments	Reclassification	Remeasurement	Impairment provision under the New Standards for Financial Instruments
		(2,133,904.67)		
Bills receivable and accounts receivable	228,171,522.61	(Note)	—	226,037,617.94
Other receivables	217,664,256.88	—	—	217,664,256.88

Note: The reclassification is reclassification of contract assets.

29.1.3 Presentation of Financial Statement

In the preparation of 2018 financial statements, the Group implemented the Cai Kuai No. 15 Document promulgated by the Ministry of Finance on June 15, 2018. The Cai Kuai No. 15 Document revised the reporting items in the balance sheet and the income statement by adding new line items of "bills receivable and accounts receivable", "bills payable and accounts payable" and "research and development expenses", revising the reporting contents of line items of "other receivables", "fixed assets", "construction in progress", "other payables", "long-term payables" and "administrative expenses", eliminating the line items of "bills receivable", "accounts receivable", "dividends receivable", "interest receivable", "disposal of fixed assets", "construction materials", "bills payable", "accounts payable", "interest payable", "dividends payable" and "special payables", adding the line items of "including: interest expenses" and "interest income" under the item of "finance costs" for reporting, and adjusted the location for reporting certain items in the income statement whereby refund of commission received from withholding individual income tax shall be reported under the item of "other gains" in the income statement. For the changes to the above-mentioned reporting items, the Group adopted the retrospective adjustment method for accounting treatment and made retrospective adjustments to the data in the comparable financial statements.

Notes to the Financial Statements

For the year ended December 31, 2018

(IV) TAXATION

1. Main tax categories and tax rates

	Taxation basis	Tax rate
Value-added tax (VAT)	(Note 1)	3%, 5%, 6%, 10%, 11%, 13%, 16%, 17%
Education surcharges	Paid-in VAT and business tax	3%
Local education surcharges	Paid-in VAT and business tax	2%
Urban maintenance and construction tax	Paid-in VAT and business tax	1%, 5%, 7%
Real estate tax	Tax basis under relevant tax law (Note 2)	1.2% or 12%
Enterprise income tax	Taxable income	25%, 20%, 15%

Note 1: VAT payable is output tax minus deductible input tax, and the output tax is calculated based on sales and VAT tax rate as determined by relevant tax law.

The revenue from sales of electricity of the subsidiaries of the Company, namely Guangdong Nuclear Power Investment Co., Ltd. ("GNIC"), GNPJVC, Yangxi Nuclear Power Limited (陽西核電有限公司), Fujian Ningde Nuclear Power Co., Ltd. (福建寧德核電有限公司) ("Ningde Nuclear"), Ling'ao Nuclear Power Co., Ltd. (嶺澳核電有限公司) ("Ling'ao Nuclear"), Lingdong Nuclear Power Co., Ltd. (嶺東核電有限公司) ("Lingdong Nuclear"), Yangjiang Nuclear Power Co., Ltd. (陽江核電有限公司) ("Yangjiang Nuclear"), Taishan Nuclear Power Joint Venture Co., Ltd. (台山核電合營有限公司) ("Taishan Nuclear"), Guangxi Fangchenggang Nuclear Power Co., Ltd. (廣西防城港核電有限公司) ("Fangchenggang Nuclear") and CGN Lufeng Nuclear Power Co., Ltd. (中廣核陸豐核電有限公司) ("Lufeng Nuclear"), were subject to VAT at 17%, which was changed to 16% from May 1, 2018. The revenue from overhaul service of the subsidiaries of the Company, Daya Bay Nuclear Power Operations and Management Co., Ltd. ("DMMC") and CGN Nuclear Power Operations Limited Company (中廣核核電運營有限公司) ("CGN Operations"), is subject to VAT at 17%, which was changed to 16% from May 1, 2018. The revenue from sales of goods or equipment of the subsidiaries of the Company, namely China Nuclear Power Technology Research Institute (中廣核研究院有限公司) ("CNPRI"), Suzhou Nuclear Power Research Institute (蘇州熱工研究院有限公司) ("SNPI"), China Nuclear Power (Beijing) Simulation Technology Corporation Ltd. (中廣核(北京)仿真技術有限公司) ("CNPSTC"), CGN Engineering, Shanghai Engineering Science & Technology Co., LTD (上海中廣核工程科技有限公司), Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. (中法國際核能工程有限公司) and CGN Import & Export Co., Ltd. (中廣核電進出口有限公司) were subject to VAT at 17%, which was changed to 16% from May 1, 2018.

Revenue from newspaper and magazine publication of Suzhou Nuclear Power Research Institute, a subsidiary of the Company, was subject to VAT at 13%.

Revenue from technical service of the subsidiaries of the Company, namely CNPRI, CNPSTC, SNPI, China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司), CGN Inspection Technology Co., Ltd. (中廣核檢測技術有限公司) (the "Inspection Company"), DNMC, CGN Engineering, China Nuclear Power Design Co., Ltd. (Shenzhen) (深圳中廣核工程設計有限公司) ("CGN Design"), Shanghai Engineering Science & Technology Co., LTD (上海中廣核工程科技有限公司), Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. (中法國際核能工程有限公司), Guangdong Daya Bay Nuclear Power Environment Protection Co., Ltd. (廣東大亞灣核電環保有限公司) ("Daya Bay Environment Protection") and CGN Import & Export Co., Ltd. (中廣核電進出口有限公司) is subject to VAT at 6%.

The revenue from construction contracts of CGN Engineering, a subsidiary of the Company, was subject to VAT at 3%. The real estate rental income of the Company's subsidiaries, namely CGN Engineering, CNPRI, Shanghai Engineering Science & Technology Co., LTD (上海中廣核工程科技有限公司) and GNPJVC were subject to VAT at 11%, which was changed to 10% from May 1, 2018. The entrusted loan interest income of the subsidiaries of the Company, namely GNIC and GNPJVC, were subject to VAT to 6%. The real estate rental income of the Company's subsidiaries, namely CGN Engineering, GNIC, Ling'ao Nuclear and Lingdong Nuclear were subject to VAT at 5% by the application of simplified tax calculation method. Training income of the Company's subsidiaries, namely DNMC and CGN Operations, were subject to the VAT at 6%.

The Company's subsidiaries, namely Taishan Nuclear Power Industry Investment Co., Ltd. (台山核電產業投資有限公司) ("Taishan Investment"), CGN Ninghe Investment Co., Ltd. (中廣核寧核投資有限公司) ("CGN Ninghe Investment") and CGN Nuclear Power Investment Co., Ltd. (中廣核核電投資有限公司) ("CGN Investment") were subject to VAT at 3% of taxable income of small-scale taxpayers under the tax law.

Note 2: Self-occupied properties are subject to tax at 1.2% per year, with real estate residual value after a one-time deduction of 10%-30% depletion as tax basis; while leased properties are subject to tax at 12% per year, with the full year lease income as tax basis.

(IV) TAXATION (Continued)

2. Tax preference

VAT “levy first, refund later” policy

Pursuant to the Circular on Relevant Issues Concerning Taxation in Nuclear Power Industry (Cai Shui [2008] No. 38) (《關於核電行業稅收政策有關問題的通知》(財稅[2008]38號)) issued by the Ministry of Finance and State Administration of Taxation, sales of electrical products of the Company’s subsidiaries, namely Ling’ao Nuclear, Lingdong Nuclear, Yangjiang Nuclear, Fangchenggang Nuclear, Ningde Nuclear and Taishan Nuclear, were entitled to the VAT “levy first, refund later” policy within 15 years from the second month to the commencement of commercial production of their power generating units, with the refund ratio gradually decreasing in three phases. Within 5 years from the second month to the commencement of commercial production, refund ratio is 75% of deposited tax; between 6 to 10 years from the second month to the commencement of commercial production, refund ratio is 70% of deposited tax; and between 11 to 15 years from the second month to the commencement of commercial production, refund ratio is 55% of deposited tax. After 15 years from the second month to the commencement of commercial production, the “levy first, refund later” policy is no longer applicable.

Investment tax preferential policy for public infrastructure projects

Pursuant to the Notice on the Execution of the Catalogue of Public Infrastructure Projects Entitled for Tax Benefit (Cai Shui [2008] No. 46) issued by the Ministry of Finance and the State Administration of Taxation and the Supplementary Notice of Tax Benefit Scheme in relation to Public Infrastructure Project (Cai Shui [2014] No. 55), as Lingdong Nuclear, Yangjiang Nuclear, Fangchenggang Nuclear, Ningde Nuclear, Taishan Nuclear and Lufeng Nuclear falls under the Tax Benefit Scheme in relation to the Investment in and Operation of Key Public Infrastructure Projects Supported by the State, these companies were entitled to EIT exemption for three years followed by 50% exemption for the next three years commencing from their first revenue generating year.

Yangjiang Unit 1 was subject to EIT at 12.5% for 2017 and 2018; Unit 2 was entitled to EIT exemption for 2017, and was subject to EIT at 12.5% for 2018; Unit 3 was entitled to EIT exemption for 2017 and 2018; and Unit 4 was entitled to EIT exemption for 2017 and 2018 and Unit 5 was entitled to EIT exemption for 2018.

Fangchenggang Units 1 and 2 were entitled to EIT exemption for 2017 and 2018.

Ningde Unit 1 was subject to EIT at 12.5% for 2017 and 2018; Unit 2 was subject to EIT at 12.5% for 2017 and 2018; Unit 3 was entitled to EIT exemption for 2017, and was subject to EIT at 12.5% for 2018; and Unit 4 was entitled to EIT exemption for 2017 and 2018.

Taishan Unit 1 commenced commercial production in December 2018, and was entitled to EIT exemption for 2018.

Lufeng Nuclear had not yet generated operating revenue as at December 31, 2018.

Notes to the Financial Statements

For the year ended December 31, 2018

(IV) TAXATION (Continued)

2. Tax preference (Continued)

Preferential tax policy for high-tech enterprises

On June 19, 2015, GNPJVC was again recognized as a high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201544200288) with a validity of three years. GNPJVC paid EIT at 15% in 2017. The High-Tech Enterprise qualification of GNPJVC expired on June 19, 2018, and the company is currently re-applying for such recognition. Pursuant to the Announcement of State Administration of Taxation on Issues Concerning Implementation of Preferential Income Tax Policies for High and New Technology Enterprises (國家稅務總局關於實施高新技術企業所得稅優惠政策有關問題的通知), the provisional EIT tax rate in 2018 is 15%.

On November 21, 2016, Ling'ao Nuclear was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201644201738) with a validity of three years. Ling'ao Nuclear paid EIT at 15% in 2017 and 2018.

On December 1, 2017, Lingdong Nuclear was recognized as a high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201744205073) with a validity of three years. Lingdong Nuclear paid EIT at 15% in 2017 and 2018.

On October 31, 2017, CNPRI was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201744203194) with a validity of three years. CNPRI paid EIT at 15% in 2017 and 2018.

On December 22, 2016, CNPSTC was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201611006000) with a validity of three years. CNPSTC paid EIT at 15% in 2017 and 2018.

On November 17, 2017, Suzhou Nuclear Power Research Institute was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201732000370) with a validity of three years. Suzhou Nuclear Power Research Institute paid EIT at 15% in 2017 and 2018.

On October 31, 2017, the Inspection Company was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201744203105) with a validity of three years. The Inspection Company paid EIT at 15% in 2017 and 2018.

On August 17, 2017, China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司), a subsidiary of the Company, was recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201744200760) with a validity of three years. China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司) paid EIT at 15% in 2017 and 2018.

On November 21, 2016, CGN Engineering was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201644203168) with a validity of three years. CGN Engineering paid EIT at 15% in 2017 and 2018.

(IV) TAXATION (Continued)

2. Tax preference (Continued)

Preferential tax policy for high-tech enterprises (Continued)

On November 2, 2015, CGN Design was again recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GF201544201487) with a validity of three years. CGN Design paid EIT at 15% in 2017. The High-Tech Enterprise qualification of CGN Design expired on November 2, 2018, and the company is currently re-applying for such recognition. Pursuant to the Announcement of State Administration of Taxation on Issues Concerning Implementation of Preferential Income Tax Policies for High and New Technology Enterprises (國家稅務總局關於實施高新技術企業所得稅優惠政策有關問題的通知), the provisional EIT rate in 2018 is 15%.

Other preferential tax policies

Pursuant to the Notice of the Ministry of Finance and State Administration of Taxation on Implementation of Preferential Enterprise Income Tax Policies (Cai Shui [2009] No. 69) (《財政部、國家稅務總局關於執行企業所得稅優惠政策若干問題的通知》(財稅[2009]69號)) and the Notice of the State Administration of Taxation on Issues concerning Enterprise Income Tax in Further Implementing the Western Development Strategy (SAT [2012] No.12) (《國家稅務總局關於深入實施西部大開發戰略有關企業所得稅問題的公告》(國家稅務總局公告2012年第12號)), as Fangchenggang Nuclear simultaneously meets the conditions of the western development tax preferential policy, and those for investment of public infrastructure projects, therefore it is entitled to both tax preferential policies with EIT exemption for 2017 and 2018.

Pursuant to the Notice on Issues Concerning the Implementation of the Catalog of Enterprise Income Tax Preference for Equipment Specialized for Environmental Protection, the Catalog of Enterprise Income Tax Preference for Equipment Specialized for Energy and Water Conservation and the Catalog of Enterprise Income Tax Preference for Equipment Specialized for Production Safety (Cai Shui [2008] No. 48) (《關於執行環境保護專用設備企業所得稅優惠目錄、節能節水專用設備企業所得稅優惠目錄和安全生產專用設備企業所得稅優惠目錄有關問題的通知》(財稅[2008]48號)), equipment purchased and put into actual service by Ningde Nuclear specialized for environmental protection, energy and water conservation and production safety may offset EIT payable of the current year by 10% of the specialized equipment investment. If tax payable of the current year is insufficient for the offset, the amount may be carried down to subsequent years not exceeding five taxable years.

Pursuant to the Notice of the State Council on Further Promulgation of Various Policies in order to Encouraging the Development of Software and Integrated Circuit Industries (Guo Fa [2011] No. 4) (國發[2011]4號《國務院關於印發進一步鼓勵軟件產業和集成電路產業發展若干政策的通知》) and the Notice on Value-Added Tax Policy of Software Products (Cai Shui [2011] No. 100) (財稅[2011]100號《關於軟件產品增值稅政策的通知》) released by the Ministry of Finance and the State Administration of Taxation, sales revenue of software products developed by CNPSTC by itself is subject to VAT at the statutory rate of 17%, and the portion exceeding 3% of actual tax burden is entitled to the “immediate levy and return” policy.

Pursuant to the Notice on Levy of and Exemption from Urban Land Use Tax for Land of Nuclear Power Station (Cai Shui [2007] No. 124) (《關於核電站用地徵免城鎮土地使用稅的通知》(財稅[2007]124號)) issued by the Ministry of Finance and the State Administration of Taxation, other than nuclear islands, regular islands, auxiliary plants, land for communication facilities (excluding land for underground lines) and living and office land, other land for nuclear power stations are exempt from urban land use tax. Taxable land of nuclear power stations is subject to half of the urban land use tax during infrastructure construction period.

Pursuant to the PRC Enterprise Income Tax Law and the Notice on Preferential Enterprise Income Tax Policies for Small Profit-making Enterprises (Cai Shui [2015] No. 34) (《關於小型微利企業所得稅優惠政策的通知》([財稅2015]34號)), CGN Ocean Power Co., Ltd. (中廣核海洋能源有限公司) (“Ocean Power”) qualifies as a small profit-making enterprise fitting the criteria, and its therefore subject to EIT at 20% in 2017 and 2018.

Notes to the Financial Statements

For the year ended December 31, 2018

(IV) TAXATION (Continued)

2. Tax preference (Continued)

Other preferential tax policies

Pursuant to the PRC Enterprise Income Tax Law and the Notice on Preferential Enterprise Income Tax Policies for Small Profit-making Enterprises ([Cai Shui 2015] No. 34) (《關於小型微利企業所得稅優惠政策的通知》([財稅2015]34 號)), CGN Hebei Thermal Power Co., Ltd. (中廣核河北熱電有限公司) (“Hebei Thermal Power”) qualifies as a small profit-making enterprise fitting the criteria, and its therefore subject to EIT at 20% in 2017 and 2018.

(V) Notes to Items in the Consolidated Financial Statements

1. Cash at bank and in hand

		Unit: RMB
Item	December 31, 2018	December 31, 2017 (Restated)
Cash in hand:	5,812.41	6,423.79
RMB	2,280.00	3,055.60
HKD	7.41	7.07
USD	3,404.15	3,240.96
EUR	120.85	120.16
Cash at bank:	15,177,713,030.31	12,375,453,803.89
RMB	12,001,959,297.89	8,774,263,719.73
HKD	8,670,746.13	8,250,113.87
USD	3,066,799,498.05	3,250,307,616.42
EUR	82,074,177.76	338,840,756.88
GBP	18,187,416.22	3,767,588.94
ZAR	21,894.26	24,008.05
Other cash at bank and in hand	30,217,919.80	11,366,783.04
RMB	30,217,919.80	11,366,783.04
Total	15,207,936,762.52	12,386,827,010.72
Include: Total amount deposited overseas	1,097,805,361.03	1,004,589,202.97

(V) Notes to Items in the Consolidated Financial Statements (Continued)

1. Cash at bank and in hand (Continued)

As at December 31, 2018, in the other cash at bank and in hand as mentioned above, the Group, as a supplier, deposited guarantee deposits in banks in accordance to the supply and sales contracts amounted to RMB30,217,919.80 (December 31, 2017: RMB11,366,783.04), and their uses were restricted.

As at December 31, 2018, the Group's fixed deposits of more than three months amounted to RMB3,540,000,000.00 (December 31, 2017: RMB2,023,000,000.00).

As at December 31, 2018, the Group had no restricted balances such as mortgages or pledges, as well as those deposited overseas with restricted repatriation.

2. Derivative financial assets

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Currency swap	4,753,642.10	—
Interest rate swap	—	1,132,716.64
Foreign currency forward	—	353,919.00
Total	4,753,642.10	1,486,635.64

3. Bills receivable and accounts receivable

(1) Total bills receivable and accounts receivable

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Bills receivable	18,433,532.76	38,521,967.11
Accounts receivable	6,630,947,443.89	6,416,927,496.21
Total	6,649,380,976.65	6,455,449,463.32

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

3. Bills receivable and accounts receivable (Continued)

(2) Bills receivable

(a) Bills receivable by category

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Bank acceptance bills	18,433,532.76	38,461,967.11
Commercial acceptance bills	—	60,000.00
Total	18,433,532.76	38,521,967.11

(b) As at December 31, 2018, the Group had no pledged bills receivable. The Group had no bills receivable which were endorsed and discounted but outstanding at the balance sheet date.

(c) As at December 31, 2018, the Group had no bills transferred to accounts receivable due to non-performance of the issuers.

(3) Accounts receivable

(a) Accounts receivable disclosed by category

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Accounts receivable arising from contracts with customers	6,751,528,146.34	6,645,099,018.82
Including: Group 1	6,249,212,682.38	6,311,223,558.98
Group 2	417,994,768.11	325,050,155.79
Accounts receivable for which provision for bad debts has been individually made	84,320,695.85	8,825,304.05
Less: Impairment provisions	120,580,702.45	228,171,522.61
Including: Group 1	22,967,372.36	193,650,854.85
Group 2	13,292,634.24	25,695,363.71
Accounts receivable for which provision for bad debts has been individually made	84,320,695.85	8,825,304.05
Carrying value	6,630,947,443.89	6,416,927,496.21

(V) Notes to Items in the Consolidated Financial Statements (Continued)

3. Bills receivable and accounts receivable (Continued)

(3) Accounts receivable (Continued)

(a) Accounts receivable disclosed by category (Continued)

As part of the credit risk management, the Group uses the age of accounts receivable to assess the impairment loss by grouping of accounts receivable with the same risk characteristics, and the aging data reflects the solvency of such customers when the accounts receivable become due. The credit risk and expected credit loss of each group of accounts receivable are as follows:

Group 1:

Unit: RMB

Aging	December 31, 2018				December 31, 2017 (Restated)			
	Expected average loss rate	Carrying balance	Impairment provisions	Carrying value	Expected average loss rate	Carrying balance	Impairment provisions	Carrying value
Less than 1 year (inclusive)	0.30%	6,206,957,852.57	18,680,010.40	6,188,277,842.17	0.30%	5,299,557,079.40	15,898,671.24	5,283,658,408.16
1-2 years	5.00%	27,766,996.20	1,388,349.81	26,378,646.39	5.00%	544,893,605.06	27,244,680.25	517,648,924.81
2-3 years	20.00%	14,473,379.27	2,894,675.85	11,578,703.42	20.00%	243,590.06	48,718.01	194,872.05
3-4 years	30.00%	14,454.34	4,336.30	10,118.04	30.00%	451,529,284.46	135,458,785.35	316,070,499.11
4-5 years	50.00%	—	—	—	50.00%	—	—	—
More than 5 years	100.00%	—	—	—	100.00%	15,000,000.00	15,000,000.00	—
Total	0.37%	6,249,212,682.38	22,967,372.36	6,226,245,310.02	3.07%	6,311,223,558.98	193,650,854.85	6,117,572,704.13

Group 2:

Unit: RMB

Aging	December 31, 2018				December 31, 2017 (Restated)			
	Expected average loss rate	Carrying balance	Impairment provisions	Carrying value	Expected average loss rate	Carrying balance	Impairment provisions	Carrying value
Less than 1 year (inclusive)	0.30%	372,626,834.11	1,117,768.49	371,509,065.62	0.30%	184,776,713.00	554,330.14	184,222,382.86
1-2 years	10.00%	23,679,042.99	2,367,904.30	21,311,138.69	10.00%	111,944,332.63	11,194,433.26	100,749,899.37
2-3 years	30.00%	15,557,407.02	4,667,222.11	10,890,184.91	30.00%	11,370,712.47	3,411,213.74	7,959,498.73
3-4 years	50.00%	1,706,689.31	853,344.66	853,344.65	50.00%	11,690,592.45	5,845,296.22	5,845,296.23
4-5 years	80.00%	692,000.00	553,600.00	138,400.00	80.00%	2,888,574.47	2,310,859.58	577,714.89
More than 5 years	100.00%	3,732,794.68	3,732,794.68	—	100.00%	2,379,230.77	2,379,230.77	—
Total	3.18%	417,994,768.11	13,292,634.24	404,702,133.87	7.91%	325,050,155.79	25,695,363.71	299,354,792.08

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

3. Bills receivable and accounts receivable (Continued)

(3) Accounts receivable (Continued)

(b) Changes in provisions for bad debts of accounts receivable

Unit: RMB

	Expected credit losses during the whole life (no credit impairment occurred)	2018 Expected credit losses during the whole life (credit impairment occurred)	Total
December 31, 2017	—	228,171,522.61	228,171,522.61
Remeasurement of provisions for expected credit losses	217,212,313.89	(219,346,218.56)	(2,133,904.67)
January 1, 2018	217,212,313.89	8,825,304.05	226,037,617.94
Provisions for expected credit losses for the period	—	75,924,474.09	75,924,474.09
Reversal of expected credit losses for the period	(181,000,306.90)	—	(181,000,306.90)
Write-offs for the period	—	(429,082.29)	(429,082.29)
Impact of changes in exchange rates	47,999.61	—	47,999.61
December 31, 2018	36,260,006.60	84,320,695.85	120,580,702.45

(V) Notes to Items in the Consolidated Financial Statements (Continued)

3. Bills receivable and accounts receivable (Continued)

(3) Accounts receivable (Continued)

(c) Top five debtors with the largest balances of accounts receivable

Unit: RMB

Name of entity	Carrying balance	Percentage to total accounts receivable (%)	Balance of provisions for bad debts at end of the year
Guangdong Power Grid Co., Ltd	3,549,360,763.92	52.57	10,648,025.58
Fujian Electric Grid Co., Ltd.	709,256,387.61	10.51	2,127,769.16
Guangxi Power Grid Co., Ltd.	546,981,863.78	8.10	1,640,945.59
Hong Kong Nuclear Investment Co. Ltd. ("HKNIC")	453,284,714.66	6.71	1,359,913.24
Fujian Ningde Second Nuclear Power Co., Ltd.	240,963,816.30	3.57	722,891.45
Total	5,499,847,546.27	81.46	16,499,545.02

4. Prepayments

(1) Prepayments by aging

Unit: RMB

Age	December 31, 2018		December 31, 2017	
	Amount	Percentage (%)	Amount	Percentage (%)
Within 1 year	1,268,797,506.25	24.74	2,109,606,611.05	35.42
1 to 2 years	979,563,571.88	19.10	1,276,661,918.57	21.43
2 to 3 years	1,021,677,185.33	19.92	868,562,226.86	14.58
More than 3 years	1,858,910,490.41	36.24	1,702,113,964.58	28.57
Total	5,128,948,753.87	100.00	5,956,944,721.06	100.00

Description of the reasons for the non-timely settlement of prepayments aged over 1 year and in significant amount:

Prepayments aged over 1 year are mainly payments for construction projects, which have not yet been settled with the other party due to the long cycle of the projects.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

4. Prepayments (Continued)

(2) Top five entities with the largest balances of prepayments

Unit: RMB

Name of entity	Amount	Percentage to total prepayments (%)
Dongfang Electric Corporation Limited	628,178,174.19	12.25
China Nuclear Industry 23 Construction Co., Ltd.	489,700,390.67	9.55
China Construction Second Engineering Bureau Ltd.	484,709,307.89	9.45
Energy China NEPC (中國能源建設集團東北電力第一工程有限公司)	242,212,503.03	4.72
CGNPC Uranium Resources Co., Ltd.	179,911,167.41	3.51
Total	2,024,711,543.19	39.48

5. Other receivables

(1) Total other receivables

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
Interest receivable	388,449,625.43	282,334,983.95
Dividends receivable	146,023,234.13	180,556,722.34
Other receivables	373,104,354.98	1,069,323,067.09
Total	907,577,214.54	1,532,214,773.38

(V) Notes to Items in the Consolidated Financial Statements (Continued)

5. Other receivables (Continued)

(2) Interest receivable

Item	December 31, 2018	December 31, 2017 (Restated)
Fixed deposit	388,449,625.43	282,334,983.95
Less: Bad debt provisions	—	—
Carrying value	388,449,625.43	282,334,983.95

As at December 31, 2018, the Group had no overdue interest of significant amount.

(3) Dividends receivable

Unit: RMB		
Investee	December 31, 2018	December 31, 2017
China Techenergy Co., Ltd. ("Techenergy")	130,200,000.00	130,200,000.00
China Nuclear Industry Huaxing Construction Co., Ltd. (中國核工業華興建設有限公司)	46,460,441.70	31,077,641.70
China Nuclear Industry 23 Construction Co., Ltd.	—	13,637,100.00
Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	—	5,641,980.64
Total	176,660,441.70	180,556,722.34
Less: Bad debt provisions	30,637,207.57	—
Carrying value	146,023,234.13	180,556,722.34

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

5. Other receivables (Continued)

(4) Other receivables

(a) Other receivables disclosed by category

Unit: RMB

Item	December 31, 2018				January 1, 2018 (Restated)			
	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	Total	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	Total
Group 1	1,737,832.69	23,602,171.38	—	25,340,004.07	290,651,932.27	602,425,998.28	—	893,077,930.55
Group 2	155,165,862.66	252,026,729.44	—	407,192,592.10	350,786,895.71	42,711,661.24	—	393,498,556.95
Other receivables for which bad debt provision is individually assessed	—	—	410,836.47	410,836.47	—	—	410,836.47	410,836.47
Carrying balance	156,903,695.35	275,628,900.82	410,836.47	432,943,432.64	641,438,827.98	645,137,659.52	410,836.47	1,286,987,323.97
Bad debt provisions	470,711.09	58,957,530.10	410,836.47	59,839,077.66	1,924,316.48	215,329,103.93	410,836.47	217,664,256.88

(b) Changes in bad debt provisions for other receivables

Unit: RMB

	2018			Total
	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	
December 31, 2017	—	—	217,664,256.88	217,664,256.88
Remeasurement of provisions for expected credit losses	1,924,316.48	215,329,103.93	(217,253,420.41)	—
January 1, 2018	1,924,316.48	215,329,103.93	410,836.47	217,664,256.88
Provisions for expected credit losses for the year	—	—	—	—
Reversals for expected credit losses for the year	(1,453,605.39)	(156,592,611.80)	—	(158,046,217.19)
Effect of exchange rate changes	—	221,037.97	—	221,037.97
December 31, 2018	470,711.09	58,957,530.10	410,836.47	59,839,077.66

(V) Notes to Items in the Consolidated Financial Statements (Continued)

5. Other receivables (Continued)

(4) Other receivables (Continued)

(c) Top five debtors with the largest balances of other accounts receivable

Unit: RMB

Name of entity	Nature	Amount	Aging	Percentage to total other receivables (%)	Balance of provisions for bad debts at end of the year
CLP Nuclear Power (Yangjiang) Limited	Related party receivables	300,843,139.00	Within 1 year, 1 to 2 years	69.49	21,501,436.13
CGN Services Group Co., Ltd. (中廣核服務集團有限公司) ("CGN Services Group")	Related party receivables	23,235,907.50	Within 1 year, 1 to 2 years, more than 5 years	5.37	22,350,555.17
Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	Related party receivables	16,228,478.58	Within 1 year	3.75	48,685.44
Shenzhen Branch of the People's Insurance Company (Group) of China Ltd.	Insurance compensation receivables	12,906,523.92	Within 1 year	2.98	38,719.57
Office of the Financial Ombudsman of the Ministry of Finance in Shenzhen	Reserve for spent nuclear fuel	6,532,244.79	1 to 2 years, 2 to 3 years, more than 5 years	1.51	2,097,725.06
Total		359,746,293.79		83.10	46,037,121.37

(d) Other receivables by nature

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
Related party payments	327,112,215.92	1,187,779,756.39
Petty cash fund	35,011,086.15	15,514,333.22
Others	70,820,130.57	83,693,234.36
Total	432,943,432.64	1,286,987,323.97

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

6. Inventories

(1) Inventories by category

Unit: RMB

Item	December 31, 2018			December 31, 2017		
	Carrying balance	Provision for decline in value	Carrying value	Carrying balance	Provision for decline in value	Carrying value
Nuclear fuel	5,629,968,019.93	—	5,629,968,019.93	6,104,483,413.02	—	6,104,483,413.02
Spare parts	4,675,746,210.60	541,552,231.16	4,134,193,979.44	4,406,118,494.21	440,821,531.54	3,965,296,962.67
Goods on hand	686,808.96	—	686,808.96	282,870.89	—	282,870.89
Consigned processing materials	11,505,325,235.70	—	11,505,325,235.70	9,494,219,293.03	—	9,494,219,293.03
Materials in transit	170,981,191.28	112,851,427.35	58,129,763.93	259,817,464.34	112,851,427.35	146,966,036.99
Completed but unsettled assets resulting from construction contracts	/	/	/	6,819,199,881.66	—	6,819,199,881.66
Raw materials	42,650,099.00	—	42,650,099.00	26,219,713.73	—	26,219,713.73
Turnover materials	1,301,449.42	—	1,301,449.42	1,368,692.76	—	1,368,692.76
Total	22,026,659,014.89	654,403,658.51	21,372,255,356.38	27,111,709,823.64	553,672,958.89	26,558,036,864.75

(2) Provision for decline in value of inventories

Unit: RMB

Inventory categories	January 1, 2018	Additions during the year	Impact of foreign currency translation	Deductions during the year	December 31, 2018
				Reversal or write-off	
Spare parts	440,821,531.54	143,462,979.74	11,044,229.21	53,776,509.33	541,552,231.16
Materials in transit	112,851,427.35	—	—	—	112,851,427.35
Total	553,672,958.89	143,462,979.74	11,044,229.21	53,776,509.33	654,403,658.51

(3) Description of the inventory balance containing the capitalized borrowing costs

One-third of the initial nuclear fueling costs is recognized in the inventory, and is included in the production cost by installments at the period between the initial fueling and the next refueling based on the on-grid power generation. As at December 31, 2018, the capitalized borrowing costs included in the initial nuclear fueling costs in the Group's inventory amounted to RMB32,753,983.48 (December 31, 2017: RMB45,597,686.70).

(V) Notes to Items in the Consolidated Financial Statements (Continued)

7. Contract assets

(1) Presentation of contract assets

Unit: RMB

Item	December 31, 2018			December 31, 2017		
	Carrying balance	Loss provision	Carrying value	Carrying balance	Loss provision	Carrying value
Completed but unsettled assets resulting from construction contracts	3,406,637,671.84	10,060,627.59	3,396,577,044.25	/	/	/
Guarantee deposits	14,276,824.50	1,066,842.28	13,209,982.22	/	/	/
Total	3,420,914,496.34	11,127,469.87	3,409,787,026.47	/	/	/

Unit: RMB

	2018		Total
	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	
December 31, 2017	—	—	—
Remeasurement of provisions for expected credit losses	2,133,904.67	—	2,133,904.67
January 1, 2018	2,133,904.67	—	2,133,904.67
Provisions for expected credit losses for the year	8,993,565.20	—	8,993,565.20
Write-offs for the year	—	—	—
Total	11,127,469.87	—	11,127,469.87

(2) Qualitative and quantitative analysis of contract assets

The amount associated with construction contracts is the project balance that should be delivered to the customer under the construction contract that CGN Engineering receives from the customer's payment based on a series of performance-based milestones. The Group firstly recognizes the completed construction as a contract asset and reclassifies the recognized contract assets to accounts receivable upon receipt of payment from the customer.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

8. Non-current assets due within one year

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Derivative financial instruments	3,649,503.86	1,248,496.91
Others	9,530.00	—
Total	3,659,033.86	1,248,496.91

9. Other current assets

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
VAT retained at the end of the period	2,701,364,945.88	3,010,364,329.96
Others	2,252,581.58	2,078,836.96
Total	2,703,617,527.46	3,012,443,166.92

10. Available-for-sale financial assets

(1) Available-for-sale financial assets

Unit: RMB						
Item	December 31, 2018			December 31, 2017		
	Carrying balance	Impairment provision	Carrying value	Carrying balance	Impairment provision	Carrying value
Available-for-sale equity instruments	/	/	/	195,310,350.00	—	195,310,350.00
Measured at fair value	/	/	/	—	—	—
Measured at cost	/	/	/	195,310,350.00	—	195,310,350.00
Total	/	/	/	195,310,350.00	—	195,310,350.00

(V) Notes to Items in the Consolidated Financial Statements (Continued)

10. Available-for-sale financial assets (Continued)

(2) Available-for-sale financial assets measured at cost

Unit: RMB

Investee	Carrying balance				Impairment provisions				Shareholding in investee (%)	Cash dividend in 2017
	January 1, 2017	Increase during the year	Decrease during the year	December 31, 2017	January 1, 2017	Increase during the year	Decrease during the year	December 31, 2017		
Chinergy Co., Ltd. (中核能源科技有限公司) (Note 1)	110,000,000.00	—	—	110,000,000.00	—	—	—	—	15.00	—
China Nuclear Industry Huaxing Construction Co., Ltd. (中國核工業華興建設有限公司) (Note 2)	85,310,350.00	—	—	85,310,350.00	—	—	—	—	13.70	23,861,166.70
Total	195,310,350.00	—	—	195,310,350.00	—	—	—	—	—	23,861,166.70

Note 1: The balance of the Group's equity investment in Chinergy Co., Ltd. (中核能源科技有限公司) amounted to RMB110,000,000.00. As such company's shares are not traded in any stock market, the Group measured the investment at cost before implementing the New Standards for Financial Instruments. The Group has no intention of disposing of the equity investment.

Note 2: The balance of the Group's equity investment in China Nuclear Industry Huaxing Construction Co., Ltd. (中國核工業華興建設有限公司) amounted to RMB85,310,350.00. As such company's shares are not traded in any stock market, the Group measured the investment at cost before implementing the New Standards for Financial Instruments. The Group has no intention of disposing of the equity investment.

Note 3: With effect from January 1, 2018, the Group has implemented the New Standards for Financial Instruments by designating the investment in equity instruments originally classified as available-for-sale financial assets as financial assets at FVTOCI, and recognized in the investment in other equity instruments (please see Note V(12)).

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)
11. Long-term equity investments

Unit: RMB

Investee	Balance at December 31, 2017	Changes in accounting policies	Carrying balance at January 1, 2018	Additional investment	Reduce investment	Investment gains/ losses recognized under the equity method	Adjustment of other comprehensive gains	Changes in other equity	Declared cash dividends or profits	Impairment provision	Others	Balance at December 31, 2018	Closing balance of impairment provisions
I. Joint Venture													
Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	17,187,489.24	—	17,187,489.24	—	16,500,327.62	(687,161.62)	—	—	—	—	—	—	—
Sub-total	17,187,489.24	—	17,187,489.24	—	16,500,327.62	(687,161.62)	—	—	—	—	—	—	—
II. Associates													
Liaoning Hongyuanhe Nuclear Power Co., Ltd. (遼寧紅沿河核電有限公司) ("Hongyuanhe Nuclear")	4,685,495,670.83	—	4,685,495,670.83	399,131,100.00	—	1,242,145,440.03	—	—	180,689,549.21	—	—	6,146,882,661.65	—
Fujian Ningde Second Nuclear Power Co., Ltd. (福建寧德第二核電有限公司) ("Ningde Second Nuclear")	106,640,000.00	—	106,640,000.00	54,438,000.00	—	—	—	—	—	—	—	16,078,000.00	—
CGN Fund Phase I	2,002,551,625.15	131,139,543.08	2,133,691,168.23	40,857,200.00	—	301,823,485.66	66,639,133.53	—	226,285,920.00	—	—	2,316,725,067.42	—
		(Note)											
China Nuclear Industry 23 Construction Co., Ltd.	346,316,566.63	—	346,316,566.63	—	—	65,227,489.25	(788,366.06)	5,638,799.13	—	—	—	416,394,488.95	—
Finance Company	1,172,501,008.72	—	1,172,501,008.72	—	—	(1,308,681.91)	—	—	41,042,788.79	—	—	1,130,149,538.02	—
CNEC Engineering Company Limited (中設工程有限公司)	32,938,679.88	—	32,938,679.88	—	—	697,241.00	—	—	1,042,500.00	—	—	32,593,420.88	—
Sub-total	8,346,443,551.21	131,139,543.08	8,477,583,094.29	494,426,300.00	—	1,608,584,974.03	65,850,767.47	5,638,799.13	449,060,758.00	—	—	10,203,023,176.92	—
Total	8,363,631,040.45	131,139,543.08	8,494,770,583.53	494,426,300.00	16,500,327.62	1,607,897,812.41	65,850,767.47	5,638,799.13	449,060,758.00	—	—	10,203,023,176.92	—

Note: CGN Fund Phase I has adopted the New Standards for Financial Instruments with effect from January 1, 2018. The available-for-sale financial assets previously held by CGN Nuclear Fund Phase I were re-classified as investment in other equity instruments and remeasured at fair value. The Company adjusted the carrying value of long-term equity investment up by RMB131,139,543.08 according to its shareholding.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

12. Other investment in equity instruments

(1) Other investment in equity instruments

Unit: RMB

Investee	December 31, 2018	December 31, 2017	Reasons for the specified classification	Dividends for 2018
Chinergy Co., Ltd. (中核能源科技有限公司)	110,000,000.00	/	Not intended to hold for recent sale or short-term profit	—
China Nuclear Industry Huaxing Construction Co., Ltd. (中國核工業華興建設有限公司)	312,689,500.00	/	Not intended to hold for recent sale or short-term profit	15,382,800.00
Total	422,689,500.00	/		15,382,800.00

(2) Investment in other equity instruments measured at fair value

Unit: RMB

Item	December 31, 2018	December 31, 2017
Cost of equity instruments	195,310,350.00	/
Additional investment during the year	60,270,000.00	/
Fair value	422,689,500.00	/
Accumulated change in fair value recognized in other comprehensive income	167,109,150.00	/

13. Other non-current financial assets

Unit: RMB

Item	December 31, 2018	December 31, 2017
Derivative financial instruments	812,257.18	/

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

14. Investment properties

(1) Investment properties measured at cost

Unit: RMB

Item	Buildings and structures
I. Original carrying value	
1. Opening balance	353,795,267.80
2. Additions during the year	473,367.64
(1) Impact of foreign currency translation	473,367.64
3. Deductions during the year	6,236,364.59
(1) Investment properties transferred to self-use properties	6,236,364.59
4. Closing balance	348,032,270.85
II. Accumulated depreciation and accumulated amortization	
1. Opening balance	114,124,855.98
2. Additions during the year	26,147,953.47
(1) Provisions	25,947,409.86
(2) Impact of foreign currency translation	200,543.61
3. Deductions during the year	2,586,579.96
(1) Investment properties transferred to self-use properties	2,586,579.96
4. Closing balance	137,686,229.49
III. Impairment provisions	
1. Opening balance	—
2. Additions during the year	—
3. Deductions during the year	—
4. Closing balance	—
IV. Carrying value	
1. Closing carrying value	210,346,041.36
2. Opening carrying value	239,670,411.82

(2) As at December 31, 2018, the Group had no investment properties without proper title certificates.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

15. Fixed assets

(1) Fixed assets

Unit: RMB

Item	Buildings and structures	Machinery and equipment	Transportation vehicles	Electronic and office equipment	Cost of nuclear power plant decommissioning	Total
I. Original carrying value	—	—	—	—	—	—
1. Opening balance (Restated)	43,651,424,219.92	166,985,721,365.02	148,719,048.22	2,446,122,129.15	1,697,807,783.75	214,929,794,546.06
2. Additions during the year	18,345,789,785.67	41,503,746,863.93	12,513,288.03	211,255,026.76	504,425,094.70	60,577,730,059.09
(1) Acquisition	—	283,619,641.53	8,143,372.48	123,720,303.46	387,631,865.83	803,115,183.30
(2) Transfer from construction in progress	18,106,002,685.53	40,079,222,701.05	4,103,403.41	70,517,971.84	108,167,634.63	58,368,014,396.46
(3) Investment properties transferred to self-use properties	6,236,364.59	—	—	—	—	6,236,364.59
(4) Transfer from development costs	—	35,068,190.27	—	12,867,459.51	—	47,935,649.78
(5) Impact of foreign currency translation	233,550,735.55	1,105,836,331.08	266,512.14	4,149,291.95	8,625,594.24	1,352,428,464.96
3. Deductions during the year	22,798,309.22	204,316,573.97	1,431,075.49	84,626,624.24	—	313,172,582.92
(1) Disposal	22,798,309.22	204,316,573.97	1,431,075.49	84,626,624.24	—	313,172,582.92
4. Closing balance	61,974,415,696.37	208,285,151,654.98	159,801,260.76	2,572,750,531.67	2,202,232,878.45	275,194,352,022.23
II. Accumulated depreciation						
1. Opening balance (Restated)	10,231,411,221.38	43,580,507,448.95	94,520,261.45	1,602,525,153.74	259,326,833.71	55,768,290,919.23
2. Additions for the year	1,743,329,456.53	6,733,168,598.22	15,655,240.70	240,430,593.85	51,836,560.72	8,784,420,450.02
(1) Provisions	1,528,040,083.23	5,763,876,982.14	15,399,107.43	236,891,730.43	46,328,559.10	7,590,536,462.33
(2) Investment properties transferred to self-use properties	2,586,579.96	—	—	—	—	2,586,579.96
(3) Impact of foreign currency translation	212,702,793.34	969,291,616.08	256,133.27	3,538,863.42	5,508,001.62	1,191,297,407.73
3. Deductions during the year	16,350,064.85	125,389,177.19	1,267,737.07	77,184,032.51	—	220,191,011.62
(1) Disposal	16,350,064.85	125,389,177.19	1,267,737.07	77,184,032.51	—	220,191,011.62
4. Closing balance	11,958,390,613.06	50,188,286,869.98	108,907,765.08	1,765,771,715.08	311,163,394.43	64,332,520,357.63

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

15. Fixed assets (Continued)

(1) Fixed assets (Continued)

Item	Buildings and structures	Machinery and equipment	Transportation vehicles	Electronic and office equipment	Cost of nuclear power plant decommissioning	Total
III. Impairment provisions						
1. Opening balance	—	14,259,033.35	—	—	—	14,259,033.35
2. Additions during the year	—	271,643.41	—	—	—	271,643.41
(1) Impact of foreign currency translation	—	271,643.41	—	—	—	271,643.41
3. Deductions during the year	—	2,905,594.31	—	—	—	2,905,594.31
4. Closing balance	—	11,625,082.45	—	—	—	11,625,082.45
IV. Carrying value						
1. Closing carrying value	50,016,025,083.31	158,085,239,702.55	50,893,495.68	806,978,816.59	1,891,069,484.02	210,850,206,582.15
2. Opening carrying value (Restated)	33,420,012,998.54	123,390,954,882.72	54,198,786.77	843,596,975.41	1,438,480,950.04	159,147,244,593.48

(2) As at December 31, 2018, the Group had no temporarily idle fixed assets.

(3) As at December 31, 2018, the Group had no fixed assets under financial leases.

(4) As at December 31, 2018, the Group had no fixed assets under operating leases.

(5) Fixed assets without proper title certificates:

As at December 31, 2018, the net value of the properties held by the Group for which the application of title certificates was still in progress amounted to RMB6,538,322,061.97 .

(V) Notes to Items in the Consolidated Financial Statements (Continued)

16. Construction in progress

(1) Construction in progress

Unit: RMB

Name of project	December 31, 2018			December 31, 2017 (Restated)		
	Carrying balance	Impairment provision	Carrying value	Carrying balance	Impairment provision	Carrying value
Yangjiang Nuclear project	7,455,936,462.12	—	7,455,936,462.12	16,240,011,663.89	—	16,240,011,663.89
Lufeng Nuclear project	15,834,583,812.79	—	15,834,583,812.79	13,978,172,167.09	—	13,978,172,167.09
Fangchenggang Nuclear Phase I Project	311,742,443.04	—	311,742,443.04	315,886,873.82	—	315,886,873.82
Fangchenggang Nuclear Phase II Project	12,509,637,399.87	—	12,509,637,399.87	6,235,349,466.65	—	6,235,349,466.65
Taishan Nuclear project	36,794,864,039.66	—	36,794,864,039.66	76,987,398,450.21	—	76,987,398,450.21
Ningde Nuclear project	56,720,887.82	—	56,720,887.82	162,583,064.53	—	162,583,064.53
Others	1,661,237,067.75	—	1,661,237,067.75	1,366,308,849.16	—	1,366,308,849.16
Total	74,624,722,113.05	—	74,624,722,113.05	115,285,710,535.35	—	115,285,710,535.35

16. Construction in progress (Continued)

(2) Changes in major construction in progress

Name of project	Budget amount	January 1, 2018	Additions during the year	Transfer to fixed assets	Transfer to intangible assets	Other deductions (Note)	December 31, 2018	Proportion of investment to budget (%)	Project progress (%)	Accumulated capitalized interest	Including: capitalized interest for the year	Ratio of capitalized interest amount for the year (%)	Sources of fund
Yangjiang Nuclear project	77,532,140,000.00	16,240,011,663.89	3,704,765,489.65	12,113,391,697.20	38,834,568.17	336,614,426.05	7,455,936,462.12	93.12	99.25	9,342,790,320.54	526,751,520.43	4.35	Capital, loans, debt issuance
Lufeng Nuclear project (note 2)	/	13,978,172,167.09	1,856,411,645.70	—	—	—	15,834,583,812.79	/	/	2,226,639,995.25	570,066,331.58	4.95	Capital, loans
Fangchenggang Nuclear Phase I Project	28,756,050,000.00	315,886,873.82	32,977,715.29	37,122,146.07	—	—	311,742,443.04	100.01	100.00	4,372,947,377.63	—	—	Capital, loans, debt issuance
Fangchenggang Nuclear Phase II Project	37,489,790,000.00	6,235,349,466.65	6,274,287,933.22	—	—	—	12,509,637,399.87	32.82	32.82	847,213,589.16	381,825,609.94	4.64	Capital, loans
Taishan Nuclear project	85,812,910,000.00	76,987,398,450.21	5,133,035,408.94	45,325,569,819.49	—	—	36,794,864,039.66	97.00	97.00	15,930,946,641.27	2,704,722,723.07	4.28	Self-funded, loans, debt issuance
Total		113,755,818,621.66	17,001,478,192.80	57,476,083,662.76	38,834,568.17	336,614,426.05	72,906,764,157.48			32,720,537,923.85	4,183,366,185.02		

Note 1: Other deductions mainly were the transfer of one-third of the initial nuclear fueling costs of new units commenced commercial operation to inventory.

Note 2: According to the approval letter in relation to the launch of preliminary work of Lufeng Phase I from the NDRC (《國家發改委辦公廳關於同意廣東陸豐核電一二期工程前期工作的函》), Lufeng nuclear launch the preliminary work of Lufeng Nuclear project (Lufeng Phase I), but has been approved yet, and no investment budget at present.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

16. Construction in progress (Continued)

(3) Provisions for construction in progress

Unit: RMB

Name of project	Provision	Reason for provision
Nil	—	N/A

17. Intangible assets

(1) Intangible assets

Unit: RMB

Item	Land use rights	Computer software	Patent rights	Non-patented technology	Sea area use rights	Others	Total
I. Original carrying value							
1. Opening balance (Restated)	3,967,714,059.94	1,630,291,347.42	472,597,637.59	360,212,198.33	263,676,952.00	92,804,022.62	6,787,296,217.90
2. Additions during the year	98,949,210.00	169,756,456.89	106,413,963.34	173,583,546.47	—	—	548,703,176.70
(1) Acquisition	60,119,359.01	107,029,161.77	—	—	—	—	167,148,520.78
(2) Transfer from development cost	—	34,922,687.66	106,413,963.34	173,583,546.47	—	—	314,920,197.47
(3) Transfer from construction in progress	20,798,501.27	18,036,066.90	—	—	—	—	38,834,568.17
(4) Impact of foreign currency translation	18,031,349.72	9,768,540.56	—	—	—	—	27,799,890.28
3. Deductions during the year	—	34,676.00	—	1,866,318.60	—	—	1,900,994.60
(1) Disposal during the year	—	34,676.00	—	1,866,318.60	—	—	1,900,994.60
4. Closing balance	4,066,663,269.94	1,800,013,128.31	579,011,600.93	531,929,426.20	263,676,952.00	92,804,022.62	7,334,098,400.00

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

17. Intangible assets (Continued)

(1) Intangible assets (Continued)

Unit: RMB

Item	Land use rights	Computer software	Patent rights	Non-patented technology	Sea area use rights	Others	Total
II. Accumulated amortization							
1. Opening balance (Restated)	723,518,317.90	1,229,832,376.68	80,768,725.67	140,787,122.31	10,529,770.85	20,385,919.36	2,205,822,232.77
2. Additions during the year	107,257,375.32	163,351,359.23	68,783,663.87	54,576,776.88	5,929,650.49	9,394,460.32	409,293,286.11
(1) Provisions	96,267,031.75	152,614,943.89	68,783,663.87	54,576,776.88	5,929,650.49	9,394,460.32	387,566,527.20
(2) Impact of foreign currency translation	10,990,343.57	10,736,415.34	—	—	—	—	21,726,758.91
3. Deductions during the year	—	266,443.72	547,122.41	—	—	—	813,566.13
(1) Disposal during the year	—	266,443.72	547,122.41	—	—	—	813,566.13
4. Closing balance	830,775,693.22	1,392,917,292.19	149,005,267.13	195,363,899.19	16,459,421.34	29,780,379.68	2,614,301,952.75
III. Impairment provision							
1. Opening balance	—	—	—	—	—	—	—
2. Additions during the year	—	—	—	—	—	—	—
3. Deductions during the year	—	—	—	—	—	—	—
4. Closing balance	—	—	—	—	—	—	—
IV. Carrying amount							
1. Closing carrying value	3,235,887,576.72	407,095,836.12	430,006,333.80	336,565,527.01	247,217,530.66	63,023,642.94	4,719,796,447.25
2. Opening carrying value (Restated)	3,244,195,742.04	400,458,970.74	391,828,911.92	219,425,076.02	253,147,181.15	72,418,103.26	4,581,473,985.13

As at December 31, 2018, the Group's intangible assets from internal research and development accounted for 13.88% of the balance of intangible assets.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

18. Development cost

Unit: RMB

Item	January 1, 2018	Additions during the year	Deductions during the year			December 31, 2018
			Transfer to intangible asset during the year	Transfer to fixed assets during the year	Transfer to profit or loss during the year	
AP1000	360,440,849.15	54,099,203.29	112,523,148.29	—	—	302,016,904.15
HPR/ACPR 1000	370,747,357.47	299,377,587.99	38,277,299.89	—	—	631,847,645.57
Others	914,091,065.05	345,410,462.95	164,119,749.29	47,935,649.78	18,854,921.75	1,028,591,207.18
Total	1,645,279,271.67	698,887,254.23	314,920,197.47	47,935,649.78	18,854,921.75	1,962,455,756.90

19. Goodwill

(1) Original carrying value of goodwill

Unit: RMB

Item	January 1, 2018	Additions during the year From business combinations	Deductions during the year Disposal	December 31, 2018
China Daya Bay Nuclear Power Technology Research Institute Co., Ltd. (中國大亞灣核電技術研究院有限公司)	7,048,000.00	—	—	7,048,000.00
Ningde Nuclear	419,242,673.32	—	—	419,242,673.32
Total	426,290,673.32	—	—	426,290,673.32

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

19. Goodwill(Continued)

(2) Impairment provision for goodwill

Unit: RMB

Name of investee or matters generating goodwill	January 1, 2018	Additions during the year Provisions	Deductions during the year Disposal	December 31, 2018
China Daya Bay Nuclear Power Technology Research Institute Co., Ltd. (中國大亞灣核電技術研究院有限公司)	7,048,000.00	—	—	7,048,000.00

As at December 31, 2018, the Group assessed the recoverable amount of Ningde Nuclear's goodwill and determined that the Group's acquisition of Ningde Nuclear related goodwill had no impairment occurred.

The Group conducted impairment tests with Ningde Nuclear as a whole asset group. The recoverable amount of Ningde Nuclear was determined in accordance with the present value of its projected future cash flows. Its future cash flows were based on the financial budget approved by the management for the period from 2019 to 2056 and are discounted using a discount rate of 9.18%. Other key assumptions used in anticipation of future cash flows were: the estimated sales and gross profit based on the past performance of Ningde Nuclear and the expected market developments by the management. The management considered any reasonable change in the above assumptions will not result in the carrying value of the net assets of Ningde Nuclear being lower than its recoverable amount.

20. Long-term deferred expenses

Unit: RMB

Item	January 1, 2018 (Restated)	Increase during the year	Amortization for the year	Other reduction	Impact of foreign currency translation	December 31, 2018
Nuclear power production preparation staff training fee (Note 1)	1,328,849,371.64	193,802,323.65	170,478,694.56	197,441,729.44	—	1,154,731,271.29
Emergency passages (Note 2)	436,607,354.18	—	29,174,903.88	—	—	407,432,450.30
Others	173,448,238.26	16,293,675.88	17,257,827.50	—	10,683.82	172,494,770.46
Total	1,938,904,964.08	210,095,999.53	216,911,425.94	197,441,729.44	10,683.82	1,734,658,492.05

Note 1: The expenses incurred during the training of nuclear power production preparation staff shall be accounted as long-term deferred expenses of the Group, and shall be amortized according to the remaining working years as stipulated in the labor contract or training agreement from the conclusion of the training, and recognized in the cost of the related assets or profit or loss for the period.

Note 2: The emergency passages were constructed under funding by Ling'ao Nuclear, Lingdong Nuclear, Yangjiang Nuclear, Fangchenggang Nuclear and Ningde Nuclear. It was accounted as long-term deferred expenses by the Group, amortized based on the estimated useful life from the date of completion and recognized in cost of the related assets or the profit or loss for the period.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

21. Deferred tax assets/deferred tax liabilities (Continued)

(1) Deferred tax assets after offset and corresponding deductible temporary differences after offset

Unit: RMB

Item	December 31, 2018		December 31, 2017 (Restated)	
	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets
Unrealized profit arising from internal transactions	6,878,832,451.99	1,719,708,113.00	5,914,247,997.36	1,479,947,866.91
Provisions for bad debts	62,781,908.18	9,225,121.78	445,835,779.49	55,965,750.83
Receipts in advance	252,032.32	37,804.85	13,934,627.73	2,502,371.29
Derivative financial instruments	—	—	878,094.45	219,523.61
Deferred income	131,504,510.29	19,693,989.04	170,785,700.75	25,617,855.11
Others	162,602,795.36	26,203,369.50	148,818,740.53	23,013,348.60
Total	7,235,973,698.14	1,774,868,398.17	6,694,500,940.31	1,587,266,716.35

(2) Deferred tax liabilities after offset and corresponding taxable temporary differences after offset

Unit: RMB

Item	December 31, 2018		December 31, 2017	
	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Depreciation of fixed assets	3,884,587,923.17	1,015,437,210.55	3,873,602,248.84	1,002,204,577.51
Revaluation gain of assets for business combinations involving entities not under common control	550,904,565.92	137,726,141.48	614,575,685.59	153,643,921.38
Others	96,484,258.76	24,121,064.69	19,332,960.19	4,833,240.05
Total	4,531,976,747.85	1,177,284,416.72	4,507,510,894.62	1,160,681,738.94

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

21. Deferred tax assets/deferred tax liabilities (Continued)

(3) Unrecognized deferred tax assets

Unit: RMB

Item	December 31, 2018	December 31, 2017
Deductible temporary differences	155,120,298.46	179,821,619.98
Deductible losses	770,888,501.76	449,347,423.80
Total	926,008,800.22	629,169,043.78

Note: As it is uncertain for the Company and certain subsidiaries to obtain sufficient taxable income in the future, the above deductible temporary differences and deductible losses are not recognized as deferred tax assets.

(4) Deductible losses of unrecognized deferred tax assets due in the following years

Unit: RMB

Year	December 31, 2018	December 31, 2017
2018	—	3,542,252.95
2019	18,775,391.00	18,775,391.00
2020	155,735,394.34	155,962,879.44
2021	360,465,359.47	188,914,256.41
2022	82,210,303.10	82,152,644.00
2023	153,702,053.85	—
Total	770,888,501.76	449,347,423.80

(V) Notes to Items in the Consolidated Financial Statements (Continued)

22. Other non-current assets

Unit: RMB		
Item	December 31, 2018	December 31, 2017
VAT retained at the end of the period	5,413,386,886.24	6,635,215,854.55
Prepayment for engineering equipment	754,406,748.13	1,050,509,621.13
Derivative financial instruments	—	1,857,052.64
Prepayment for land purchase	11,957,964.00	86,503,786.00
Others	65,181,029.71	218,084,771.57
Total	6,244,932,628.08	7,992,171,085.89

Note: The prepayment for land purchase is the land prepayment to the Fangchenggang Land Resources Bureau by Fangchenggang Nuclear.

23. Short-term loans

(1) Short-term loans by category

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Credit loans	16,296,240,042.13	19,392,821,406.87

As at December 31, 2018, the Group had no overdue and unsettled short-term loans.

24. Derivative financial liabilities

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Derivative financial instruments	2,724,971.67	29,930,116.11

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

25. Bills payable and accounts payable

(1) Total bills payable and accounts payable

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Bills payable	2,260,164,887.24	997,259,992.66
Accounts payable	15,986,899,682.85	16,347,413,552.38
Total	18,247,064,570.09	17,344,673,545.04

(2) Bills payable

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Commercial acceptance bills	104,438,140.29	—
Bank acceptance bills	2,155,726,746.95	997,259,992.66
Total	2,260,164,887.24	997,259,992.66

As at December 31, 2018, the Group had no overdue and unsettled bills payable.

(3) Accounts payable

(a) Accounts payable by aging

Unit: RMB		
Aging	December 31, 2018	December 31, 2017 (Restated)
Less than 1 year	13,578,695,513.73	13,440,401,789.44
1-2 years	1,047,166,567.09	1,528,797,057.70
2-3 years	893,219,613.47	392,842,471.26
More than 3 years	467,817,988.56	985,372,233.98
Total	15,986,899,682.85	16,347,413,552.38

(V) Notes to Items in the Consolidated Financial Statements (Continued)

25. Bills payable and accounts payable (Continued)

(b) Accounts payable aged over one year with significant amount

Unit: RMB

Name of creditors	Amount	Reason for outstanding or not transfer
Shanghai Electric Group Co., Ltd. (上海電氣集團股份有限公司)	204,324,653.20	Not yet settled
Shanghai First Machine Tool Works Co., Ltd. (上海第一機床廠有限公司)	83,498,856.79	Not yet settled
Nanfang Ventilator Co., Ltd. (南方風機股份有限公司)	48,951,514.52	Not yet settled
Dalian Baoyuan Nuclear Equipment Co., Ltd. (大連寶原核設備有限公司)	30,824,661.55	Not yet settled
Total	367,599,686.06	

26. Receipts in advance

(1) Receipts in advance

Unit: RMB

Item	December 31, 2018	December 31, 2017
Insurance payment	2,058,361.07	—
Settled payments of uncompleted construction, installation and design service contracts	/	499,174,856.15
Sales, technology service, and construction, installation and design service payment received in advance	/	4,605,011,078.18
Total	2,058,361.07	5,104,185,934.33

(2) Receipts in advance aged over one year with significant amount

As at December 31, 2018, the Group had no receipts in advance aged over one year with significant amount.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

27. Contract liabilities

(1) Contract liabilities

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Settled payments of uncompleted construction, installation and design service contracts	751,679,055.21	/
Sales, technical services and construction and installation contract payment received in advance	84,120,693.22	/
Total	835,799,748.43	/

(2) The contract liabilities before the offset of the contract assets and contract liabilities at the beginning of the year was RMB5,104,185,934.33, and the amount of income recognized in the book value of the contract liabilities for the year was RMB2,463,172,273.00, including contract liabilities arising from settled payments of uncompleted construction, installation and design service contracts of RMB2,425,736,416.19 and sales, technical services and construction and installation contract payment received in advance of RMB37,435,856.81.

(3) Qualitative and quantitative analysis of contract liabilities

The contract liabilities associated with the construction, installation and design service contracts are the balances payable to the customer under the contract under construction. The balance is generated when a specific milestone payment exceeds the revenue recognized as a result of the performance.

For sales revenue, it is recognized when the control right of the product is transferred to the customer. When the customer purchases a product and prepays to the Group, the Group recognizes the transaction price received as the contract liabilities until the control right of the product is transferred to the customer.

Service-related revenue is recognized over a period of time, although the customer has paid in advance for partial or full service payments. The Group recognizes the contract liabilities when it initially receives the service payment and transfers it to revenue during the service period.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

28. Employee benefits payable

(1) Employee benefits payable

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
I. Short-term employee benefits payable	35,764,135.06	7,950,508.894.60	7,946,064,825.87	40,208,203.79
II. Post-employment benefits - defined contribution plan	811,886.50	839,929,350.48	838,333,006.97	2,408,230.01
III. Dismissal benefits	434,280.00	448,504.42	882,784.42	—
IV. Others	—	45,947,521.01	45,947,521.01	—
Total	37,010,301.56	8,836,834,270.51	8,831,228,138.27	42,616,433.80

(2) Short-term employee benefits

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
1. Salaries, bonuses, allowances and subsidies	377,305.60	5,721,316,760.84	5,721,601,557.98	92,508.46
2. Staff welfare	—	796,004,650.86	796,004,650.86	—
3. Social insurance premiums	243,859.87	490,159,204.00	489,893,319.65	509,744.22
Including: Basic medical insurance	139,904.35	221,289,115.05	221,035,221.96	393,797.44
Supplementary medical insurance	—	232,219,992.47	232,219,992.47	—
Work-related injury insurance	38,526.20	16,754,245.42	16,750,870.49	41,901.13
Maternity insurance	65,429.32	19,824,906.46	19,816,290.13	74,045.65
Others	—	70,944.60	70,944.60	—
4. Housing provident funds	4,042,264.34	534,114,621.22	534,006,428.18	4,150,457.38
5. Labor union expenditures and employees' education expenses	29,134,610.17	171,121,637.02	166,319,469.46	33,936,777.73
6. Other short-term employee benefits	1,966,095.08	237,792,020.66	238,239,399.74	1,518,716.00
Total	35,764,135.06	7,950,508,894.60	7,946,064,825.87	40,208,203.79

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

28 Employee benefits payable (Continued)

(3) Defined contribution plan

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
1. Basic pension insurance	727,907.87	573,840,134.28	573,439,966.92	1,128,075.23
2. Unemployment insurance	31,091.02	7,780,251.88	7,768,525.98	42,816.92
3. Corporate annuity contribution	52,887.61	258,308,964.32	257,124,514.07	1,237,337.86
Total	811,886.50	839,929,350.48	838,333,006.97	2,408,230.01

Other explanations:

The Group participates in pension insurance and unemployment insurance schemes established by the government as required, pursuant to which, the Group contributes a stipulated proportion to pension insurance and unemployment insurance schemes respectively. Other than the above, the Group has no further payment responsibility. The corresponding expenses are recognized in profit or loss for the period or the cost of related assets when incurred.

For the year, the Group shall pay a total of RMB573,840,134.28 and RMB7,780,251.88 to the pension insurance and unemployment insurance schemes respectively. As at December 31, 2018, the balance of the pension insurance premiums and unemployment insurance premiums payable by the Group was RMB1,128,075.23 and RMB42,816.92, respectively, which were paid after the balance sheet date.

29. Taxes payable

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
VAT	459,915,223.09	300,107,428.46
Urban maintenance and construction tax	35,722,236.84	42,302,147.32
Enterprise income tax	818,786,799.34	671,398,249.19
Withholding individual income tax	79,117,001.48	91,442,855.58
Real estate tax	6,462,219.38	28,339,260.06
Duty stamp	1,899,677.90	7,894,925.47
Education surcharges	25,630,240.87	30,269,225.91
Others	3,760,802.06	2,409,573.65
Total	1,431,294,200.96	1,174,163,665.64

(V) Notes to Items in the Consolidated Financial Statements (Continued)

30. Other payables

(1) Total other payables

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Interest payable	629,159,330.98	596,860,981.06
Dividends payable	968,903,753.94	2,019,585,665.83
Other payables	2,909,575,413.49	2,429,845,641.96
Total	4,507,638,498.41	5,046,292,288.85

(2) Interest payable

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Corporate bond interest	226,984,986.30	163,971,972.60
Long-term loans interest payable	331,672,129.46	380,412,370.69
Short-term loans interest payable	70,502,215.22	52,476,637.77
Total	629,159,330.98	596,860,981.06

As at December 31, 2018, the Group had no significant unpaid overdue interest.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

30. Other payables (Continued)

(3) Dividends payable

Unit: RMB

Name of entities	December 31, 2018	December 31, 2017
Guangdong Yudean Group Co., Ltd. (廣東省粵電集團有限公司)	—	632,111,083.27
CGN Fund Phase I	136,740,753.94	586,318,044.11
Fujian Energy Group Co., Ltd. (福建省能源集團有限責任公司)	—	148,362,321.93
Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司)	—	652,794,216.52
HKNIC	832,163,000.00	—
Total	968,903,753.94	2,019,585,665.83

As at December 31, 2018, the Group had no dividends payable for more than 1 year.

(4) Other payables

(a) Other payables by nature

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
Spent fuel management fund	1,332,687,588.66	1,187,124,429.40
Related party payments	1,154,912,382.23	949,926,681.41
Others	421,975,442.60	292,794,531.15
Total	2,909,575,413.49	2,429,845,641.96

(b) Other payables aged over one year with significant amount

Unit: RMB

Item	December 31, 2018	December 31, 2017	Reason for outstanding or not transfer
CGNPC	63,251,842.25	414,488,208.70	Not yet settled
Guangxi Investment Group Co., Ltd. (廣西投資集團有限公司)	488,161,440.00	224,250,000.00	Not yet settled
Total	551,413,282.25	638,738,208.70	

(V) Notes to Items in the Consolidated Financial Statements (Continued)

31. Non-current liabilities due within one year

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Long-term loans due within one year	15,792,525,241.13	10,071,199,432.43
Bonds payable due within one year	2,500,000,000.00	1,000,000,000.00
Derivative financial instruments due within one year	—	1,630,161.62
Post-employment benefit scheme liabilities due within one year	2,583,999.04	2,576,999.04
Total	18,295,109,240.17	11,075,406,593.09

32. Other non-current liabilities

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Pending output tax	964,545,364.41	1,221,690,823.91
Total	964,545,364.41	1,221,690,823.91

33. Long-term loans

(1) Long-term loans by category

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Credit loans	28,575,767,074.65	28,582,546,088.91
Guaranteed loans (Note1)	6,000,000,000.00	6,000,000,000.00
Pledged loans (Note2)	160,675,985,135.51	159,001,136,322.60
Secured loans (Note3)	180,719,170.77	—
Total	195,432,471,380.93	193,583,682,411.51
Less: Long-term loans due within one year	15,792,525,241.13	10,071,199,432.43
Long-term loans due after one year	179,639,946,139.80	183,512,482,979.08

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

33. Long-term loans (Continued)

(1) Classification of long-term loans (Continued)

Notes for classification of long-term loans:

Note1: In August 2012, GNIC, a subsidiary of the Company, entered into the "Taiping Asset – CGN Power Project Debt Investment Plan Investment Contract" (《太平資產—中廣核電項目債權投資計劃投資合同》) with Taiping Asset Management Co., Ltd. (太平資產管理有限公司) pursuant to which Taiping Asset Management Co., Ltd. initiated the establishment of "Taiping Asset – CGN Power Project Debt Investment Plan" with the actual investment proceeds of RMB3 billion. The proceeds were invested in GNIC in the form of debts, and were used in the construction of nuclear power projects of Taishan Nuclear and Yangjiang Nuclear under GNIC. CGNPC provides a full unconditional irrevocable joint and several liability guarantee for all the obligations of GNIC under such contract to Taiping Asset Management Co., Ltd.. As at December 31, 2018, the loan had not expired.

In November 2015, Lufeng Nuclear, a subsidiary of the Company, entered into a contract with China Development Bank Financial Leasing Co., Ltd. (國銀金融租賃有限公司) for capital financing, and the principal received was RMB500,000,000.00. In 2016, the Company transferred the leased assets of RMB300,000,000.00 to China Development Bank Financial Leasing Co., Ltd.. In October 2017, Lufeng Nuclear and China Development Bank Financial Leasing Co., Ltd.. entered into a supplementary contract to increase the financing amount to RMB3,000,000,000.00 on the basis of the above contract. CGNPC provided Lufeng Nuclear with a joint and several liability guarantee for all debts under the above contract with all its legal assets. As at December 31, 2018, the balance of outstanding loans of Lufeng Nuclear was RMB3,000,000,000.00.

Note2: Pledged loans are pledged by the Group with its interests under sales agreements of electricity, insurance contracts and equity interest held. For details of the pledge of the Group, please refer to Note (V)63.

Note3: Secured loans are secured by the Company's subsidiaries Suzhou Nuclear Power Research Institute, CGN Engineering and CNPRI with land use rights and buildings. For details, please refer to Note (V)63.

The range of annual interest rate of the above loans:

Unit: RMB		
	2018	2017
Range of annual interest rate of the above loans	0.49%-5.30%	0.49%-6.95%

(V) Notes to Items in the Consolidated Financial Statements (Continued)

33. Long-term loans (Continued)

(2) Repayment terms of long-term loans

Unit: RMB		
Term	December 31, 2018	December 31, 2017
1-2 years (including 2 years)	10,248,340,000.00	9,750,744,781.11
2-5 years (including 5 years)	14,283,740,444.70	26,472,779,492.10
More than 5 years	155,107,865,695.10	147,288,958,705.87
Total	179,639,946,139.80	183,512,482,979.08

34. Bonds payable

(1) Bonds payable

Unit: RMB		
Category	December 31, 2018	December 31, 2017
Long-term bonds	4,498,219,043.17	4,495,866,518.52
Medium-term notes	3,989,825,356.08	—
Private placement financing instruments	2,500,000,000.00	3,500,000,000.00
Total	10,988,044,399.25	7,995,866,518.52
Less: Bonds payable due within one year	2,500,000,000.00	1,000,000,000.00
Bonds payable due after one year	8,488,044,399.25	6,995,866,518.52

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

34. Bonds payable (Continued)

(2) Changes in bonds payable

Unit: RMB

Name of Bonds	Face value	Issue date	Term	Issue amount	January 1, 2018	Issue during the year	Accrued interest based on the face value	Amortization of premiums or discounts	Repayment during the year	December 31, 2018
07 CGN Debt	2,000,000,000.00	20/12/2007	15 years	2,000,000,000.00	2,000,000,000.00	—	118,000,000.00	—	—	2,000,000,000.00
10 CGN Debt	2,500,000,000.00	12/05/2010	10 years	2,500,000,000.00	2,495,866,518.52	—	115,000,000.00	(2,352,524.65)	—	2,498,219,043.17
18 CGN Power MTN001	1,000,000,000.00	24/04/2018	3 years	1,000,000,000.00	—	997,000,000.00	32,320,547.95	(653,176.38)	—	997,653,176.38
18 CGN Power MTN002	1,000,000,000.00	24/04/2018	3 years	1,000,000,000.00	—	997,000,000.00	32,251,780.82	(653,371.34)	—	997,653,371.34
18 CGN Power MTN003	1,000,000,000.00	21/08/2018	3 years	1,000,000,000.00	—	997,000,000.00	15,217,534.25	(341,123.56)	—	997,341,123.56
18 CGN Power MTN004	1,000,000,000.00	17/10/2018	3 years	1,000,000,000.00	—	997,000,000.00	8,170,410.96	(177,684.80)	—	997,177,684.80
15 Taishan Nuclear Power PPN001	500,000,000.00	13/02/2015	3 years	500,000,000.00	500,000,000.00	—	3,328,767.12	—	500,000,000.00	—
16 Yangjiang Nuclear Power PPN001	500,000,000.00	20/01/2016	3 years	500,000,000.00	500,000,000.00	—	19,000,000.00	—	—	500,000,000.00
16 Yangjiang Nuclear Power PPN002	500,000,000.00	01/03/2016	3 years	500,000,000.00	500,000,000.00	—	18,750,000.00	—	—	500,000,000.00
16 Yangjiang Nuclear Power PPN003	700,000,000.00	17/06/2016	3 years	700,000,000.00	700,000,000.00	—	27,300,000.00	—	—	700,000,000.00
16 Yangjiang Nuclear Power PPN004	800,000,000.00	19/07/2016	3 years	800,000,000.00	800,000,000.00	—	28,320,000.00	—	—	800,000,000.00
15 Yangjiang Nuclear Power PPN001	500,000,000.00	09/12/2015	3 years	500,000,000.00	500,000,000.00	—	18,973,972.60	—	500,000,000.00	—
Total				12,000,000,000.00	7,995,866,518.52	3,988,000,000.00	436,633,013.70	(4,177,880.73)	1,000,000,000.00	10,988,044,399.25
Less: Bonds payable due within one year					1,000,000,000.00					2,500,000,000.00
Bonds payable due after one year					6,995,866,518.52					8,488,044,399.25

Note: On April 24, 2018, April 24, 2018, August 21, 2018, and October 17, 2018, the Group issued medium term notes, namely 18 CGN Power MTN001, MTN002, MTN003 and MTN004, with the same face value of RMB1,000,000,000.00, and the issuance expenses amounted to RMB12,000,000.00. The bonds will mature on April 2021, April 2021, August 2021 and October 2021, respectively.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

35. Long-term employee benefits payable

(1) Long-term employee benefits payable

Unit: RMB

Item	December 31, 2018	December 31, 2017
Post-employment benefits- net liabilities of defined benefit plan	43,122,999.04	43,615,999.04
Cash-settled share-based payment	61,728,273.40	24,949,743.31
Total	104,851,272.44	68,565,742.35
Less: Liabilities of post-employment benefits due within one year	2,583,999.04	2,576,999.04
Net amount	102,267,273.40	65,988,743.31

(2) Changes in defined benefit plan

The present value of obligations under the defined benefit plan:

Unit: RMB

Item	December 31, 2018	December 31, 2017
I. Opening balance	43,615,999.04	42,949,000.00
II. Defined benefit cost included in profit or loss	1,672,000.00	459,999.04
1. Net interest	1,672,000.00	459,999.04
III. Defined benefit cost included in other comprehensive income	913,000.00	3,279,000.00
1. Actuarial gains	913,000.00	3,279,000.00
IV. Other changes	(3,078,000.00)	(3,072,000.00)
1. Paid benefits	(3,078,000.00)	(3,072,000.00)
V. Closing balance	43,122,999.04	43,615,999.04

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

35. Long-term employee benefits payable (Continued)

(2) Changes in defined benefit plan (Continued)

Other explanation:

The Group provides supplementary retirement benefit plans for some resigned and retired employees. According to the plan, the supplementary retirement benefits paid by the Group include nursing recuperation fees, holiday fees, travel expenses, medical examination and vaccination fees and annually paid supplementary medical insurance in accordance with policies, and the benefits will be paid until their death.

The Group engaged Mercer Consulting (China) Co., Ltd. to estimate the present value of the retirement benefit plan obligations above in an actuarial manner based on the expected cumulative welfare unit method. The plan estimates future cash outflows based on inflation and mortality assumptions and determines its present value at a discount rate. The discount rate is determined according to the government bond market yield rate corresponding to the planned duration on the balance sheet date and the evaluation date of the defined benefit plan obligation and currency. The Group recognizes its liabilities based on the actuarial results. The relevant actuarial gains or losses are recognized in other comprehensive income and will not be reversed to profit or loss in subsequent accounting periods. Past service costs are recognized through profit or loss for the current period in which the plan is revised. The net interest is determined by multiplying the defined benefit plan net liabilities or net assets by the appropriate discount rate.

36. Provisions

Unit: RMB			
Item	December 31, 2018	December 31, 2017	Reason
Provision for nuclear power plant decommissioning	3,689,783,017.22	2,952,097,625.57	Note 1
Provision for low and medium level radioactive waste disposal	310,281,961.52	292,768,114.70	Note 2
Others	1,466,775.27	—	
Total	4,001,531,754.01	3,244,865,740.27	

Note1: It is the discounted value of the best estimate of the expected cost of processing the nuclear power plant decommissioning of the Group.

Note2: It is the best estimate of the expected disposal cost of long-term and short-term low and medium level radioactive waste generated by nuclear power plants.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

37. Deferred income

Unit: RMB

Item	January 1, 2018	Increase during the year	Amortization amount of the year	Other changes	December 31, 2018
Government grants	995,286,142.41	516,974,107.27	99,919,171.60	(16,486,239.33)	1,395,854,838.75

Projects related to government grants:

Unit: RMB

Item	January 1, 2018	Increase in grant during the year	Amount recognized in other gains for the year	Other changes	December 31, 2018	Related to asset/ related to income
Special fund for infrastructure expenses of nuclear power equipment proprietary project from the Ministry of Finance	75,888,000.00	—	5,493,000.00	—	70,395,000.00	Related to income
Grant for the R&D and test verification platform construction project of small reactor and nuclear main pump operation and maintenance technology	74,620,000.00	—	—	—	74,620,000.00	Related to asset
Grant for Energy Independent Innovation Project by Ministry of Finance in 2011	53,487,000.00	—	11,886,000.00	—	41,601,000.00	Related to asset
R&D and test center of inaccessible equipment in nuclear power plant containment	24,000,000.00	—	18,000,000.00	—	6,000,000.00	Related to asset
Grant for Daya Bay spent fuel storage facility renovation project	—	312,435,587.90	2,005,063.89	10,735,321.22	321,165,845.23	Related to asset
Experimental Study on Critical Heat Flux of Shanghai Nuclear Engineering Research and Design Institute	—	62,427,800.00	—	—	62,427,800.00	Related to asset
Other government grants related to income	262,377,877.21	21,675,245.81	17,713,504.19	(562,000.00)	265,777,618.83	Related to income
Other government grants related to asset	504,913,265.20	120,435,473.56	44,821,603.52	(26,659,560.55)	553,867,574.69	Related to asset
Total	995,286,142.41	516,974,107.27	99,919,171.60	(16,486,239.33)	1,395,854,838.75	

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

38. Share Capital

Unit: RMB

Name of company	January 1, 2018	Changes in the current year				Subtotal	December 31, 2018
		Issuance of new shares	Bonus shares	Transfer from capital reserves	Others		
Domestic shares	34,285,125,000.00	—	—	—	—	—	34,285,125,000.00
Including: CGNPC	29,176,641,375.00	—	—	—	—	—	29,176,641,375.00
Guangdong Hengjian Investment Holdings Co., Ltd. (廣東恒健投資控股有限公司)	3,428,512,500.00	—	—	—	—	—	3,428,512,500.00
CNNC	1,679,971,125.00	—	—	—	—	—	1,679,971,125.00
Overseas listed foreign shares (H shares)	11,163,625,000.00	—	—	—	—	—	11,163,625,000.00
Total	45,448,750,000.00	—	—	—	—	—	45,448,750,000.00

The above share capital was verified by the Capital Verification Reports issued by Deloitte Touche Tohmatsu Certified Public Accountants LLP, namely De Shi Bao (Yan) Zi (15) No.0003 and De Shi Bao (Yan) Zi (15) No.0004.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

39. Capital reserve

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
Share premium	25,479,932,699.52	265,681,118.16	235,016,511.04	25,510,597,306.64
– Share capital contributed by owners	29,254,190,663.74	—	—	29,254,190,663.74
– Business combination involving entities under common control	(3,774,257,964.22)	—	235,016,511.04 (Note 1)	(4,009,274,475.26)
– Others	—	265,681,118.16 (Note 2)	—	265,681,118.16
Restructuring valuation adjustment	(27,701,479,836.62)	—	—	(27,701,479,836.62)
Other capital reserve	5,535,762,911.09	5,638,800.71	—	5,541,401,711.80
Total	3,314,215,773.99	271,319,918.87	235,016,511.04	3,350,519,181.82

Note1: On April 30, 2018, the Group acquired 100% equity interests in Ocean Power and 100% equity interests in Hebei Thermal Power held by CGNPC and 100% equity interests in CGN Power Sales Co., Ltd. (中廣核電力銷售有限公司) (“Power Sales Company”) held by Shenzhen Nengzhahui Investment Co., Ltd. (深圳市能之匯投資有限公司) (“Nengzhahui”), which was business combination involving entities under common control. The final transfer price of the transactions above was RMB235,016,511.04. The difference between the combination consideration paid by the Group and the share of the book value of the owners’ equity of combined parties on the combination date was RMB29,086.06, which is offset against the capital reserve. The share of the book value of the owners’ equity of the combined parties on the date of combination of RMB234,987,424.98 was wrote off.

Note2: The Group, holding 61% equity interests in Fangchenggang Nuclear, established Guangxi Fangchenggang CGN Nuclear Power Industry Investment Co., Ltd. (廣西防城港中廣核電產業投資有限公司) (“Fangchenggang Investment”) with Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業) in January 2018 and held 60% equity interest in it, which was regarded as disposal of certain equity interests in Fangchenggang Nuclear in the consolidated financial statements. The difference between the disposal of equity interest and the share of the corresponding net assets after deducting corresponding deferred income tax impact amounted to RMB265,798,413.32.

SNPI, a subsidiary of the Group, increased its investment to the Inspection Company, its subsidiary, in May 2018. Upon the capital increase, the shareholding was changed from 78.75% to 81.52%. The Group included the difference between the capital increase above and the share of the net assets of the subsidiary based on the new shareholding that continuously calculated from the date of acquisition and the effect of the dividend distribution of RMB117,295.16 into the capital reserve.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)
40. Other comprehensive income

Unit: RMB

Item	Balance at December 31, 2017	Changes in accounting policies	Balance at January 1, 2018	Amount incurred for the year					Balance at December 31, 2018
				Incurred amount before income tax for the year	Less: Transferring other comprehensive income recorded in the previous period into current profit of loss	Less: Income tax expenses	Attributable to the shareholders of parent company, after-tax	Attributable to minority shareholders, after-tax	Less: Other comprehensive income transferred to retained earnings
I. Other comprehensive income that will not be reclassified to profit or loss	(12,867,625.00)	397,932,570.58	385,064,945.58	(69,779,019.38)	—	(10,254,902.91)	(58,991,366.47)	(32,750.00)	197,778,676.61
1.Change arising from remeasurement of defined benefit plan	(12,867,625.00)	—	(12,867,625.00)	(913,000.00)	—	—	(880,250.00)	(32,750.00)	—
2.Other comprehensive income that cannot be transferred to profit or loss under the equity method	—	131,139,543.08	131,139,543.08	78,398,980.62	—	11,759,847.09	66,639,133.53	—	197,778,676.61
3.Change in fair value of investment in other equity instruments	—	266,793,027.50	266,793,027.50	(146,765,000.00)	—	(22,014,750.00)	(124,750,250.00)	—	142,042,777.50
II. Other comprehensive income that may be reclassified to profit or loss	416,101,490.89	(57,900,771.93)	358,200,718.96	284,740,814.09	—	213,358,519.05	71,382,295.04	—	571,559,238.01
1.Other comprehensive income that can be transferred to profit or loss under the equity method	62,815,711.51	(57,900,771.93)	4,914,939.58	(788,366.06)	—	—	(788,366.06)	—	4,126,573.52
2.Translation differences arising from translation of foreign currency financial statements	353,285,779.38	—	353,285,779.38	285,529,180.15	—	—	214,146,885.11	71,382,295.04	—
Total other comprehensive income	403,233,865.89	340,031,798.65	743,265,664.54	215,461,794.71	—	(10,254,902.91)	154,367,152.58	71,349,545.04	197,778,676.61
									699,854,140.51

(V) Notes to Items in the Consolidated Financial Statements (Continued)

41. Specific reserve

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
Safe production expenses	131,413,773.45	217,848,331.82	152,122,411.87	197,139,693.40

42. Surplus reserve

Unit: RMB

Item	January 1, 2018	Transfer to surplus reserve during the year	Transfer from other comprehensive income during the year	Decrease during the year	December 31, 2018
Statutory surplus reserves	2,712,326,934.84	609,390,862.94	19,777,867.66	—	3,341,495,665.44

43. Retained earnings

Unit: RMB

Item	2018	2017 (Restated)
Retained earnings before the adjustment at the beginning of the year	13,139,256,274.10	6,325,440,386.99
Business combination involving entities under common control (Note 1)	(859,816.88)	(942,200.50)
Changes in accounting policies (Note 2)	57,900,771.93	—
Others	(299,866,423.47)	(238,154,100.25)
Retained earnings after the adjustment at the beginning of the year	12,896,430,805.68	6,086,344,086.24
Add: Net profit attributable to shareholders of the parent company for the year	8,702,632,650.82	9,564,092,697.56
Less: Appropriation of statutory surplus reserves	609,390,862.94	494,061,974.43
Distributable profits for shareholders	20,989,672,593.56	15,156,374,809.37
Less: Profits payable (Note 3)	3,090,516,570.98	2,317,844,775.62
Add: Other comprehensive income transferred to retained earnings	178,000,808.95	—
Retained earnings at the end of the year (Note 5)	18,077,156,831.53	12,838,530,033.75

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

43. Retained earnings (Continued)

- Note 1: In April 2018, the Group acquired 100% equity interests in Power Sales Company, 100% equity interests in Ocean Power and 100% equity interests in Hebei Thermal Power, as a business combination under common control, affecting the retained earnings of RMB(859,816.88) at the beginning of 2018 and the retained earnings of RMB(942,200.50) at the beginning of 2017.
- Note 2: The Group's long-term equity investments in Finance Company are accounted for using the equity method. Under the New Standards for Financial Instruments, the Finance Company originally held available-for-sale financial assets measured at FVTOCI. On January 1, 2018, it was reclassified as financial assets measured at FVTPL held for trading. The accumulated changes in fair value were transferred from other comprehensive income to retained earnings at the beginning of the year, which affected the retained earnings of RMB57,900,771.93 at the beginning of 2018.
- Note 3: On May 30, 2018, a profit distribution plan was considered and approved at the general meeting of the Company, which proposed to distribute cash dividends of RMB0.068 per share based on total shares of 45,448,750,000 shares to all shareholders in order to distribute cash dividends from the accumulated retained earnings for 2017 of RMB3,090,516,570.98 to shareholders. As at December 31, 2018, the dividends above have been paid.
- Note 4: Profit distribution resolved subsequent to the balance sheet date:
- As proposed by the Board of Directors, the Company intends to distribute cash dividends of RMB0.072 per share based on issued shares of 45,448,750,000 shares for 2018. Such dividend distribution plan is subject to approval at the general meeting.
- Note 5: As at December 31, 2018, the balance of retained earnings of the Group included the surplus reserves used by subsidiaries which was RMB5,697,914,260.57 (December 31, 2017: RMB5,464,727,749.86).

(V) Notes to Items in the Consolidated Financial Statements (Continued)

44. Operating revenue and costs

Unit: RMB

Item	2018		2017 (Restated)	
	Revenue	Cost	Revenue	Cost
From principal operation	50,543,922,149.96	28,227,621,577.00	45,457,057,438.81	25,023,009,068.36
Of which: Sales of electricity	46,071,750,901.61	23,425,317,972.01	41,543,214,608.05	21,569,118,165.15
Construction, installation and design services	3,178,563,261.77	3,812,574,569.31	2,680,488,509.49	2,540,486,014.50
Rendering of services	721,858,441.79	494,359,016.18	722,427,251.63	555,609,759.92
Sales of goods and others	571,749,544.79	495,370,019.50	510,927,069.64	357,795,128.79
From other operations	283,997,034.47	276,233,032.56	176,396,481.83	162,035,026.20
Total	50,827,919,184.43	28,503,854,609.56	45,633,453,920.64	25,185,044,094.56

- (1) For the details of operating revenue, please refer to Note (XIV)2.
- (2) As at December 31, 2018, the transaction price attributable to outstanding (or partially outstanding) performance obligation and the estimated time of revenue recognition:

Unit: RMB

Item	After January 1,				Total
	2019	2020	2021	2022	
Construction, installation and design service	4,457,429,826.36	5,026,644,018.16	1,922,724,741.16	893,972,990.29	12,300,771,575.97

- (3) As at December 31, 2018, there was no significant variable consideration in the transaction price of the Group.
- (4) Changes in contracts in the current period for the performance obligation of the Group fulfilled (or partially fulfilled) in the previous period.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

44. Operating Revenue and Cost (Continued)

On November 16, 2007, the Group accepted the engagement from Hongyanhe Nuclear and undertook the construction and management of the Liaoning Hongyanhe NPP Phase I project ("Hongyanhe Phase I") to meet the conditions for commercial operation and assist Hongyanhe Nuclear with respect to fulfillment of completion acceptance and other work. According to a construction contract for Hongyanhe Phase I (the "Engagement Contract"), the contract price comprised the initial contract price and the variable contract price. Among which, the initial contract price was the price agreed by both parties when signing the Engagement Contract, which included project payment, risk reserve, project management fees and others, while the variable contract price should be determined by both parties with supplemental agreements or revisions for those matters which were not specified or necessary to supplement or revise in the Engagement Contract arising during construction. Hongyanhe Phase I officially commenced commercial operation on September 20, 2016. In order to assist Hongyanhe Nuclear to fulfill completion acceptance and settlement, the Group and Hongyanhe Nuclear initiated a "bundle" negotiation on the controversial issues in the Engagement Contract. On September 28, 2018, both parties came to an agreement on the settlement amount of the Engagement Contract, which was recorded in the minutes. In January 2019, both parties officially entered into the Liaoning Hongyanhe NPP Phase I Construction Project Engagement Contract Settlement Agreement (《遼寧紅沿河電廠一期工程建設委託合同結算協議》) to substantiate the modifications involved in the minutes by way of contract. In view of the above minutes and the settlement agreement, the Group remeasured the progress of performance and reduced the operating revenue in 2018 by RMB748,417,987.25.

45. Taxes and surcharges

Unit: RMB		
Item	2018	2017 (Restated)
City maintenance and construction tax	302,780,271.45	272,822,069.53
Education surcharges	216,643,216.46	194,723,180.36
Stamp duty	27,490,954.99	37,284,675.43
Others	85,855,686.03	122,726,269.38
Total	632,770,128.93	627,556,194.70

(V) Notes to Items in the Consolidated Financial Statements (Continued)

46. Selling expenses

Unit: RMB		
Item	2018	2017 (Restated)
Travelling expenses	8,162,462.43	8,760,493.70
Employees' remuneration	57,926,312.33	60,111,135.05
Rental expenses	539,517.22	926,001.96
Logistics service expenses	3,710,178.46	456,347.19
Consulting fees and legal affairs fees	5,796,186.69	4,683,568.52
Others	25,985,934.04	17,296,946.71
Total	102,120,591.17	92,234,493.13

47. Administrative expenses

Unit: RMB		
Item	2018	2017 (Restated)
Employee remuneration	1,013,756,436.70	894,832,401.90
Depreciation and amortization	293,158,542.76	277,369,223.32
Rental expenses	115,472,337.60	132,554,322.08
Labor technical service fees	105,518,114.38	110,425,262.55
Logistics service expenses	247,220,551.52	255,580,325.81
Information technology expenses	127,768,087.71	125,743,898.28
Professional service consulting fees	21,744,213.82	23,660,748.88
Auditors' remuneration	7,368,632.08	7,459,386.79
Travelling expenses	35,558,156.59	28,377,896.64
Office expenses	41,084,448.31	23,713,275.26
Other expenses	354,248,602.43	402,965,350.81
Total	2,362,898,123.90	2,282,682,092.32

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

48. R&D expenses

Unit: RMB		
Item	2018	2017 (Restated)
Commissioning fees paid for R&D outsourcing, cooperation and others	404,811,433.23	493,525,510.78
Employee remuneration	207,251,498.40	142,951,621.98
Inspection expenses	195,402,617.21	88,489,692.02
Depreciation expenses	45,580,372.15	6,973,249.81
Amortization expenses	22,573,924.40	4,034,178.84
Others	144,206,064.22	37,911,807.46
Total	1,019,825,909.61	773,886,060.89

49. Finance cost

Unit: RMB		
Item	2018	2017 (Restated)
Interest expenses	9,947,795,170.31	10,011,056,835.96
Less: Capitalized interest expenses	4,004,039,487.10	3,906,266,883.76
Less: Interest income	254,816,814.36	206,879,219.46
Exchange losses	192,710,406.19	434,835,618.10
Less: Capitalized exchange losses	96,248,163.36	436,090,317.94
Nuclear power facility disposal reserve	197,603,371.22	182,361,434.12
Bank charges and others	17,864,290.79	27,605,587.58
Total	6,000,868,773.69	6,106,623,054.60

(V) Notes to Items in the Consolidated Financial Statements (Continued)

50. Asset impairment losses

Unit: RMB		
Item	2018	2017
I. Bad debts losses	—	109,881,863.64
II. Impairment losses of inventories	139,409,032.49	275,315,915.01
III. Impairment losses of prepayments	(32,220,000.00)	—
Total	107,189,032.49	385,197,778.65

51. Credit Impairment Losses

Unit: RMB		
Item	2018	2017
Bad debt loss of accounts receivable	(105,075,832.81)	/
Bad debt loss of other receivables	(127,409,009.62)	/
Impairment losses of contract assets	8,993,565.20	/
Total	(223,491,277.23)	/

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

52. Other gains

Unit: RMB

Item	2018	2017	Amount included in non-recurring gains and losses in 2018	Amount included in non-recurring gains and losses in 2017
VAT refunds	1,408,237,981.06	1,386,129,487.10	—	—
Other government grants	143,333,834.97	118,535,257.69	143,333,834.97	118,535,257.69
Others	11,569,083.75	8,792,249.41	—	—
Total	1,563,140,899.78	1,513,456,994.20	143,333,834.97	118,535,257.69

53. Investment income

Details of investment income

Unit: RMB

Item	2018	2017
Income from long-term equity investments accounted for using the equity method	1,029,509,833.39	602,635,840.38
Investment income (loss) from disposal of long-term equity investments	(771,849.04)	1,856,801,074.11 (Note)
Income from derivative financial instruments	2,911,325.02	(167,323,962.10)
Investment income from holding available-for-sale financial assets	—	23,861,166.70
Investment income from holding other equity instruments	15,382,800.00	—
Others	(2,473,446.40)	(3,835,945.96)
Total	1,044,558,662.97	2,312,138,173.13

Note: Mainly comprised the investment income of RMB1,785,082,112.93 generated from the remeasurement of equity originally held in Ningde Nuclear on the acquisition date upon the change of Ningde Nuclear from a joint venture to a subsidiary of the Company, the investment income of RMB199,325.71 generated from the Group's disposal of an associate, Suzhou Longyuan Bailu Wind Power Vocational Training Center Co., Ltd. (蘇州龍源白鷺風電職業培訓中心有限公司), and the investment income of RMB71,519,635.47 generated from the Group's disposal of a subsidiary, Nanjing Xinsu Thermoelectricity Co., Ltd. (南京新蘇熱電有限公司), totaling RMB1,856,801,074.11.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

54. Gains arising from changes in fair value

Unit: RMB		
Item	2018	2017
Gains from changes in fair value of derivative financial instruments	4,939,607.32	197,260,129.31
Gains from changes in fair value of cash-settled share-based payments	11,136,508.04	10,183,550.29
Total	16,076,115.36	207,443,679.60

55. Gains (Losses) arising from assets disposal

Unit: RMB		
Item	2018	2017 (Restated)
Losses from disposal of fixed assets	106,649.90	(6,236,182.25)

56. Non-operating income

Unit: RMB				
Item	2018	2017	Amount included in non-recurring gains and losses in 2018	Amount included in non-recurring gains and losses in 2017
Others	7,639,433.82	4,290,905.13	7,639,433.82	4,290,905.13

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

57. Non-operating expenses

Unit: RMB

Item	2018	2017	Amount included in non-recurring gains and losses in 2018	Amount included in non-recurring gains and losses in 2017
Donations	15,438,158.01	18,674,378.45	15,438,158.01	18,674,378.45
Others	38,491,137.74	24,389,953.32	38,491,137.74	24,389,953.32
Total	53,929,295.75	43,064,331.77	53,929,295.75	43,064,331.77

58. Income tax expenses

(1) Income tax expenses

Unit: RMB

Item	2018	2017 (Restated)
Current income tax expenses	1,555,897,354.32	1,337,798,743.18
Deferred income tax expenses	(336,958,473.33)	95,494,862.58
Adjustments to income tax of previous years	(1,140,452.73)	10,778,223.40
Total	1,217,798,428.26	1,444,071,829.16

(V) Notes to Items in the Consolidated Financial Statements (Continued)

58. Income tax expenses (Continued)

(2) Reconciliation of income tax expenses to accounting profits

Unit: RMB		
Item	2018	2017 (Restated)
Accounting profits	14,899,475,758.39	14,168,259,389.83
Income tax calculated at tax rate of 25%	3,724,868,939.60	3,542,064,847.46
Tax effect of non-deductible expenses	30,775,909.20	34,547,067.08
Tax effect of tax-free income	(241,500,764.37)	(295,258,765.52)
Tax effect of non-taxable income	(352,059,495.27)	(346,532,371.78)
Tax effect of unrecognized deductible losses and deductible temporary differences	81,250,422.27	13,934,928.42
Tax effect of utilization of unrecognized deductible losses and deductible temporary differences in previous years	(733,854.04)	(496,623,380.42)
The effect of the inconsistency between income tax rate applicable to the current period and the income tax rate when measuring the deferred income tax	24,078,514.13	7,952,599.34
Adjustment of income tax in previous years	(1,140,452.73)	10,778,223.40
Tax effect of tax incentives	(2,156,098,782.73)	(1,541,759,199.28)
Additional deduction for research and development costs	(25,623,713.78)	(53,268,722.96)
Others	133,981,705.98	568,236,603.42
Income tax expenses	1,217,798,428.26	1,444,071,829.16

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

59. Government grants

			Unit: RMB	
Item	Related to asset/related to income	Item	2018	2017
Research fund for key technologies for accident-tolerant fuels	Related to asset	Deferred income	23,047,100.00	27,581,400.00
Design and R&D innovation capacity building of small offshore reactors	Related to asset	Deferred income	—	13,000,000.00
Grant for Hydrogen Safety 3D Analysis Project	Related to asset	Deferred income	2,229,100.00	8,972,900.00
Financial assistance to small offshore reactors from Financial Committee	Related to asset	Deferred income	—	8,000,000.00
Grant for Daya Bay spent fuel storage facility renovation project	Related to asset	Deferred income	312,435,587.90	—
Experimental Study on Critical Heat Flux of Shanghai Nuclear Engineering Research and Design Institute	Related to asset	Deferred income	62,427,800.00	—
Other government grants related to asset	Related to asset	Deferred income	95,159,273.56	15,637,614.29
Other government grants related to income	Related to income	Deferred income	21,675,245.81	2,281,526.63
VAT refunds	Related to income	Other income	1,408,237,981.06	1,386,129,487.10
Others	Related to income	Other income	54,983,747.12	39,008,340.39
Shenzhen Science and Technology Innovation Committee R&D Fund	Related to income	Other income	—	16,290,000.00
Total			1,980,195,835.45	1,516,901,268.41
Including: Government grants recognized for the period			1,463,221,728.18	1,441,427,827.49

60. Other comprehensive income

Please refer to Note (V)40 for details.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

61. Cash flow statements items

(1) Cash received from other operating activities

Unit: RMB

Item	2018	2017 (Restated)
Amount received by related parties in advance	743,905,654.13	281,608,357.16
Guarantee deposit and deposit	583,932,845.72	232,422,695.87
Government grants related to income	76,658,992.93	57,579,867.02
Government grants related to asset	495,298,861.46	73,191,914.29
Liquidated damages, refunds and advances	12,819,643.95	44,068,777.42
Rental, consulting and other services income	248,460.18	6,834,924.70
Research fund	45,462,683.00	29,078,038.51
Bank settlement and interest	64,411,572.07	29,679,026.54
Others	102,975,849.63	71,339,024.78
Total	2,125,714,563.07	825,802,626.29

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

61. Cash flow statements items (Continued)

(2) Cash paid to other operating activities

Unit: RMB

Item	2018	2017 (Restated)
Amount paid by related parties in advance	915,021,959.45	516,383,447.32
Transportation, travelling expenses and other expenses reimbursement	253,968,944.28	203,733,742.15
Guarantee deposit and deposit	399,436,102.40	255,442,810.67
Consulting and other services expenses	92,240,791.66	125,288,509.82
Payment for social insurance and capital reserve, taxes, etc.	182,063,077.20	228,519,525.95
Vehicle rental fees	88,528,910.29	44,458,720.09
Labour union fees	76,104,222.07	93,831,640.64
Insurance	82,141,824.04	72,589,492.53
Others	264,184,252.74	190,055,715.70
Total	2,353,690,084.13	1,730,303,604.87

(3) Cash received from other investing activities

Unit: RMB

Item	2018	2017
Amount received by related parties in advance	1,502,472,991.57	26,592,564.58
Recovery of fixed deposits with maturities of more than three months	248,000,000.00	197,000,000.00
Commissioning electricity fee income	845,367,894.00	137,035,624.50
Cash and cash equivalents of Ningde Nuclear on the combination date	—	108,551,689.27
Others	52,252,925.29	40,088,820.21
Total	2,648,093,810.86	509,268,698.56

(V) Notes to Items in the Consolidated Financial Statements (Continued)

61. Cash flow statements items (Continued)

(4) Cash paid to other investing activities

Unit: RMB		
Item	2018	2017
Amount paid by related parties in advance	314,859,986.09	8,459,138.57
Settlement of derivative financial instruments	2,762,475.99	167,323,962.10
Deposit of fixed deposits with maturities of more than three months	1,765,000,000.00	173,000,000.00
Others	3,337,472.17	24,246,776.15
Total	2,085,959,934.25	373,029,876.82

(5) Cash received from other financing activities

Unit: RMB		
Item	2018	2017
Advance capital received	577,200,000.00	263,911,440.00
Consideration received for the equity transfer of 17% in Yangjiang Nuclear	—	5,000,000,000.00
Total	577,200,000.00	5,263,911,440.00

(6) Cash paid to other financing activities

Unit: RMB		
Item	2018	2017
Amount paid by related parties in advance	350,750,000.00	—
Export credit transfer fees	13,994,799.56	—
Guarantee fees and interest payment service fees of 02CGN Debt	—	4,000,000.00
Others	5,544,816.81	17,956,480.02
Total	370,289,616.37	21,956,480.02

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

62. Supplementary information to cash flow statements

(1) Supplementary information to cash flow statements

		Unit: RMB
Supplementary information	2018	2017 (Restated)
1.Reconciliation of net profit to cash flows from operating activities:		
Net profit	13,681,677,330.13	12,724,187,560.67
Add: Asset impairment provision	107,189,032.49	385,197,778.65
Credit impairment losses	(223,491,277.23)	/
Depreciation of fixed assets	7,387,055,941.58	6,697,433,560.95
Amortization of intangible assets	366,450,363.63	303,776,264.44
Amortization of long-term deferred expenses	202,653,811.16	211,679,394.57
Depreciation of investment properties	25,947,409.86	21,839,090.65
Losses on disposal of fixed assets, intangible assets and other long-term assets	33,537,561.02	6,236,182.25
Losses from changes in fair value (" - ": gains)	(16,076,115.36)	(207,443,679.60)
Finance costs	5,986,236,302.69	6,265,182,271.12
Investment losses (" - ": gains)	(1,044,558,662.97)	(2,312,138,173.13)
Decrease in deferred tax assets (" - ": Increase)	(241,903,842.32)	116,896,325.99
Increase in deferred tax liabilities(" - ": Decrease)	16,602,677.78	(21,401,463.41)
Decrease in contract assets (" - ": Increase)	(79,174,667.78)	/
Increase in contract liabilities (" - ": Decrease)	(783,724,926.10)	/
Decrease in inventories (" - ": Increase)	(1,817,667,680.96)	(3,143,222,904.09)
Decrease in operating receivables (" - ": Increase)	1,532,348,775.85	82,406,939.00
Increase in operating payable (" - ": Decrease)	3,276,468,541.42	5,740,187,798.72
Net cash flows from operating activities	28,409,570,575.29	26,870,816,946.78

(V) Notes to Items in the Consolidated Financial Statements (Continued)

62. Supplementary information to cash flow statements (Continued)

(1) Supplementary information to cash flow statements (Continued)

		Unit: RMB
Supplementary information	2018	2017 (Restated)
2. Major investing and financing activities that do not involve cash receipts and payments:		
Transfer from debt to equity	—	—
Convertible corporate bonds due within one year	—	—
Fixed assets under financing leases	—	—
3. Net changes in cash and cash equivalents:		
Closing balance of cash	11,637,718,842.72	10,352,460,227.68
Less: Opening balance of cash	10,352,460,227.68	8,681,418,604.64
Add: Closing balance of cash equivalents	—	—
Less: Opening balance of cash equivalents	—	—
Net increase in cash and cash equivalents	1,285,258,615.04	1,671,041,623.04

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

62. Supplementary information to cash flow statements (Continued)

(2) Cash paid for acquisition of subsidiaries and other business entities

	Unit: RMB	
	2018	2017
Cash or cash equivalents paid in current year for business combination occurred in current year	235,016,511.04	—
Power Sales Company, Ocean Power and Hebei Thermal Power (Note 2)	235,016,511.04	—
Less: Cash and cash equivalents held by subsidiaries on the date of acquisition	—	—
Add: Cash or cash equivalents paid in current year for business combination occurred in previous period (Note 1)	N/A	5,536,329,688.08
Net cash paid for acquisition of subsidiaries	235,016,511.04	5,536,329,688.08

Note 1: On November 30, 2016, the Company acquired 100% equity interests in CGN Engineering, 61% equity interests in Fangchenggang Nuclear and 100% equity interests in Lufeng Nuclear from the parent company, CGNPC, and the final transaction price was RMB8,536,329,688.08. In 2016, the Company paid RMB3,000,000,000.00 for the equity acquisition, and the remaining amount of RMB5,536,329,688.08 was accounted for as other payable to CGNPC on December 31, 2016. In 2017, the Company paid the remaining amount of RMB5,536,329,688.08 for the equity acquisition.

Note 2: On April 30, 2018, the Company obtained controls over Power Sales Company, Ocean Power and Hebei Thermal Power, which became the subsidiaries of the Company, and the final transaction price was RMB235,016,511.04. The Company settled the payment by December 31, 2018.

(3) Composition of cash and cash equivalents

	Unit: RMB	
Item	December 31, 2018	December 31, 2017
I. Cash	11,637,718,842.72	10,352,460,227.68
Including: Cash in hand	5,812.41	6,423.79
Bank deposits available on demand	11,637,713,030.31	10,352,453,803.89
II. Cash equivalents	—	—
III. Closing balance of cash and cash equivalents	11,637,718,842.72	10,352,460,227.68

(V) Notes to Items in the Consolidated Financial Statements (Continued)

63. Assets with restricted ownership or right of use

Unit: RMB

Item	December 31, 2018	December 31, 2017	Reason for being restricted
Cash at bank and in hand (Note 1)	30,217,919.80	11,366,783.04	Letters of guarantee
Bills receivable and accounts receivable (Note 2)	4,037,714,144.39	3,273,348,315.28	Guarantees
Fixed assets (Note 3)	19,797,109,997.55	15,822,726,041.88	Guarantees
Intangible assets (Note 4)	481,432,713.41	108,211,863.39	Guarantees
Total	24,346,474,775.15	19,215,653,003.59	

Note 1: The letter of guarantee was for the bank deposits of the Group (as the supplier) according to the supply and purchase contract.

Note 2: On August 22, 2005, Lingdong Nuclear entered into the Common Terms Agreement on Loans for Phase II of Guangdong Ling'ao Nuclear Power Plant Construction Project with China Development Bank (the "CDB"), Agricultural Bank of China Shenzhen Branch and Industrial and Commercial Bank of China Shenzhen Branch, and acquired a total loan facility equivalent to USD2.585 billion from the banks with a maturity period ranged from 15 to 22 years. Lingdong Nuclear transferred its interest in the insurance contract of the phase II of the nuclear power plant project to CDB, and pledged all the electricity sales revenue in the electricity sales income collection account to CDB.

On December 16, 2008, Yangjiang Nuclear entered into the Common Terms Agreement on Guangdong Yangjiang Nuclear Power Construction Project with six financial institutions including the CDB and the Bank of China, and obtained a total loan facility of RMB55.652 billion from the banks. The term of the loan shall not be more than 25 years from the date of signing the agreement. Yangjiang Nuclear transferred its interests in the insurance contract and the general contracting contract of the Guangdong Yangjiang Nuclear Power Construction Project to CDB, and pledged the accounts receivable from the electricity sales contract to CDB.

On October 25, 1995, April 6, 1998, January 14, 2000, and November 27, 2000, CGNPC and CDB entered into the Loan Agreement on Ling'ao Nuclear Power Station Between China Development Bank and CGNPC, the Loan Supplemental Agreement 4 and Commercial Loan Sub-agreement 3, the Loan Supplemental Agreement 4 Sub-agreement 1, and Loan Supplemental Agreement 4 Sub-agreement 2 (collectively, the "Loan Agreements"), respectively. According to the Loan Agreements, CDB agreed to provide foreign exchange sub-loans amounting to EUR1,172,112,953.10, GBP 252,761,926.42 and USD51,803,623.92 in aggregate to CGNPC. On April 6, 1998, Ling'ao Nuclear and CDB entered into the Pledge Contract of Accounts Receivable from Electricity Sales for Phase I of Guangdong Ling'ao Nuclear Power Plant and the Transfer Contract of Interests in Insurance, so as to pledge the accounts receivable from the electricity sales contract and interest in insurance as collateral for the Loan Agreement. On May 20, 2009, Ling'ao Nuclear, CGNPC and CDB entered into the Agreement on Changes of Borrower and Guarantees under the Loan Agreement on Guangdong Ling'ao Nuclear Power Plant Phase I Construction Project, pursuant to which the borrower under the Loan Agreements was changed from CGNPC to Ling'ao Nuclear. Ling'ao Nuclear undertook all rights and obligations of CGNPC in the past and in the future under the Loan Agreements.

On July 29, 2010, pledging the receivables from electricity sales of Fangchenggang Phase I Construction Project, Fangchenggang Nuclear entered into a series of syndicate agreements with various financial institutions including the Finance Company (as the leader), China Construction Bank and CDB to obtain a comprehensive borrowing facility equivalent to RMB19.939 billion in aggregate for the construction of its phase I project. In addition, Fangchenggang Nuclear pledged the electricity sales receivables from the phase II project and signed a series of syndicate agreements with the above-mentioned financial institutions on February 16, 2016, obtaining comprehensive borrowing facilities equivalent to RMB28.52856 billion and equivalent to USD245.66 million in aggregate for the construction of its phase II project.

On April 18, 2008, pledging the receivables under the future power sales agreement of Ningde Phase I Construction Project, the interest in construction entrustment contract and the interest in the construction insurance, Ningde Nuclear signed the Common Terms Agreement with four financial institutions including Industrial and Commercial Bank of China to obtain a borrowing equivalent to RMB39.966 billion in aggregate. On December 30, 2011, Ningde Nuclear pledged the income rights to the electricity fee of the Ningde Phase I Construction Project based on the loan ratio, and signed the Special Facility Contract with Postal Savings Bank of China Limited to obtain a total borrowing amounting to RMB2 billion. The above borrowings were all used for the Ningde Nuclear Power Phase I Construction Project.

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

63. Assets with restricted ownership or right of use (Continued)

Note 3: According to the Commitment Letter on Land Use Rights and Equipment issued by Lingdong Nuclear to CDB, during the term of the loan contract, Lingdong Nuclear shall not, in any form, dispose of, including but not limited to sell, let or pledge, any of the equipment asset with an original value over USD500,000. As at December 31, 2018 and December 31, 2017, the above net asset owned by Lingdong amounted to RMB19,789,641,268.41 and RMB15,814,381,083.53, respectively.

According to the Maximum Mortgage Contract signed by Suzhou Nuclear Power Research Institute and Agricultural Bank of China Co., Ltd. Suzhou High-tech Zone Technology Industry Development Zone Branch in March 2016, Suzhou Nuclear Power Research Institute pledged the land use rights of and buildings on Xihuan Road owned by it. As at December 31, 2018 and December 31, 2017, the above net fixed assets owned by Suzhou Nuclear Power Research Institute amounted to RMB7,468,729.14 and RMB8,344,958.35, respectively.

Note 4: According to the Maximum Mortgage Contract signed by Suzhou Nuclear Power Research Institute and Agricultural Bank of China Co., Ltd. Suzhou High-tech Zone Technology Industry Development Zone Branch in March 2016, Suzhou Nuclear Power Research Institute pledged the land use rights of and buildings on Xihuan Road owned by it. As at December 31, 2018 and December 31, 2017, the above net land use rights owned by Suzhou Nuclear Power Research Institute amounted to RMB52,901,515.05 and RMB54,124,522.51, respectively.

According to the RMB Loan Mortgage Contract signed by CNPRI and CDB in October 2017, CNPRI pledged the land use rights owned by it. As at December 31, 2018 and December 31, 2017, the above net land use rights owned by CNPRI amounted to RMB51,564,936.92 and RMB54,087,340.88, respectively.

According to the Loan Contract of China Guangdong Nuclear Power Engineering Building Agreement signed by CGN Engineering and ICBC on March 19, 2018, CGN Engineering pledged the land use rights of New Energy Industry Base owned by it. As at December 31, 2018, the above net land use rights owned by CGN Engineering amounted to RMB376,966,261.44.

(V) Notes to Items in the Consolidated Financial Statements (Continued)

64. Foreign currency monetary items

(1) Foreign currency monetary items

Item	December 31, 2018			December 31, 2017 (Restated)		
	Foreign currency balance	Exchange rate	RMB Balance	Foreign currency balance	Exchange rate	RMB Balance
Cash at bank and in hand			4,514,002,114.17			3,340,539,361.96
Including: HKD	9,895,861.14	0.8762	8,670,753.54	9,869,628.23	0.8359	8,250,120.94
USD	279,257,573.95	6.8632	1,916,600,581.54	170,011,371.74	6.5342	1,110,888,305.25
EUR	10,458,922.00	7.8473	82,074,298.61	43,428,335.33	7.8023	338,840,877.04
GBP	2,096,242.16	8.6762	18,187,416.22	429,149.46	8.7792	3,767,588.94
ZAR	46,239.22	0.4735	21,894.26	45,495.65	0.5277	24,008.05
RMB	2,488,447,170.00	1.0000	2,488,447,170.00	1,878,768,461.74	1.0000	1,878,768,461.74
Bills receivable and accounts receivable			327,250,762.80			36,045,654.16
Including: USD	—	6.8632	—	1,481,329.61	6.5342	9,679,303.94
EUR	5,707,303.41	7.8473	44,786,922.05	975,024.46	7.8023	7,607,433.33
GBP	—	8.6762	—	1,755,000.00	8.7792	15,407,496.00
RMB	282,463,840.75	1.0000	282,463,840.75	3,351,420.89	1.0000	3,351,420.89
Other receivables			72,324,899.72			781,445,296.93
Including: USD	218,760.04	6.8632	1,501,393.91	210,430.36	6.5342	1,374,994.03
HKD	7,602.00	0.8762	6,660.87	7,602.09	0.8359	6,354.59
EUR	6,491,750.05	7.8473	50,942,710.18	94,815,620.32	7.8023	739,779,914.43
GBP	428,874.33	8.6762	3,720,999.46	—	8.7792	—
RMB	16,153,135.30	1.0000	16,153,135.30	36,600,035.75	1.0000	36,600,035.75
ZAR	—	0.4735	—	6,981,235.80	0.5277	3,683,998.13
Bills receivable and accounts receivable			551,606,986.04			568,658,108.47
Including: HKD	11,187,905.51	0.8762	9,802,842.81	12,568,093.35	0.8359	10,505,669.23
USD	14,358,137.52	6.8632	98,542,769.43	10,591,992.01	6.5342	69,210,194.20
EUR	40,777,095.39	7.8473	319,990,100.63	47,834,051.59	7.8023	373,215,620.69
GBP	1,024,113.21	8.6762	8,885,411.05	608,767.28	8.7792	5,344,489.74
JPY	2,296,268.82	0.0619	142,139.04	9,377,245.94	0.0579	542,942.54
RMB	110,517,259.31	1.0000	110,517,259.31	104,168,260.64	1.0000	104,168,260.64
CAD	—	5.0381	—	4,833.00	5.2009	25,135.95
CHF	536,228.13	6.9494	3,726,463.77	845,444.75	6.6779	5,645,795.48

Notes to the Financial Statements

For the year ended December 31, 2018

(V) Notes to Items in the Consolidated Financial Statements (Continued)

64. Foreign currency monetary items (Continued)

(1) Foreign currency monetary items (Continued)

Exchange rate	December 31, 2018			December 31, 2017 (Restated)		
	Foreign currency balance	Exchange rate	RMB Balance	Foreign currency balance	Exchange rate	RMB Balance
Other payables			502,558,677.36			482,765,548.54
Including: HKD	40,405.00	0.8762	35,402.86	40,404.49	0.8359	33,774.11
USE	22.86	6.8632	156.86	317,084.55	6.5342	2,071,893.87
EUR	11,419,285.53	7.8473	89,610,559.34	8,259,348.12	7.8023	64,441,911.80
GBP	1.00	8.6762	8.68	467,476.64	8.7792	4,104,070.92
RMB	412,912,549.62	1.0000	412,912,549.62	412,113,897.84	1.0000	412,113,897.84
Employee benefits payable			250,190.68			230,038.47
Including: RMB	250,190.68	1.0000	250,190.68	230,038.47	1.0000	230,038.47
Taxes payable			408,822,017.53			405,786,193.62
Including: RMB	408,822,017.53	1.0000	408,822,017.53	405,786,193.62	1.0000	405,786,193.62
Non-current liabilities due within one year			794,953,223.81			892,162,415.11
Including: USD	5,470,414.30	6.8632	37,544,547.42	6,692,512.95	6.5342	43,730,218.11
EUR	96,518,379.11	7.8473	757,408,676.39	101,595,879.11	7.8023	792,681,527.58
GBP	—	8.6762	—	6,350,313.15	8.7792	55,750,669.42
Short-term loans			2,641,948,282.92			2,306,692,643.47
Including: HKD	1,755,307,007.53	0.8762	1,538,000,000.00	960,000,000.00	0.8359	802,464,000.00
USD	—	6.8632	—	67,900,000.00	6.5342	443,672,180.00
EUR	140,678,740.83	7.8473	1,103,948,282.92	135,928,695.83	7.8023	1,060,556,463.47
Long-term loans			6,693,073,537.83			6,606,159,682.71
Including: USD	35,557,692.80	6.8632	244,039,557.22	41,028,107.10	6.5342	268,085,857.41
EUR	821,815,653.87	7.8473	6,449,033,980.61	812,334,032.95	7.8023	6,338,073,825.30

(2) Description of overseas business entities:

The sales customers of GNPJVC are mainly GNIC and HKNIC, and all of the sales are conducted in USD. During the period of preparation for the establishment of GNPJVC, the funds required for the construction of the nuclear power plant were mainly obtained from loans for financing, the funds from which were mainly long-term USD loans, and such loans from financing activities were repaid in USD. Therefore, GNPJVC selected USD as its reporting currency.

(VI) Change of consolidation scope

1. Business combination under common control

(1) Business combination under common control

Unit: RMB

Name of the combined party	Percentage of interest obtained under the business combination	Basis for business combination under common control	Date of combination	Determination basis of combination date	Income of the combined party from the beginning of the current period of business combination	Net profit of the combined party from the beginning of the current period of business combination	Income of the combined party in 2017	Net profit of the combined party in 2017
Power Sales Company	100%	Under common control of CGNPC before and after the acquisition	April 30, 2018	Controls obtained	1,357,727.21	1,578,647.42	4,281,676.74	4,163,265.36
Ocean Power	100%	Under common control of CGNPC before and after the acquisition	April 30, 2018	Controls obtained	—	19,527.09	—	83,482.24
Hebei Thermal Power	100%	Under common control of CGNPC before and after the acquisition	April 30, 2018	Controls obtained	—	15,478.34	—	69,225.03

(2) Combination cost

Unit: RMB

Combination cost	Power Sales Company	Ocean Power	Hebei Thermal Power	Total
Cash	214,783,136.88	10,147,181.10	10,086,193.06	235,016,511.04

Note: In 2018, the amount fully paid for equity acquisition by the Company was RMB235,016,511.04.

Notes to the Financial Statements

For the year ended December 31, 2018

(VI) Change of consolidation scope

1. Business combination under common control (Continued)

(3) Book value of the assets and liabilities of the combined party on the date of combination

Unit: RMB

	Power Sales Company		Ocean Power		Hebei Thermal Power	
	Combination date	At the end of 2017	Combination date	At the end of 2017	Combination date	At the end of 2017
Assets:	217,721,674.49	216,251,830.74	10,147,205.02	10,127,677.93	10,086,202.41	10,070,724.07
Cash at bank and in hand	19,759,805.97	18,547,107.03	10,147,205.02	10,127,677.93	10,086,202.41	10,070,724.07
Bills receivable and accounts receivable	420,393.07	523,476.71	—	—	—	—
Other receivables	5,350,445.30	4,804,441.14	—	—	—	—
Other current assets	190,000,000.00	190,001,484.36	—	—	—	—
Fixed assets	96,197.91	104,258.90	—	—	—	—
Intangible assets	114,490.62	125,660.42	—	—	—	—
Amortization of long-term deferred expenses	1,980,341.62	2,145,402.18	—	—	—	—
Liabilities:	2,967,656.94	3,076,460.61	—	—	—	—
Bills payable and accounts payable	23,962.10	123,897.30	—	—	—	—
Taxes payable	357,253.78	770,627.44	—	—	—	—
Other payables	2,586,441.06	2,181,935.87	—	—	—	—
Net assets	214,754,017.55	213,175,370.13	10,147,205.02	10,127,677.93	10,086,202.41	10,070,724.07
Less: Non-controlling interests	—	—	—	—	—	—
Net assets acquired	214,754,017.55	213,175,370.13	10,147,205.02	10,127,677.93	10,086,202.41	10,070,724.07

2. Disposal of subsidiaries

In 2018, the Company did not loss controls over its subsidiaries due to disposal of investment in subsidiaries.

3. Change of consolidation scope for other reasons

In August 2018, the Group established Sansha Advanced Energy Co., Ltd. (三沙先進能源有限公司) and Hebei Zhongzhuang Clean Thermal Energy Co., Ltd. (河北中莊清潔熱能有限公司).

(VII) Interests in other entities

1. Interests in subsidiaries

(1) Constitution of the corporate group

Name of subsidiary	Principal place of operation	Place of registration	Business nature	Shareholding (%)		Method of acquisition
				Direct	Indirect	
GNIC	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Investment	100.00	—	Establishment
GNP/VC	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Nuclear power generation	—	75.00	Establishment
DNMC	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Operations and management of nuclear power plant	—	87.50	Establishment
CGN Investment	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Investment	77.78	—	Establishment
CGN Ninghe Investment	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Investment	56.52	—	Establishment
Ling'ao Nuclear	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Nuclear power generation	70.00	30.00	Establishment
Lingdong Nuclear	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Nuclear power generation	25.00	75.00	Establishment
Yangjiang Nuclear	Yangjiang, Guangdong Province	Yangjiang, Guangdong Province	Nuclear power generation	34.00	25.00	Establishment
CGN Operations	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Provision of management, technology and consultancy services	100.00	—	Establishment
CNPRI	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Nuclear power technology development	100.00	—	Establishment
Inspection Company (Note 1)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Testing and maintenance of power stations	—	81.52	Establishment
Daya Bay Environment Protection	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Environment protection relating to nuclear power	100.00	—	Establishment
CGN Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Radiation detection and evaluation, instrument verification	—	100.00	Establishment
China Daya Bay Nuclear Power Technology Research Institute Co., Ltd. (中國大亞灣核電技術研究院有限公司)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Nuclear power technology development	—	100.00	Business combination not under same control
Suzhou Nuclear Power Research Institute	Suzhou, Jiangsu Province	Suzhou, Jiangsu Province	Nuclear power technology development	100.00	—	Business combination not under same control
CNPSTC	Beijing	Beijing	Nuclear power technology development	—	75.00	Business combination not under same control
Ningde Nuclear	Ningde, Fujian Province	Ningde, Fujian Province	Nuclear power generation	—	46.00	Business combination not under same control
Taishan Nuclear	Taishan, Guangdong Province	Taishan, Guangdong Province	Nuclear power generation	12.50	57.50	Business combination under same control
Taishan Investment	Taishan, Guangdong Province	Taishan, Guangdong Province	Investment	60.00	—	Business combination under same control
CGN Engineering	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Construction	100.00	—	Business combination under same control

Notes to the Financial Statements

For the year ended December 31, 2018

(VII) Interests in other entities (Continued)

1. Interests in subsidiaries (Continued)

(1) Constitution of the corporate group (Continued)

Name of subsidiary	Principal place of operation	Place of registration	Business nature	Shareholding (%)		Method of acquisition
				Direct	Indirect	
CGN Design	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Construction design	—	60.00	Business combination under same control
Shanghai Engineering Science & Technology Co., LTD (上海中廣核工程科技有限公司)	Shanghai	Shanghai	Other professional technical support	—	100.00	Business combination under same control
Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. (中法國際核能工程有限公司)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Other professional technical support	—	55.00	Business combination under same control
CGN Import & Export Co., Ltd. (中廣核電進出口有限公司)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Import and export trade	—	100.00	Business combination under same control
Fangchenggang Nuclear (Note 3)	Fangchenggang, Guangxi	Fangchenggang, Guangxi	Nuclear power generation	—	61.00	Business combination under same control
Lufeng Nuclear	Shanwei, Guangdong Province	Shanwei, Guangdong Province	Nuclear power generation	100.00	—	Business combination under same control
Power Sales Company (Note 2)	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Sales of electricity	100.00	—	Business combination under same control
Ocean Power (Note 2)	Tianjin	Tianjin	Development, construction and operations of offshore power stations	100.00	—	Business combination under same control
Hebei Thermal Power (Note 2)	Chengde, Hebei Province	Chengde, Hebei Province	Thermal power development	100.00	—	Business combination under same control
Yangxi Nuclear Power Co., Ltd. (陽西核電有限公司)	Yangjiang, Guangdong Province	Yangjiang, Guangdong Province	Investment, construction and operations of nuclear power plants	—	51.00	Establishment
Fangchenggang Investment (Note 3)	Fangchenggang, Guangxi	Fangchenggang, Guangxi	Investment	60.00	—	Establishment
Hebei Zhongzhuang Clean Thermal Energy Co., Ltd. (河北中莊清潔熱能有限公司)	Xingtai, Hebei Province	Xingtai, Hebei Province	Thermal power generation	100.00	—	Establishment
Sansha Advanced Energy Co., Ltd. (三沙先進能源有限公司)	Sansha, Hainan Province	Sansha, Hainan Province	Island energy development, smart grid investment, transmission and distribution, sales of electricity	—	60.00	Establishment

Note 1: In May 2018, Suzhou Nuclear Power Research Institute, a subsidiary of the Company, increased its capital in its subsidiary Inspection Company, and the shareholding changed from 78.75% to 81.52% after such capital increase.

Note 2: On April 30, 2018, the Group acquired the entire equity interests in Power Sales Company, the entire equity in Ocean Power and the entire equity in Hebei Thermal Power from CGNPC and Nengzhahui, respectively.

Note 3: On January 10, 2018, the Company, holding 61% equity interests in Fangchenggang Nuclear, established Fangchenggang Investment with Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業) and held 60% equity interests in Fangchenggang Investment.

(VII) Interests in other entities (Continued)

1. Interests in subsidiaries (Continued)

(1) Constitution of the corporate group (Continued)

Basis for only holding half or less voting rights but still having control over the investees, as well as holding 50% or more voting rights but not having control over the investees:

CGN Ninghe Investment, a subsidiary of the Company, holds 46% of the voting rights of Ningde Nuclear. In December 2016, CGN Ninghe Investment and Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司) entered into the Concerted Party Agreement. Datang International Power Generation Co., Ltd. agreed to act in concert with Ningde Nuclear at the shareholders' meetings and the meetings of board of directors of Ningde Nuclear. Datang International Power Generation Co., Ltd. holds 44% equity interest in Ningde Nuclear. Therefore, after signing the Concerted Party Agreement, the Group can thus lead the relevant activities of Ningde Nuclear. Since January 1, 2017, the Group has obtained the control over Ningde Nuclear, which has been consolidated into the Group's consolidated financial statements. Ningde Nuclear has been changed from a joint venture of the Group to a subsidiary of the Group with unchanged shareholding.

(2) Significant non-wholly-owned subsidiaries

Unit: RMB

Name of subsidiary	Shareholding of non-controlling shareholders	Gains or losses attributable to non-controlling shareholders in 2018	Dividends announced to be distributed to non-controlling shareholders in 2018	Balance of non-controlling interests as at December 31, 2018
Yangjiang Nuclear	41.00%	1,780,390,637.56	—	8,494,959,414.07
Taishan Nuclear	30.00%	17,619,246.03	—	7,346,189,983.49
GNPJVC	25.00%	765,884,514.16	1,583,371,615.20	1,377,630,134.33
CGN Investment	22.22%	326,104,121.71	183,648,716.30	2,669,179,889.72
CGN Ninghe Investment	43.48%	443,411,663.31	89,108,340.67	3,013,065,160.92
Ningde Nuclear	54.00%	1,196,779,738.05	—	7,782,533,916.45
Taishan Investment	40.00%	22,196,686.06	—	5,853,790,955.24
Fangchenggang Investment	40.00%	136,281,374.76	—	2,816,281,721.19
Fangchenggang Nuclear	39.00%	261,476,257.41	—	2,542,511,234.54
Total		4,950,144,239.05	1,856,128,672.17	41,896,142,409.95

Notes to the Financial Statements

For the year ended December 31, 2018

(VII) Interests in other entities (Continued)

1. Interests in subsidiaries (Continued)

(2) Significant non-wholly-owned subsidiaries (Continued)

Name of subsidiary	Shareholding of non-controlling shareholders	Gains or losses attributable to non-controlling shareholders in 2017	Dividends announced to non-controlling shareholders in 2017	Balance of non-controlling interests as at December 31, 2017
Yangjiang Nuclear	41.00%	903,872,136.36	892,392,117.56	6,714,568,776.51
Taishan Nuclear	30.00%	(25,295,702.94)	—	7,328,570,737.46
GNPJVC	25.00%	824,643,386.24	9,176,499.88	2,123,734,940.33
CGN Investment	22.22%	183,648,716.30	—	2,438,037,552.31
CGN Ninghe Investment	43.48%	392,458,135.83	207,919,461.56	2,658,761,838.28
Ningde Nuclear	54.00%	877,398,159.53	801,156,538.45	6,585,754,178.49
Taishan Investment	40.00%	(3,508,268.81)	—	5,831,594,269.18
Fangchenggang Nuclear	39.00%	16,842,420.08	—	2,281,034,977.13
Total		3,170,058,982.59	1,910,644,617.45	35,962,057,269.69

(VII) Interests in other entities (Continued)

1. Interests in subsidiaries (Continued)

(3) Significant financial information of significant non-wholly-owned subsidiary

Unit: RMB

Name of subsidiary	December 31, 2018					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Yangjiang Nuclear	10,521,417,499.55	69,876,168,950.30	80,397,586,449.85	15,181,586,175.64	44,496,587,069.17	59,678,173,244.81
Taishan Nuclear	3,531,539,590.98	89,043,806,074.44	92,575,345,665.42	7,795,663,681.21	60,292,382,039.22	68,088,045,720.43
GNPIVC	8,678,246,710.95	4,028,179,047.52	12,706,425,758.47	4,823,030,754.03	2,372,874,467.23	7,195,905,221.26
CGN Investment	1,307,876.81	12,390,163,084.66	12,391,470,961.47	378,960,325.34	—	378,960,325.34
CGN Ninghe Investment	5,645,024,303.08	47,006,176,220.03	52,651,200,523.11	5,974,385,282.49	31,964,508,680.69	37,938,893,963.18
Including: Ningde Nuclear	5,643,214,692.19	46,586,933,546.71	52,230,148,238.90	5,853,539,712.95	31,964,508,680.69	37,818,048,393.64
Taishan Investment	2,097,359,167.96	12,564,528,184.34	14,661,887,352.30	3,288,899.52	24,121,064.69	27,409,964.21
Fangchenggang Investment	4,368,063,757.11	39,731,885,187.08	44,099,948,944.19	6,519,225,260.35	27,997,508,146.33	34,516,733,406.68
Including: Fangchenggang Nuclear	3,558,881,889.81	39,682,939,594.11	43,241,821,483.92	8,725,053,761.85	27,997,508,146.33	36,722,561,908.18
Total	34,842,958,906.44	274,640,906,748.37	309,483,865,654.81	40,676,140,378.58	167,147,981,467.33	207,824,121,845.91

Notes to the Financial Statements

For the year ended December 31, 2018

(VII) Interests in other entities (Continued)

1. Interests in subsidiaries (Continued)

(3) Significant financial information of significant non-wholly-owned subsidiary (Continued)

Unit: RMB

Name of subsidiary	December 31, 2017					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Yangjiang Nuclear	7,927,994,660.99	70,415,378,776.40	78,343,373,437.39	14,535,799,829.22	47,430,576,592.29	61,966,376,421.51
Taishan Nuclear	2,649,215,610.72	84,314,801,361.30	86,964,016,972.02	9,360,212,379.26	53,175,235,467.89	62,535,447,847.15
GNP/VC	7,504,348,958.51	4,525,895,622.38	12,030,244,580.89	1,603,632,183.73	1,931,672,635.98	3,535,304,819.71
CGN Investment	564,207,504.79	10,704,517,047.45	11,268,724,552.24	296,458,451.82	—	296,458,451.82
CGN Ninghe Investment	5,967,689,680.07	49,372,064,147.43	55,339,753,827.50	8,926,142,910.62	33,711,377,086.50	42,637,519,997.12
Including: Ningde Nuclear	5,964,219,122.84	48,952,821,474.11	54,917,040,596.95	9,010,238,326.99	33,711,377,086.50	42,721,615,413.49
Taishan Investment	2,018,109,843.68	12,566,451,975.96	14,584,561,819.64	742,906.65	4,833,240.05	5,576,146.70
Fangchenggang Nuclear	4,660,191,497.66	35,616,161,344.10	40,276,352,841.76	5,779,822,631.09	28,647,722,577.01	34,427,545,208.10
Total	31,291,757,756.42	267,515,270,275.02	298,807,028,031.44	40,502,811,292.39	164,901,417,599.72	205,404,228,892.11

Unit: RMB

Name of subsidiary	Amount incurred for 2018				Amount incurred for 2017			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
Yangjiang Nuclear	12,962,449,023.33	4,342,416,189.16	4,342,416,189.16	8,211,232,217.79	10,971,708,550.12	3,628,770,473.81	3,628,770,473.81	6,230,076,028.52
Taishan Nuclear	254,142,930.95	58,730,820.12	58,730,820.12	(588,444,553.90)	—	(84,319,009.81)	(84,319,009.81)	(43,472,777.60)
GNP/VC	6,772,853,834.35	3,063,538,056.65	3,349,067,236.80	4,266,979,658.23	6,687,132,219.66	3,298,573,544.93	2,869,635,549.59	4,132,988,649.54
CGN Investment	—	1,467,615,309.23	1,467,615,309.23	(13,472.54)	—	826,501,873.52	826,501,873.52	(46,773.54)
CGN Ninghe Investment	10,242,862,552.62	2,215,013,715.46	2,215,013,715.46	6,980,443,018.60	9,123,393,183.46	1,781,587,823.19	1,781,587,823.19	7,981,902,270.92
Including: Ningde Nuclear	10,242,862,552.62	2,216,258,773.99	2,216,258,773.99	6,980,456,522.85	9,123,393,183.46	1,624,811,406.54	1,624,811,406.54	7,986,050,507.52
Taishan Investment	—	55,491,715.14	55,491,715.14	(17,013.22)	—	(8,770,672.01)	(8,770,672.01)	(11,452,806.66)
Fangchenggang Investment	4,928,767,987.90	692,821,331.29	692,821,331.29	4,097,762,039.33	N/A	N/A	N/A	N/A
Including: Fangchenggang Nuclear	4,928,767,987.90	670,451,942.08	670,451,942.08	4,099,701,780.72	4,034,039,253.03	43,185,692.51	43,185,692.51	3,167,107,138.53

(4) As at December 31, 2018, there was no significant restriction on using the corporate group's assets and settling the corporate group's debts.

(VII) Interests in other entities (Continued)

2. Control over subsidiaries' transactions despite change in owners' equity in subsidiaries

(1) Descriptions of change in owners' equity in subsidiaries

In January 2018, the Company, holding 61% equity interests in Fangchenggang Nuclear, established Fangchenggang Investment with Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業) and held 60% equity interest in it, which was regarded as disposal of certain equity interests in Fangchenggang Nuclear in the consolidated financial statements. The effect of such disposal of equity interest on capital reserve amounted to RMB265,798,413.32.

In May 2018, Suzhou Nuclear Power Research Institute, a subsidiary of the Company, increased its investment to the Inspection Company, its subsidiary. Upon the capital increase, the shareholding was changed from 78.75% to 81.52%. The Group included the difference between the capital increase above and the share of the net assets of the subsidiary based on the new shareholding that continuously calculated from the date of acquisition and the effect of the dividend distribution of RMB117,295.16 into the capital reserve.

(2) Impact of transactions on non-controlling interests and equity attributable to owners of the parent company

Unit: RMB	
Item	Fangchenggang Nuclear
Consideration of disposal	1,823,964,440.00
Less: Share of net assets of the subsidiary calculated according to the shareholding disposed of	1,464,024,066.43
Less: Effect of deferred tax expenses	94,141,960.25
Difference	265,798,413.32
Including: Adjustment to capital reserves	265,798,413.32

Unit: RMB	
Item	Inspection Company
Share of net assets of the subsidiary calculated according to the shareholding acquired	30,469,197.80
Actual share of dividends from the subsidiary	11,729,859.14
Less: Cost of acquisition (Increasing investment in the subsidiary)	30,000,000.00
Less: Share of dividends calculated as per shareholding	12,316,352.10
Difference	117,295.16
Including: Adjustment to capital reserves	117,295.16

Notes to the Financial Statements

For the year ended December 31, 2018

(VII) Interests in other entities (Continued)

3. Interests in joint ventures or associates

(1) Significant joint ventures or associates

Name of joint venture or associate	Principal place of operation	Place of registration	Business nature	Shareholding (%)		Accounting treatment for investment in joint venture and associate
				Direct	Indirect	
Hongyanhe Nuclear	Dalian, Liaoning Province	Dalian, Liaoning Province	Nuclear power generation	—	45.00	Equity method
CGN Fund Phase I	Shenzhen, Guangdong Province	Beijing	Nuclear investment	31.43	—	Equity method
CGN Finance	Shenzhen, Guangdong Province	Shenzhen, Guangdong Province	Financial services	—	30.00	Equity method

(VII) Interests in other entities (Continued)

3. Interests in joint ventures or associates (Continued)

(2) Significant financial information of significant associates

Unit: RMB

	December 31, 2018/2018			December 31, 2017/2017		
	Hongyanhe Nuclear	CGN Fund Phase I	CGN Finance	Hongyanhe Nuclear	CGN Fund Phase I	CGN Finance
Current assets	7,515,714,324.09	140,858,272.70	27,688,019,573.95	6,331,838,815.11	592,183,063.27	26,099,015,916.14
Non-current assets	64,271,892,321.38	7,429,637,279.21	6,794,084,497.56	61,574,495,580.68	5,978,671,680.27	11,746,869,150.28
Total assets	71,787,606,645.47	7,570,495,551.91	34,482,104,071.51	67,906,334,395.79	6,570,854,743.54	37,845,885,066.42
Current liabilities	7,356,204,043.13	335,878.24	30,714,938,944.75	9,090,453,105.89	336,868.34	33,912,195,119.98
Non-current liabilities	49,077,854,592.72	—	—	45,281,649,360.08	—	25,353,250.68
Total liabilities	56,434,058,635.85	335,878.24	30,714,938,944.75	54,372,102,465.97	336,868.34	33,937,548,370.66
Non-controlling interests	—	—	—	—	—	—
Equity attributable to the shareholders of the parent company	15,353,548,009.62	7,570,159,673.67	3,767,165,126.76	13,534,231,929.82	6,570,517,875.20	3,908,336,695.76
Share of net assets calculated as per shareholding	6,909,096,604.33	2,379,195,239.01	1,130,149,538.02	6,090,404,368.42	2,065,021,812.01	1,172,501,008.72
– Unrealized profits of internal transactions	(763,013,942.68)	(62,470,171.59)	—	(1,404,908,697.59)	(62,470,186.86)	—
Book value of equity investment in associates	6,146,082,661.65	2,316,725,067.42	1,130,149,538.02	4,685,495,670.83	2,002,551,625.15	1,172,501,008.72
Operating revenue	8,937,928,340.67	—	1,135,351,979.31	6,878,201,150.93	—	1,023,253,395.08
Net profit	1,333,890,411.38	960,346,581.33	254,230,565.23	446,147,035.09	423,881,774.90	457,918,431.35
Other comprehensive income	—	—	(258,758,519.12)	—	—	(379,076,023.32)
Total comprehensive income	1,333,890,411.38	960,346,581.33	(4,527,953.89)	446,147,035.09	423,881,774.90	78,842,408.03
Dividends received from associates for the year	180,689,549.21	226,285,920.00	41,042,788.79	88,453,566.58	172,857,300.00	131,400,382.85

Notes to the Financial Statements

For the year ended December 31, 2018

(VII) Interests in other entities (Continued)

3. Interests in joint ventures or associates (Continued)

(3) Consolidated financial information of insignificant joint ventures and associates

Unit: RMB

	December 31, 2018/2018	December 31, 2017/2017
Joint ventures:		
Total book value of investment	—	17,187,489.24
The sum of the following items calculated as per shareholding		
– Net profit	(687,161.62)	2,998,035.98
– Other comprehensive income	—	—
– Total comprehensive income	(687,161.62)	2,998,035.98
Associates:		
Total book value of investment	610,065,909.83	485,895,246.51
The sum of the following items calculated as per shareholding		
– Net profit	65,924,730.25	64,695,247.67
– Other comprehensive income	(788,366.06)	(578,488.16)
– Total comprehensive income	65,136,364.19	64,116,759.51

(4) As at December 31, 2018, there was no major restriction on capacity of capital transfer from associates or joint ventures to the Group.

(VIII) Risks Relevant to Financial Instruments

Major financial instruments of the Group include cash at bank and in hand, derivative financial instruments, bills receivable and accounts receivable, other receivables, loans, bills payable, accounts payable, other payables, bonds payable etc. See Note (V) for details of the financial instruments. The following are risks relevant to these financial instruments and the risk management policies taken by the Group for reducing these risks. The management of the Group managed and supervised these risk exposures to keep the said risks under control.

The Group adopts sensitivity analysis method to analyze the potential impact of possible appropriate change in risk variables on current profits & losses or the shareholders' equity. As any risk variable seldom changes alone and correlation between variables greatly accounts for the final amount influenced by change of a certain risk variable, the following content is conducted under the assumption that change of each variable is independent.

1. Risk management objectives and policies

The Group's risk management objective is to achieve balance between risks and return, minimize the adverse effect of risks on the operating results of the Group and maximize the interests of shareholders and other equity investors. To achieve the said objective, the Group formulated a basic strategy of defining and analyzing various risks faced by the Group, setting a bottom line of risk tolerance and conducting timely and reliable supervision on the risks to keep them under control.

1.1 Market risk

1.1.1 Foreign exchange risk

Foreign exchange risk represents the risk of loss due to exchange rate changes. The Group's exposure to foreign exchange risk is mainly related to USD, EURO and GBP. Except for the GNPJVC which mainly conducts sales in USD, the Group's other major business activities are denominated and settled in RMB. On December 31, 2018, except for the following assets and liabilities, which are non-functional currency balances, the assets and liabilities of the Group are functional currency balances. The foreign exchange risk arising from the assets and liabilities of the foreign currency balances described below may have an impact on the Group's operating results.

Notes to the Financial Statements

For the year ended December 31, 2018

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.1 Foreign exchange risk (Continued)

(1) Foreign currency assets and liabilities of the Group denominated in RMB

	Unit: RMB	
	December 31, 2018	December 31, 2017 (Restated)
Cash at bank and in hand - HKD	8,541,348.92	8,071,084.83
Cash at bank and in hand - USD	1,916,600,581.53	1,110,888,305.25
Cash at bank and in hand - EUR	81,859,317.43	334,735,126.94
Cash at bank and in hand - GBP	16,438,882.63	93,086.65
Cash at bank and in hand - ZAR	21,894.26	24,008.05
Bills receivable and accounts receivable - USD	—	9,679,303.94
Bills receivable and accounts receivable - EUR	44,786,922.05	7,607,433.33
Bills receivable and accounts receivable - GBP	—	15,407,496.00
Other receivables - USD	1,501,393.91	1,374,994.04
Other receivables - EUR	50,942,710.18	739,779,914.43
Other receivables - GBP	3,720,999.46	—
Other receivables - ZAR	—	3,683,998.13
Bills payable and accounts payable - HKD	4,386,025.99	6,680,432.61
Bills payable and accounts payable - USD	98,542,769.43	69,210,194.20
Bills payable and accounts payable - EUR	315,678,255.69	368,175,988.73
Bills payable and accounts payable - GBP	8,177,288.50	5,022,890.26
Bills payable and accounts payable - JPY	142,139.04	542,942.54
Bills payable and accounts payable - CAD	—	25,135.95

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.1 Foreign exchange risk (Continued)

(1) Foreign currency assets and liabilities of the Group denominated in RMB (Continued)

	December 31, 2018	December 31, 2017 (Restated)
Bills payable and accounts payable - CHF	3,726,463.77	5,645,795.48
Other payables - HKD	6,661.75	(5,382.48)
Other payables - USD	156.86	2,071,893.87
Other payables - EUR	89,610,559.34	64,441,911.80
Other payables - GBP	8.68	4,104,070.92
Non-current liabilities due within one year - USD	37,544,547.42	43,730,218.11
Non-current liabilities due within one year - EUR	757,408,676.39	791,051,365.96
Non-current liabilities due within one year - GBP	—	57,380,831.04
Short-term loans - HKD	1,538,000,000.00	802,464,000.00
Short-term loans - USD	—	443,672,180.00
Short-term loans - EUR	1,103,948,282.92	1,060,556,463.47
Long-term loans - USD	244,039,557.22	268,085,857.41
Long-term loans - EUR	6,449,033,980.61	6,338,073,825.30

Notes to the Financial Statements

For the year ended December 31, 2018

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.1 Foreign exchange risk (Continued)

(2) Foreign currency assets and liabilities of the Group denominated in USD

Unit: RMB

	December 31, 2018	December 31, 2017
Cash at bank and in hand - RMB	2,488,447,170.00	1,878,768,461.74
Cash at bank and in hand - GBP	1,748,533.59	3,674,502.29
Cash at bank and in hand - HKD	129,404.62	179,036.11
Cash at bank and in hand - EUR	214,981.18	4,105,750.10
Bills receivable and accounts receivable - RMB	282,463,840.75	3,351,420.89
Other receivables - RMB	16,153,135.30	36,600,035.75
Other receivables - HKD	6,660.87	6,354.59
Bills payable and accounts payable - HKD	5,416,816.82	3,825,236.62
Bills payable and accounts payable - GBP	708,122.55	321,599.48
Bills payable and accounts payable - EUR	4,311,844.94	5,039,631.96
Bills payable and accounts payable - RMB	110,517,259.31	104,168,260.64
Other payables - RMB	412,912,549.62	412,113,897.84
Other payables - HKD	28,741.11	39,156.59

The management of the Group pays close attention to the influence of exchange rate fluctuations on the foreign exchange risk of the Group, and would consider hedging significant foreign exchange risk when necessary.

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.1 Foreign exchange risk (Continued)

Sensitivity analysis of exchange rate risks

The reasonable movements of exchange rate with all other variables unchanged may have the following impacts (before tax):

Foreign currency appreciation/depreciation denominated in RMB:

		Unit: RMB
	2018	2017 (Restated)
Exchange rate change		
5% appreciation	(426,291,566.16)	(404,979,293.18)
5% depreciation	426,291,566.16	404,979,293.18

RMB and other foreign currency appreciation/depreciation denominated in USD:

		Unit: RMB
	2018	2017
Exchange rate change		
5% appreciation	112,763,419.60	70,058,888.92
5% depreciation	(112,763,419.60)	(70,058,888.92)

Financial assets and financial liabilities held by the Group at FVTPL are measured at fair value at the balance sheet date. For forward foreign exchange contracts and currency swap contracts, the Group bears the risk of changes in exchange rate prices and closely monitors the impact of price changes on the Group.

Notes to the Financial Statements

For the year ended December 31, 2018

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.1 Foreign exchange risk (Continued)

Sensitivity analysis of exchange rate risks (Continued)

Since the fair values of certain financial instruments are determined by a general pricing model based on the discounted future cash flow method or other valuation techniques, and the valuation techniques themselves are based on certain valuation assumptions, as such, the valuation results are significantly sensitive to the valuation assumptions. Based on the valuation assumptions, the before-tax effects of reasonable movements of prices on current profit or loss and shareholders' equity are as follows, with other variables unchanged:

		Unit: RMB			
	Changes in exchange rate prices	2018		2017	
		Effect on profit	Effect on shareholders' equity	Effect on profit	Effect on shareholders' equity
Forward foreign exchange contracts					
Derivation financial instruments	Increase by 5%	—	—	69,467,753.62	69,467,753.62
Derivation financial instruments	Decrease by 5%	—	—	(72,429,255.61)	(72,429,255.61)

		Unit: RMB			
	Changes in exchange rate prices	2018		2017	
		Effect on profit	Effect on shareholders' equity	Effect on profit	Effect on shareholders' equity
Currency swap contracts					
Derivation financial instruments	Increase by 5%	74,349,462.75	74,349,462.75	38,753.41	38,753.41
Derivation financial instruments	Decrease by 5%	(74,349,462.75)	(74,349,462.75)	(11,436,244.52)	(11,436,244.52)

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.2 Interest rate risk – risk of changes in cash flow

The Group's risk of changes in cash flows of financial instruments which arise from changes in interest rates is mainly associated with bank loans at floating rate. The policies of the Group aim at maintaining the floating rates of these loans in order to eliminate the risk in fair value related to changes in interest rates.

Sensitivity analysis of interest rate risk

The sensitivity analysis of interest rate risk is conducted based on the following assumptions:

- Changes in market interest rate influence interest income or expense of variable-rate financial instruments;
- As for fixed-rate financial instruments measured at fair value, market interest rates only influence its interest income or expense;
- Changes in fair value of derivative financial instruments and other financial assets and liabilities are calculated by using discounted cash flow method and in accordance with the market interest rate on the balance sheet date.

Based on the assumptions above, if other variables remain unchanged, the before-tax impacts of potential reasonable movements of interest rate are as follows:

		Unit: RMB	
Item	Change in interest rate	2018	2017
Short-term loans	Increase by 1%	(74,379,751.95)	(97,106,196.92)
Short-term loans	Decrease by 1%	74,379,751.95	97,106,196.92
Non-current liabilities due within one year	Increase by 1%	(87,211,165.65)	(80,563,979.77)
Non-current liabilities due within one year	Decrease by 1%	87,211,165.65	80,563,979.77
Long-term loans	Increase by 1%	(1,594,388,919.01)	(1,559,988,020.82)
Long-term loans	Decrease by 1%	1,594,388,919.01	1,559,988,020.82

Financial assets and financial liabilities held by the Group at FVTPL are measured at fair value at the balance sheet date. For interest rate swap contracts, the Group bears the risk of changes in exchange rate prices and closely monitors the impact of price changes on the Group.

Notes to the Financial Statements

For the year ended December 31, 2018

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.1 Market risk (Continued)

1.1.2 Interest rate risk – risk of changes in cash flow (Continued)

Sensitivity analysis of interest rate risk (Continued)

Since the fair values of certain financial instruments are determined by a general pricing model based on the discounted future cash flow method or other valuation techniques, and the valuation techniques themselves are based on certain valuation assumptions, as such, the valuation results are significantly sensitive to the valuation assumptions. Based on the valuation assumptions, the before-tax effects of reasonable movements of prices on current profit or loss and shareholders' equity are as follows, with other variables unchanged:

		Unit: RMB			
Interest rate swap contracts	Changes in exchange rate prices	2018		2017	
		Effect on profit	Effect on shareholders' equity	Effect on profit	Effect on shareholders' equity
Derivative financial instruments	Increase by 0.5%	1,654,625.76	1,654,625.76	4,557,827.01	4,557,827.01
Derivative financial instruments	Decrease by 0.5%	(1,654,625.76)	(1,654,625.76)	(4,557,826.97)	(4,557,826.97)

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.2 Credit risk

On the balance sheet date, the maximum exposure to credit risk that may cause financial losses to the Group mainly arises from the losses incurred to the financial assets of the Group due to the failure of the other party to perform its obligations, which specifically include:

The carrying amount of the financial assets recognized in the consolidated balance sheet. For financial instruments measured at fair value, the book value reflects its risk exposure, but it is not the maximum risk exposure, and its maximum risk exposure will vary in line with future changes in fair value.

In order to reduce credit risk, the Group reviews the collection of each individual receivable on each balance sheet date to ensure that adequate bad debt provision is made for unrecoverable amounts. As a result, the management of the Group believes that the credit risk assumed by the Group has been significantly reduced.

The Group had taken necessary measures to make sure all customers have a good credit record. Except the top five accounts receivables, the Group had no other significant credit concentration risk.

		Unit: RMB
	December 31, 2018	December 31, 2017 (Restated)
Bills receivable and accounts receivable - Guangdong Power Grid Co., Ltd.	3,549,360,763.92	2,673,081,180.29
Bills receivable and accounts receivable -HKNIC	453,284,714.66	222,636,102.34
Bills receivable and accounts receivable - Fujian Electric Power Co., Ltd.	709,256,387.61	811,168,010.20
Bills receivable and accounts receivable - Guangxi Power Grid Co., Ltd.	546,981,863.78	639,588,967.08
Bills receivable and accounts receivable - Hongyanhe Nuclear	203,739,590.93	1,573,875,590.03
Other receivables – CGNPC	38,351.54	824,034,496.21
Other receivables – CLP Nuclear Power (Yangjiang) Limited	300,843,139.00	303,343,139.00
Total	5,763,504,811.44	7,047,727,485.15

Notes to the Financial Statements

For the year ended December 31, 2018

(VIII) Risks Relevant to Financial Instruments (Continued)

1. Risk management objectives and policies (Continued)

1.3 Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The management monitors the utilization of bank loans and ensures compliance with loan agreements.

As at December 31, 2018, the current liabilities of the Group exceeded the current assets and amounted to RMB5,237,175,137.29. The Group had unutilized loan facilities from banks and other financial institutions amounting to RMB121,693,020,417.03. The management of the Group is of the view that the Group would have adequate financial resources to settle the financial obligations and commitments in future. Therefore, the financial statements have been prepared on the basis of going concern.

The following is the maturity analysis for financial liabilities held by the Group which is based on undiscounted remaining contractual obligations:

Unit: RMB

	December 31, 2018			Total
	Within one year	One to five years	Over five years	
Non-derivative financial liabilities:				
Short-term loans	16,633,227,997.92	—	—	16,633,227,997.92
Bills payable and accounts payable	18,247,064,570.09	—	—	18,247,064,570.09
Other payables	4,507,403,448.57	—	—	4,507,403,448.57
Non-current liabilities due within one year	18,664,455,472.91	—	—	18,664,455,472.91
Long-term loans	8,056,345,732.11	53,742,368,651.70	222,173,020,829.81	283,971,735,213.62
Bonds payable	441,725,131.62	9,145,375,359.40	—	9,587,100,491.02
Derivative financial liabilities:				
Derivative financial liabilities	4,217,065.84	—	—	4,217,065.84

2. Transfer of financial assets

- (1) As at December 31, 2018, the Group did not have financial assets that have been transferred but not derecognized.
- (2) As at December 31, 2018, the Group did not have financial assets that have been derecognized but continued its involvement in transferred financial assets.

(IX) Disclosure of Fair Value

1. Closing fair value of assets and liabilities measured at fair value

Unit: RMB

	December 31, 2018			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
I. Recurring fair value measurement				
Currency swap contracts	—	4,753,642.10	—	4,753,642.10
Interest rate swap contracts	—	4,461,761.04	—	4,461,761.04
Other investment in equity instruments	—	312,689,500.00	110,000,000.00	422,689,500.00
Total assets continuously measured at fair value	—	321,904,903.14	110,000,000.00	431,904,903.14
Currency swap contracts	—	(2,724,971.67)	—	(2,724,971.67)
Total liabilities continuously measured at fair value	—	(2,724,971.67)	—	(2,724,971.67)

Unit: RMB

	December 31, 2017			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
I. Recurring fair value measurement				
Forward foreign exchange contracts	—	353,919.00	—	353,919.00
Interest rate swap contracts	—	4,238,266.19	—	4,238,266.19
Total assets continuously measured at fair value	—	4,592,185.19	—	4,592,185.19
Forward foreign exchange contracts	—	(31,466,551.17)	—	(31,466,551.17)
Currency swap contracts	—	(93,726.56)	—	(93,726.56)
Total liabilities continuously measured at fair value	—	(31,560,277.73)	—	(31,560,277.73)

Notes to the Financial Statements

For the year ended December 31, 2018

(IX) Disclosure of Fair Value (Continued)

2. Qualitative and quantitative information of valuation techniques and important parameters adopted for recurring and non-recurring level 2 fair value measurements

Unit: RMB

	Fair value at December 31, 2018	Fair value at December 31, 2017	Opening fair value	Inputs
Forward foreign exchange contracts	—	(31,112,632.17)	Discounted cash flow method	Forward foreign exchange rate
Currency swap contracts	2,028,670.43	(93,726.56)	Discounted cash flow method	U.S. swap for 2-30 years, swap rate, RMB-denominated interest rate, price volatility, risk free rate, contracted interest rates, interest rate swap contracts
Interest rate Mswap contracts	4,461,761.04	4,238,266.19	Discounted cash flow method	U.S. swap for 2-30 years, swap rate, RMB-denominated interest rate, price volatility, risk free rate, contracted interest rates
Other investment in equity instruments	312,689,500.00	/	Listed company comparison method	Net profit attributable to the parent company during the reporting period, average price-earnings ratio of comparable companies, liquidity discount ratio of the investee

3. Qualitative and quantitative information of valuation techniques and important parameters adopted for recurring and non-recurring level 3 fair value measurements

Unit: RMB

	Fair value at December 31, 2018	Fair value at December 31, 2017	Valuation technique	Inputs
Other investment in equity instruments	110,000,000.00	/	Investments cost method	Investment costs

(IX) Disclosure of Fair Value (Continued)

4. Reconciliation between the opening and closing carrying amount and sensitivity analysis on unobservable parameters for recurring level 3 fair value measurements

Item	January 1, 2018	Transfer into Level 3	Transfer out of Level 3	Gains or loss for the period			December 31, 2018
				Included in profit or loss	Included in other comprehensive income	Purchase, issuance, sale and settlement	
Other investment in equity instruments	110,000,000.00	—	—	—	—	—	110,000,000.00

5. Fair value of financial assets and financial liabilities not measured at fair value

The management of the Group believes that the book values of financial assets and financial liabilities measured at amortized cost in the financial statements are close to the fair values of the same.

(X) Related Parties and Related Party Transactions

1. Parent company of the Company

Unit: RMB

Name of company	Place of registration	Nature of business	Registered capital	Shareholding of the parent company in the Company (%)	Voting rights of the parent company in the Company (%)
CGNPC	Shenzhen	Nuclear power industry	RMB13,723.53 million	64.20	64.20

The parent company of the Company is CGNPC. The ultimate actual controlling shareholder is the SASAC of the State Council.

2. Subsidiaries of the Company

Details of the subsidiaries of the Company are set out in Note (VII)1.

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

3. Joint ventures and associates of the Company

Details of the significant joint ventures and associates of the Company are set out in Note (VII)3.

Other joint ventures or associates which conduct related party transactions with the Group, or have balance arising from related party transactions with the Group in prior periods are as follows:

Name of joint venture or associate	Relationship with the Company
Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	Joint venture
Ningde Second Nuclear	Associate
Hongyanhe Nuclear	Associate
China Nuclear Industry 23 Construction Co., Ltd.	Associate
CIECC Engineering Company Limited	Associate
Finance Company	Associate, under the control of the same party
CGN Fund Phase I	Associates, a non-controlling shareholder with significant influence on subsidiaries

(X) Related Parties and Related Party Transactions (Continued)

4. Other related parties

Name of other related parties	Relationship with the Company
Nengzhihui and its subsidiaries	Under the control of the same party
Anhui Wuhu Nuclear Power Co., Ltd. (安徽蕪湖核電有限公司)	Under the control of the same party
Techenergy	Under the control of the same party
Hubei Nuclear Power Co., Ltd. (湖北核電有限公司)	Under the control of the same party
Shenzhen Daya Bay Nuclear Power Experts Club Management Co., Ltd. (深圳大亞灣核電專家會所管理有限公司)	Under the control of the same party
Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	Under the control of the same party
Shenzhen Lvyuan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	Under the control of the same party
Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	Under the control of the same party
Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	Under the control of the same party
Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	Under the control of the same party
Shenzhen Zhenhe Construction Engineering Project Management Co., Ltd. (深圳市振核建設工程項目管理有限公司)	Under the control of the same party
Xianning Nuclear Power Co., Ltd. (咸寧核電有限公司)	Under the control of the same party
Yangjiang Nuclear Power Site Development Co., Ltd. (陽江核電基地開發有限公司)	Under the control of the same party
CGN Insurance Brokerage Co., Ltd. (中廣核保險經紀有限責任公司)	Under the control of the same party
CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	Under the control of the same party
CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	Under the control of the same party
CGN Wind Energy Co., Ltd. and its subsidiaries	Under the control of the same party
CGN Services Group	Under the control of the same party
Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司) (Note 1)	Under the control of the same party
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	Under the control of the same party
China Nuclear Power EPC Limited	Under the control of the same party
CGN Nuclear Technology Application Co., Ltd. (中廣核核技術應用有限公司) and its subsidiaries	Under the control of the same party
CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	Under the control of the same party
CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	Under the control of the same party
CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業 (深圳) 有限公司)	Under the control of the same party

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

4. Other related parties (Continued)

Name of other related parties	Relationship with the Company
CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	Under the control of the same party
CGN Energy Conservation Industry Development Co., Ltd. and its subsidiaries	Under the control of the same party
CGN Energy Development Co., Ltd. and its subsidiaries	Under the control of the same party
CGN Europe Energy	Under the control of the same party
CGN Taishan No. 2 Nuclear Power Co., Ltd. (中廣核台山第二核電有限公司)	Under the control of the same party
CGN Solar Energy (Shenzhen) Co., Ltd. (中廣核太陽能(深圳)有限公司)	Under the control of the same party
CGN Solar Energy Development Co., Ltd. and its subsidiaries	Under the control of the same party
CGN Yangzheng Health Technology (Shenzhen) Co., Ltd. (中廣核養正健康科技(深圳)有限公司)	Under the control of the same party
CGN Uranium Resources Co., Ltd. and its subsidiaries	Under the control of the same party
CGN Uranium Logistics (Beijing) Co., Ltd. (中廣核鈾業物流(北京)有限公司)	Under the control of the same party
CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	Under the control of the same party
Shenzhen Zhaoyinbailu Investment Partnership (Limited Partnership) (深圳招銀白鷺投資合夥企業(有限合夥))	Under the control of the same party
Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	Under the control of the same party
Lingwan Nuclear Power Co., Ltd. (嶺灣核電有限公司)	Under the control of the same party
Swakop Uranium (Pty) Ltd.	Under the control of the same party
CGN Nuclear Technology Development Co., Ltd. (中廣核核技術發展股份有限公司)	Under the control of the same party
CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	Under the control of the same party
CGN Hongda Environmental Technology Co., Ltd. (中廣核宏達環境科技有限責任公司)	Under the control of the same party
CGN Haihong Technology (Shenzhen) Co., Ltd. (中廣核海弘科技(深圳)有限公司)	Under the control of the same party
CGN Europe Consulting	Under the control of the same party
Shenzhen Huaidian Checking & Repairing Company (深圳淮電檢修公司)	Under the control of the same party
CGN Yangjiang Offshore Wind Power Co., Ltd. (中廣核陽江海上風力發電有限公司)	Under the control of the same party
Wuxi Nengzhahui Environmental Protection Technology Co., Ltd. (無錫能之匯環保科技有限公司)	Under the control of the same party
CGN (Foshan) New Energy Technology Co., Ltd. (中廣核(佛山)新能源科技有限公司)	Under the control of the same party
Nantong Meiya Thermoelectricity Co., Ltd. (南通美亞熱電有限公司)	Under the control of the same party

(X) Related Parties and Related Party Transactions (Continued)

4. Other related parties (Continued)

Name of other related parties	Relationship with the Company
Siyang County Beichuan Power Engineering Co., Ltd. (泗陽縣北穿電力工程有限公司)	Under the control of the same party
CGN Linyang New Energy Co., Ltd. (中廣核林洋新能源泗洪有限公司)	Under the control of the same party
Heilongjiang Xianghe New Energy Co., Ltd. (黑龍江祥鶴新能源有限公司)	Under the control of the same party
Suichuan Datang Hanye New Energy Co., Ltd. (遂川大唐漢業新能源有限公司)	Under the control of the same party
Suqian Hongchen Power Co., Ltd. (宿遷市宏辰電力有限公司)	Under the control of the same party
Zhenlai CGN New Energy Co., Ltd. (鎮賚中廣核新能源有限公司)	Under the control of the same party
CGN Shaoguan Nuclear Power Co., Ltd. (中廣核韶關核電有限公司)	Under the control of the same party
HKNIC	Non-controlling shareholders with significant influence on subsidiaries
Framatome Inc. (Note 2)	Non-controlling shareholders with significant influence on subsidiaries
TECNATOM, S.A.	Non-controlling shareholders with significant influence on subsidiaries
Guangdong Electric Power Design Institute of China Energy Engineering Group	Non-controlling shareholders with significant influence on subsidiaries
Beijing Hollysys Systems Engineering Co., Ltd.	Non-controlling shareholders with significant influence on subsidiaries
EDF International	Non-controlling shareholders with significant influence on subsidiaries
EDF (China) Holding Ltd.	Non-controlling shareholders with significant influence on subsidiaries
CLP Nuclear Power Operations & Management (China) Limited (中電核電運營管理(中國)有限公司)	Non-controlling shareholders with significant influence on subsidiaries
Guangdong Yudean Group Co., Ltd. (廣東省粵電集團有限公司)	Non-controlling shareholders with significant influence on subsidiaries
Guangxi Investment Group Co., Ltd. (Note 3)	Non-controlling shareholders with significant influence on subsidiaries
CLP Nuclear Power (Yangjiang) Limited	Non-controlling shareholders with significant influence on subsidiaries
Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司)	Non-controlling shareholders with significant influence on subsidiaries
Guangxi GI Energy Co., Ltd. (廣西廣投能源有限公司) (Note 3)	Non-controlling shareholders with significant influence on subsidiaries
Fujian Energy Group Co., Ltd. (福建省能源集團有限責任公司)	Non-controlling shareholders with significant influence on subsidiaries
Definite Arise Limited	Associates of the ultimate controlling party
Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	Associates of the ultimate controlling party

Note 1: On November 13, 2018, CGN Management Consulting (Shenzhen) Co., Ltd. (中廣核管理諮詢(深圳)有限公司) was officially renamed Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司).

Note 2: On January 1, 2018, AREVA NP was officially renamed Framatome Inc.

Note 3: On January 10, 2018, the Company and Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業(有限合夥)) jointly set up Fangchenggang Investment. The former non-controlling shareholder Guangxi Investment Group Co., Ltd. transferred all its shares held in Fangchenggang Nuclear to Guangxi Investment Group Fangyuan Power Co., Ltd. (廣西投資集團方元電力股份有限公司) in January 2018. Such company was merged with another company in May 2018 to establish Guangxi GI Energy Co., Ltd. (廣西廣投能源有限公司). Guangxi GI Energy Co., Ltd. (廣西廣投能源有限公司) has become a non-controlling shareholder with significant influence on subsidiaries since May 2018.

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services:

Purchase of goods/Acceptance of services:

		Unit: RMB	
Related party	Related party transaction	2018	2017 (Restated)
CGN Uranium Resources Co., Ltd. and its subsidiaries	Purchase of goods/ Acceptance of services	4,351,398,741.25	3,419,019,021.48
China Nuclear Industry 23 Construction Co., Ltd.	Purchase of goods/ Acceptance of services	1,171,429,873.32	645,505,987.80
Framatome Inc.	Purchase of goods/ Acceptance of services	939,945,891.62	2,625,103.18
Techenergy	Purchase of goods/ Acceptance of services	486,560,743.91	623,013,601.34
CGN Services Group	Purchase of goods/ Acceptance of services	471,731,656.53	486,372,972.94
Shenzhen Lvyan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	Purchase of goods/ Acceptance of services	273,726,189.96	287,929,616.53
Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	Purchase of goods/ Acceptance of services	271,144,164.27	287,284,948.98
Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	Purchase of goods/ Acceptance of services	131,268,145.17	180,061,925.09
Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司)	Purchase of goods/ Acceptance of services	103,318,941.49	138,203,338.36
Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	Purchase of goods/ Acceptance of services	103,066,480.03	99,089,368.28
CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業(深圳)有限公司)	Purchase of goods/ Acceptance of services	86,724,149.37	100,707,159.92
CGNPC	Purchase of goods/ Acceptance of services	83,871,599.70	70,997,912.51
Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	Purchase of goods/ Acceptance of services	83,375,750.72	88,211,703.06
Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	Purchase of goods/ Acceptance of services	75,633,243.97	63,688,343.22
Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司)	Purchase of goods/ Acceptance of services	50,759,383.85	44,139,039.88
EDF International	Purchase of goods/ Acceptance of services	39,402,965.74	37,147,819.16
Guangdong Electric Power Design Institute of China Energy Engineering Group	Purchase of goods/ Acceptance of services	35,017,866.96	46,607,570.58
Shenzhen Zhenhe Construction Engineering Project Management Co., Ltd. (深圳市振核建設工程項目管理有限公司)	Purchase of goods/ Acceptance of services	28,609,466.36	12,970,332.53
CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	Purchase of goods/ Acceptance of services	16,749,992.06	—
CGN Hongda Environmental Technology Co., Ltd. (中廣核宏達環境科技有限責任公司)	Purchase of goods/ Acceptance of services	7,585,299.40	—

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services: (Continued)

Purchase of goods/Acceptance of services: (Continued)

Related party	Related party transaction	2018	2017 (Restated)
CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	Purchase of goods/ Acceptance of services	5,326,100.87	6,117,276.95
TECNATOM, S.A.	Purchase of goods/ Acceptance of services	4,553,121.55	—
CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	Purchase of goods/ Acceptance of services	4,342,979.99	—
Hongyanhe Nuclear	Purchase of goods/ Acceptance of services	2,196,859.74	4,926,662.61
CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	Purchase of goods/ Acceptance of services	1,792,452.82	—
CGN Nuclear Technology Application Co., Ltd. (中廣核技術應用有限公司) and its subsidiaries	Purchase of goods/ Acceptance of services	510,518.70	1,508,927.93
Finance Company	Purchase of goods/ Acceptance of services	—	1,320,754.73
Others	Purchase of goods/ Acceptance of services	2,653,083.94	4,219,424.45
Total		8,832,696,343.29	6,651,668,811.51

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services: (Continued)

Sale of goods/Rendering of services:

		Unit: RMB	
Related party	Related party transaction	2018	2017 (Restated)
HKNIC	Sale of electricity	5,409,246,934.30	5,332,836,996.25
Hongyanhe Nuclear	Sale of goods/ Rendering of services	531,512,574.42	477,152,661.96
China Nuclear Power EPC Limited	Sale of goods/ Rendering of services	185,823,770.18	15,352,740.00
CGN Wind Energy Co., Ltd. and its subsidiaries	Sale of goods/ Rendering of services	64,655,210.61	45,321,669.86
CGNPC	Sale of goods/ Rendering of services	45,404,322.27	22,013,302.92
Nengzhahui and its subsidiaries	Sale of goods/ Rendering of services	38,852,257.95	7,370,212.79
Swakop Uranium (Pty) Ltd.	Sale of goods/ Rendering of services	28,127,334.25	10,534,374.55
Techenergy	Sale of goods/ Rendering of services	24,473,125.20	14,139,349.32
CGN Uranium Resources Co., Ltd. and its subsidiaries	Sale of goods/ Rendering of services	14,745,088.83	11,942,126.83
CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	Sale of goods/ Rendering of services	11,709,126.60	2,926,106.16
CGN Solar Energy Development Co., Ltd. and its subsidiaries	Sale of goods/ Rendering of services	10,872,290.59	7,228,569.74
CGN Energy Conservation Industry Development Co., Ltd. and its subsidiaries	Sale of goods/ Rendering of services	8,437,552.39	3,850,740.79
CGN Services Group	Sale of goods/ Rendering of services	9,014,740.14	6,551,514.77
CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	Sale of goods/ Rendering of services	8,816,530.19	7,443,455.81
CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	Sale of goods/ Rendering of services	7,813,840.41	3,608,753.90
CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	Sale of goods/ Rendering of services	5,395,015.23	3,787,913.73
Finance Company	Sale of goods/ Rendering of services	4,271,465.97	4,304,914.90
CGN Nuclear Technology Application Co., Ltd. (中廣核核技術應用有限公司) and its subsidiaries	Sale of goods/ Rendering of services	3,474,027.81	—
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	Sale of goods/ Rendering of services	2,115,931.42	—
Framatome Inc.	Sale of goods/ Rendering of services	—	1,717,174.65
Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	Sale of goods/ Rendering of services	—	784,466.07
Others	Sale of goods/ Rendering of services	7,888,977.03	6,630,743.99
Total		6,422,650,115.79	5,985,497,788.99

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services: (Continued)

Provision of construction, installation and design services

		Unit: RMB	
Related party	Related party transaction	2018	2017
Hongyanhe Nuclear	Provision of construction, installation and design services	1,552,499,248.06	1,476,233,842.28
CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	Provision of construction, installation and design services	630,228,161.99	474,727,820.31
Ningde Second Nuclear	Provision of construction, installation and design services	468,039,996.92	296,920,494.87
CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	Provision of construction, installation and design services	112,422,739.91	201,294,297.27
CGN Wind Energy Co., Ltd. and its subsidiaries	Provision of construction, installation and design services	79,341,818.87	—
Xianning Nuclear Power Co., Ltd. (咸寧核電有限公司)	Provision of construction, installation and design services	32,397,916.31	96,687,644.10
CGNPC	Provision of construction, installation and design services	9,656,647.96	18,044,759.04
Hubei Nuclear Power Co., Ltd. (湖北核電有限公司)	Provision of construction, installation and design services	9,546,187.05	45,703.36
Lingwan Nuclear Power Co., Ltd. (嶺灣核電有限公司)	Provision of construction, installation and design services	6,744,648.43	8,993,489.31
CGN Shaoguan Nuclear Power Co., Ltd. (中廣核韶關核電有限公司)	Provision of construction, installation and design services	5,717,202.13	—
Swakop Uranium (Pty) Ltd	Provision of construction, installation and design services	3,131,429.40	—
CGN Energy Conservation Industry Development Co., Ltd. (中廣核節能產業發展有限公司) and its subsidiaries	Provision of construction, installation and design services	2,299,990.38	11,108.77
CGN Taishan No. 2 Nuclear Power Co., Ltd. (中廣核台山第二核電有限公司)	Provision of construction, installation and design services	—	2,119,028.84
China Nuclear Power EPC Limited	Provision of construction, installation and design services	—	47,201,641.76
Total		2,912,025,987.41	2,622,279,829.91

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(2) Related party transactions for leasing

The Group as lessor:

		Unit: RMB	
Name of lessee	Type of leased assets	Rental income recognized in 2018	Rental income recognized in 2017 (Restated)
Techenergy	Buildings	16,677,503.34	8,289,655.15
CGN Haihong Technology (Shenzhen) Co., Ltd. (中廣核海弘科技(深圳)有限公司)	Buildings	13,636,363.65	—
Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	Buildings	2,069,578.07	2,069,578.07
Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	Buildings	1,149,640.81	—
CGN Solar Energy Development Co., Ltd. and its subsidiaries	Buildings	899,319.28	302,277.11
CGN Services Group	Buildings	623,589.26	623,589.26
CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	Buildings	273,695.23	174,171.42
CGNPC	Buildings	212,757.14	258,534.00
CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	Buildings	117,585.33	—
Shenzhen Lyvuan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	Buildings	85,714.29	70,737.14
Finance Company	Buildings	—	236,836.38
CGN Wind Energy Co., Ltd. and its subsidiaries	Buildings	—	7,370.67
Total		35,745,746.40	12,032,749.20

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(2) Related party transactions for leasing (Continued)

The Group as lessee:

		Unit: RMB	
Name of lessor	Type of leased assets	Rental costs recognized in 2018	Rental costs recognized in 2017 (Restated)
CGNPC	Buildings	58,798,220.12	76,606,284.00
CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	Buildings	35,384,199.90	—
Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	Buildings	29,204,238.27	38,988,984.06
Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	Buildings	26,613,649.76	1,886,485.50
CGN Services Group	Buildings	13,066,613.24	1,760,901.54
CGN Nuclear Technology Development Co., Ltd. (中廣核技術發展股份有限公司)	Buildings	—	1,761,656.86
Total		163,066,921.29	121,004,311.96

(3) Related party transactions for guarantees

The Group as warrantee:

					Unit: RMB
Guarantor	Guaranteed amount	Start date	Expiry date	Whether the guarantee has been fulfilled	
CGNPC	500,000,000.00	2013/02/20	2022/02/20	No	
CGNPC	500,000,000.00	2013/07/04	2022/07/04	No	
CGNPC	1,000,000,000.00	2013/09/16	2022/09/16	No	
CGNPC	1,000,000,000.00	2013/12/02	2022/12/02	No	
CGNPC	3,000,000,000.00	2015/11/23	2020/11/13	Note 1	
Total	6,000,000,000.00	—	—	—	

Note 1: As at December 31, 2018 and December 31, 2017, the balance of loans under the guarantee was nil and RMB3,000,000,000.00, respectively.

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(4) Related party transactions for funds lending

Unit: RMB		
Related party	Amount in 2018	Amount in 2017 (Restated)
Borrowing from Finance Company	17,796,500,000.00	19,134,000,000.00
Shenzhen Zhaoyinbailu Investment Partnership (Limited Partnership) (深圳招銀白鷺投資合夥企業(有限合夥))	2,000,000,000.00	1,250,500,000.00
CGNPC	800,000,000.00	1,600,000,000.00
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	250,000,000.00	500,000,000.00
EDF (China) Holding Ltd.	197,000,000.00	197,000,000.00
CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	166,277,495.41	1,001,531,570.00
Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	100,000,000.00	—
EDF International	—	1,058,996,003.47
Total	21,309,777,495.41	24,742,027,573.47

(5) Related party transactions for asset transfer and debt restructuring

Unit: RMB			
Related party	Transaction	2018	2017
CGNPC	Acquisition of subsidiaries	20,233,374.16 (Note 1)	/
Nengzhahui and its subsidiaries	Acquisition of subsidiaries	214,783,136.88 (Note 2)	/
Total		235,016,511.04	—

Note 1: The Company acquired 100% equity interests in Ocean Power and 100% equity interests in Hebei Thermal Power from CGNPC at a consideration of RMB20,233,374.16 in April 2018.

Note 2: The Company acquired 100% equity interests in Power Sales Company from Nengzhahui at a consideration of RMB214,783,136.88 in April 2018.

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(6) Emoluments for key management

Unit: RMB

Item	2018	2017
Emoluments for key management	10,100,444.78	7,328,195.84

The remuneration of each director in 2018 was as follows:

Unit: RMB

	Directors' salaries	Wages and allowances	Bonus	Retirement benefits	Total
Executive director and chief executive					
Gao Ligang	—	227,263.70	661,400.56	91,559.16	980,223.42
Non-executive directors					
Zhang Shanming	—	—	—	—	—
Tan Jiansheng	—	—	—	—	—
Shi Bing	—	—	—	—	—
Zhong Huiling	—	—	—	—	—
Zhang Yong	—	—	—	—	—
Independent non-executive directors					
Na Xizhi	500,000.00	—	—	—	500,000.00
Hu Yiguang	450,000.00	—	—	—	450,000.00
Francis Siu Wai Keung	650,000.00	—	—	—	650,000.00
Total	1,600,000.00	227,263.70	661,400.56	91,559.16	2,580,223.42

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(6) Emoluments for key management (Continued)

The remuneration of each director in 2017 was as follows:

Unit: RMB

	Directors' salaries	Wages and allowances	Bonus	Retirement benefits	Total
Executive director and chief executive					
Gao Ligang	—	224,369.78	445,262.68	85,867.16	755,499.62
Non-executive directors					
Zhang Shanming	—	—	—	—	—
Tan Jiansheng	—	—	—	—	—
Shi Bing	—	—	—	—	—
Zhong Huiling	—	—	—	—	—
Zhang Yong	—	—	—	—	—
Xiao Xue	—	—	—	—	—
Zhuo Yuyun	—	—	—	—	—
Independent non-executive directors					
Na Xizhi	500,000.00	—	—	—	500,000.00
Hu Yiguang	450,000.00	—	—	—	450,000.00
Francis Siu Wai Keung	650,000.00	—	—	—	650,000.00
Total	1,600,000.00	224,369.78	445,262.68	85,867.16	2,355,499.62

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(6) Emoluments for key management (Continued)

The remuneration of each supervisor in 2018 was as follows:

Unit: RMB

	Supervisors' salaries	Wages and allowances	Bonus	Retirement benefits	Total
Supervisors					
Cai Zihua	—	587,914.41	424,465.50	81,379.46	1,093,759.37
Wang Hongxin	—	600,263.09	495,033.00	78,197.06	1,173,493.15
Independent supervisors					
Yang Lanhe	150,000.00	—	—	—	150,000.00
Chen Rongzhen	150,000.00	—	—	—	150,000.00
Total	300,000.00	1,188,177.50	919,498.50	159,576.52	2,567,252.52

The remuneration of each supervisor in 2017 was as follows:

Unit: RMB

	Supervisors' salaries	Wages and allowances	Bonus	Retirement benefits	Total
Supervisors					
Pan Yinsheng	—	262,737.83	313,713.87	34,050.30	610,502.00
Cai Zihua	—	555,624.38	504,107.84	76,782.36	1,136,514.58
Wang Hongxin	—	527,831.56	503,924.52	73,644.36	1,105,400.44
Independent supervisors					
Yang Lanhe	150,000.00	—	—	—	150,000.00
Chen Rongzhen	150,000.00	—	—	—	150,000.00
Total	300,000.00	1,346,193.77	1,321,746.23	184,477.02	3,152,417.02

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(6) Emoluments for key management (Continued)

The remuneration of five highest paid individuals are as follows:

	Unit: RMB	
	2018	2017
Wages and allowances	2,978,279.09	3,247,329.74
Bonus	3,883,029.13	3,819,536.46
Retirement benefits	380,332.55	395,449.40
Total	7,241,640.77	7,462,315.60

The remuneration of five highest paid individuals by band:

	Number of persons in 2018	Number of persons in 2017
HK\$1,000,001 to HK\$1,500,000 (Equivalent to RMB876,200.00 to RMB1,314,300.00)	3	5
HK\$1,500,001 to HK\$2,000,000 (Equivalent to RMB1,314,300.00 to RMB1,752,400.00)	2	—

(X) Related Parties and Related Party Transactions (Continued)

5. Related party transactions (Continued)

(7) Other related party transactions

Unit: RMB		
Item	2018	2017
Interest income from Finance Company	215,665,466.18	179,910,711.91
Interest income from CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	215.14	415.86
Total	215,665,681.32	179,911,127.77
Interest expenses on Finance Company	354,823,483.11	304,414,735.68
Interest expenses on Shenzhen Zhaoyinbailu Investment Partnership (Limited Partnership) (深圳招銀白鷺投資合夥企業 (有限合夥))	171,616,939.22	1,996,457.99
Interest expenses on CGNPC	29,990,833.33	168,367,054.06
Interest expenses on EDF International	28,182,916.33	4,971,397.89
Interest expenses on CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	24,997,272.73	79,823,073.26
Interest expenses on CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	21,458,897.11	66,582,801.98
Interest expenses on EDF (China) Holding Ltd.	7,825,414.58	2,228,070.00
Interest expenses on Hualong Pressurized cash flow Technology Corporation, Ltd. (華龍國際核電技術有限公司)	4,108,333.34	—
Total	643,004,089.75	628,383,590.86
Fee expenses on Finance Company	1,968,969.29	1,962,611.80
Fee expenses on CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	(35,015.93)	28,105.95
Total	1,933,953.36	1,990,717.75

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties

(1) Receivables

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
Cash at bank and in hand	Finance Company	13,666,632,773.77	10,729,932,365.06
	CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	19,307,219.05	6,460,340.45
	Total	13,685,939,992.82	10,736,392,705.51
Bills receivable and accounts receivable	HKNIC	453,284,714.66	222,636,102.34
	Ningde Second Nuclear	240,963,816.30	—
	Hongyanhe Nuclear	203,739,590.93	1,573,875,590.03
	China Nuclear Power EPC Limited	139,737,749.06	15,407,496.00
	CGN Wind Energy Co., Ltd. and its subsidiaries	60,168,508.87	50,464,981.45
	CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	49,587,723.02	6,097,604.04
	Swakop Uranium (Pty) Ltd.	46,180,741.61	19,750,527.06
	Techenergy	31,191,890.73	9,047,160.04
	Nengzhahui and its subsidiaries	28,706,496.88	—
	Framatome Inc.	22,547,797.42	21,773,441.20
	CGN Haihong Technology (Shenzhen) Co., Ltd. (中廣核海弘科技(深圳)有限公司)	15,000,000.00	—
	CGNPC	14,600,952.60	4,798,121.70
	CGN Uranium Resources Co., Ltd. and its subsidiaries	14,549,552.46	9,726,169.74
	CGN Solar Energy Development Co., Ltd. and its subsidiaries	13,733,771.79	9,233,886.93
	CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	12,823,179.86	—
	CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	10,572,749.71	—
	CGN Services Group	9,241,875.70	6,884,616.43
	CGN Energy Conservation Industry Development Co., Ltd. (中廣核節能產業發展有限公司) and its subsidiaries	8,943,080.74	1,835,430.45
	CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	8,178,861.18	2,936,255.78
	Finance Company	4,511,369.04	1,850,311.79
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	4,346,113.98	4,919,618.28

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(1) Receivables (Continued)

Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
	CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	4,144,724.49	3,732,756.75
	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	1,207,122.85	13,251,121.57
	Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	885,967.95	885,967.95
	Beijing Hollysys Systems Engineering Co., Ltd.	—	673,993.12
	Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	—	59,576.61
	Definite Arise Limited	—	203,842,919.95
	Hubei Nuclear Power Co., Ltd. (湖北核電有限公司)	—	15,000,000.00
	Others	11,219,574.14	10,917,465.73
	Total	1,410,067,925.97	2,209,601,114.94
Prepayments	China Nuclear Industry 23 Construction Co., Ltd	489,700,390.67	606,122,673.87
	CGN Uranium Resources Co., Ltd. and its subsidiaries	179,911,167.41	561,419,800.64
	Techenergy	27,968,494.26	41,108,794.67
	Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	10,361,039.03	20,536,477.37
	CGN Services Group	9,216,414.05	12,640,403.39
	Guangdong Electric Power Design Institute of China Energy Engineering Group	4,981,765.10	—
	Shenzhen Lyuan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	4,520,000.00	5,753,146.85
	Framatome Inc.	4,337,465.98	—
	TECNATOM, S.A.	3,931,551.59	—
	Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	3,481,906.24	3,011,774.16
	CGNPC	1,962,716.54	—
	Finance Company	1,741,466.29	1,667,948.65
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	1,251,114.39	3,367,037.89
	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	300,000.00	4,300,000.00
	Others	427,754.00	1,165,337.08
	Total	744,093,245.55	1,261,093,394.57

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(1) Receivables (Continued)

Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
Contract assets	Hongyanhe Nuclear	442,969.70	/
Other receivables	Finance Company	388,449,625.43	282,256,893.67
	CLP Nuclear Power (Yangjiang) Limited	300,843,139.00	303,343,139.00
	Techenergy	130,200,000.00	130,886,420.14
	CGN Services Group	23,235,907.50	25,399,636.76
	Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	16,228,478.58	5,641,980.64
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	2,000,000.00	3,000,000.00
	EDF International	929,072.85	—
	Hongyanhe Nuclear	103,650.55	270,440.42
	CGNPC	—	824,034,496.21
	China Nuclear Industry 23 Construction Co., Ltd.	—	13,716,067.00
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	—	6,661,359.35
	Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	—	10,296.87
	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	—	3,525,217.86
	Xianning Nuclear Power Co., Ltd. (咸寧核電有限公司)	—	20,000,000.00
	CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	—	2,857.14
	CGN Solar Energy Development Co., Ltd. and its subsidiaries	—	14,477.14
	Others	446.02	752,448.50
	Total	861,990,319.93	1,619,515,730.70

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(1) Receivables (Continued)

		Unit: RMB	
Item name	Related parties	December 31, 2018	December 31, 2017 (Restated)
Other non-current assets	Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	14,000,000.00	—
	Framatome Inc.	13,414,820.98	—
	CGN Hongda Environmental Technology Co., Ltd. (中廣核宏達環境科技有限責任公司)	4,857,360.63	—
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	1,000,000.00	1,000,000.00
	CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	304,829.00	475,491.50
	Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	—	445,298.97
	Techenergy	—	1,655,305.00
	CGN Services Group	—	2,500,000.00
	Others	—	315,681.06
	Total	33,577,010.61	6,391,776.53

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(2) Payables

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
Bills payable and accounts payable	CGN Uranium Resources Co., Ltd. and its subsidiaries	315,589,898.61	291,466,377.12
	CGN Services Group	173,949,461.39	138,645,736.55
	China Nuclear Industry 23 Construction Co., Ltd.	144,690,992.39	137,068,733.00
	Techenergy	122,098,597.94	134,525,920.42
	Shenzhen Lyvuan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	100,320,075.07	55,569,909.87
	Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	94,192,821.39	67,350,026.39
	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	84,545,660.38	165,921,266.97
	Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司)	54,113,434.50	56,269,730.69
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	49,505,617.12	49,150,598.75
	CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業 (深圳) 有限公司)	48,643,946.03	50,061,295.34
	Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	42,142,334.20	37,070,917.21
	CGNPC	39,568,091.85	13,637,748.02
	Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司)	34,176,663.92	9,546,960.70
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	27,901,756.60	16,541,895.97
	EDF International	24,475,625.74	—
	Shenzhen Zhenhe Construction Engineering Project Management Co., Ltd. (深圳市振核建設工程項目管理有限公司)	9,792,519.16	5,078,672.41
	Guangdong Electric Power Design Institute of China Energy Engineering Group	7,656,739.78	—
	CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	7,720,531.99	—
	Framatome Inc.	7,275,487.89	63,173,672.20
	Beijing Ric Nuclear Instrument Joint Venture Co., Ltd. (北京中法瑞克核儀器有限公司)	5,600,641.13	—
	CGN Real Estate Management Co., Ltd. (中廣核不動產管理有限公司)	380,931.09	1,411,801.89
	Others	3,886,947.81	15,878,852.88
Total		1,398,228,775.98	1,308,370,116.38

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

		Unit: RMB	
Item name	Related parties	December 31, 2018	December 31, 2017 (Restated)
Receipts in advance	Hongyanhe Nuclear	—	3,661,443,073.99
	CGNPC	—	17,309,520.76
	CGN Taishan No. 2 Nuclear Power Co., Ltd. (中廣核台山第二核電有限公司)	—	22,710,562.50
	CGN Energy Conservation Industry Development Co., Ltd. (中廣核節能產業發展有限公司)	—	1,588,910.00
	and its subsidiaries	—	38,455.42
	Swakop Uranium (Pty) Ltd.	—	796,572,438.58
	Ningde Second Nuclear	—	433,740.00
	Others	—	
	Total	—	4,500,096,701.25
Contract liabilities	Hongyanhe Nuclear	66,020,455.22	/
	CGNPC	40,502,169.97	/
	CGN Taishan No. 2 Nuclear Power Co., Ltd. (中廣核台山第二核電有限公司)	22,710,562.50	/
	CGN Wind Energy Co., Ltd.	3,412,411.20	/
	CGN Uranium Resources Co., Ltd. and its subsidiaries	1,880,703.90	/
	Others	2,377,282.00	/
	Total	136,903,584.79	/

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
Short-term loans	Finance Company	8,904,031,552.11	4,177,000,000.00
	EDF International	1,065,103,794.79	1,058,996,003.47
	CGNPC	800,000,000.00	800,000,000.00
	CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	200,000,000.00	—
	EDF (China) Holding Ltd.	197,000,000.00	197,000,000.00
	Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	100,000,000.00	—
	CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	38,844,488.13	1,001,560,460.00
	Total	11,304,979,835.03	7,234,556,463.47
Long-term loans	Shenzhen Zhaoyinbailu Investment Partnership (Limited Partnership) (深圳招銀白鷺投資合夥企業(有限合夥))	3,250,500,000.00	1,250,500,000.00
	Finance Company	3,038,471,480.90	3,130,896,675.90
	CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	500,000,000.00	500,000,000.00
	CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	117,709,500.00	—
	Total	6,906,680,980.90	4,881,396,675.90

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017 (Restated)
Other payables	HKNIC	832,163,000.00	—
	Guangxi GI Energy Co., Ltd. (廣西廣投能源有限公司)	577,200,000.00	—
	Guangxi Investment Group Co., Ltd.	488,161,440.00	488,161,440.00
	CGN Fund Phase I	136,740,753.94	586,318,044.11
	CGNPC	74,252,896.74	422,061,416.83
	EDF International	33,154,314.22	6,498,993.80
	Finance Company	16,724,242.91	10,947,954.80
	Shenzhen Zhaoyinbailu Investment Partnership (Limited Partnership) (深圳招銀白鷺投資合夥企業(有限合夥))	5,189,513.54	1,996,457.99
	CGN Services Group	2,974,202.22	4,847,485.53
	EDF (China) Holding Ltd.	2,255,239.58	2,228,070.00
	Guangdong Electric Power Design Institute of China Energy Engineering Group	2,179,386.40	—
	China Nuclear Industry 23 Construction Co., Ltd.	1,844,399.08	2,325,046.58
	Shenzhen Nuclear Power Electrical Installation and Maintenance Co., Ltd. (深圳市核電機電安裝維修有限公司)	1,463,899.52	—
	CGN Uranium Resources Co., Ltd. and its subsidiaries	1,251,636.36	872,220.83
	CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	1,153,513.89	7,706,422.33
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	1,036,734.92	—
	CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司)	700,120.93	2,459,471.24
	Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	590,026.71	—
	Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	573,431.66	829,249.03
	CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	476,717.86	497,647.52
	CGN Nuclear Technology Application Co., Ltd. (中廣核核技術應用有限公司) and its subsidiaries	473,863.46	1,942,173.54
	CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	133,084.76	59,331.02
	Hongyanhe Nuclear	303,161.85	23,459,475.05
	Techenergy	233,158.30	26,531.85

Notes to the Financial Statements

For the year ended December 31, 2018

(X) Related Parties and Related Party Transactions (Continued)

6. Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

Item name	Related parties	December 31, 2018	December 31, 2017 (Restated)
	CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業 (深圳) 有限公司)	231,677.36	214,500.00
	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	71,296.36	619,725.41
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	69,976.40	89,191.40
	Datang International Power Generation Co., Ltd. (大唐國際發電股份有限公司)	60,000.00	652,854,216.52
	Guangdong Yudean Group Co., Ltd. (廣東省粵電集團有限公司)	—	632,111,083.27
	Fujian Energy Group Co., Ltd. (福建省能源集團有限責任公司)	—	148,362,321.93
	Others	1,536,307.00	1,596,863.24
	Total	2,183,197,995.97	2,999,085,333.82
Non-current	Finance Company	268,606,680.00	228,802,620.30
liabilities due	CGNPC Huasheng Investment Limited		
within one year	(中廣核華盛投資有限公司)	—	500,000,000.00
	Total	268,606,680.00	728,802,620.30

(XI) Share-based Payment

1. Overall share-based payment

	Unit: RMB	
	2018	2017
Total equity instruments granted by the Company during the year	—	568,970,000
Total equity instruments exercised by the Company during the year	—	—
Total equity instruments of the Company that have expired during the year	(5,520,013.00)	(27,360,000)
The range of exercise price of outstanding share appreciation rights of the Company at the end of the period and the remaining period of the contract	HKD2.09/3.50 0.96 - 5.95 years	HKD2.09/3.50 1.96 - 6.95 years

The Group has set up an H-share Appreciation Rights (“SAR”) Scheme (the “Scheme”) for core staff who exert significant impact on the Company’s strategic target, including certain Directors (excluding independent non-executive Directors and external Directors), senior management and core technical and management staff of the Company who have exerted direct influence on the overall results and sustainable development of the Company (“Incentive Recipients”). The Scheme was approved at the annual general meeting of the Company on June 12, 2015. Supervisors of the Company are not Incentive Recipients.

The initial implementation plan of the SAR was approved by the Board on November 5, 2015. Pursuant to the initial scheme, 218,880,000 units of SAR were granted to Incentive Recipients of the Group at the exercise price of HKD3.50 per share. One third of the total number of SAR are vested and entitled on or after December 19, 2016, one third of the total number of SAR are vested and entitled on or after December 18, 2017 and the remaining one third of the total number of SAR are vested and entitled on or after December 18, 2018.

The secondary implementation plan of the SAR was approved by the Board on December 14, 2017. Pursuant to the secondary scheme, 568,970,000 units of SAR were granted to Incentive Recipients of the Group at the exercise price of HKD2.09 per share. One third of the total number of SAR are vested and entitled on or after December 16, 2019, one third of the total number of SAR are vested and entitled on or after December 15, 2020 and the remaining one third of the total number of SAR are vested and entitled on or after December 15, 2021.

Each unit of SAR is notionally linked to one H Share and represents the rights conferred on the relevant Incentive Recipients to receive in cash stipulated earnings from the increase in market value of the relevant H share. The SARs will have certain services periods and 3 years after the respective vesting dates. In addition, the exercise of SAR is also subject to the performance condition of the Group and Incentive Recipients including achievements of certain performance targets.

Notes to the Financial Statements

For the year ended December 31, 2018

(XI) Share-based Payment (Continued)

2. Cash-settled share-based payment

	Unit: RMB	
	2018	2017
Methods for determining fair value of liabilities undertook by the Company and calculated by share or other equity instruments	Black-Scholes options valuation model	Black-Scholes options valuation model
Accumulated liabilities arising from cash-settled share-based payment in liabilities	61,728,273.40	24,949,743.31
Total fees recognized in respect of cash-settled share-based payment during the year	36,778,539.27	6,591,071.77

The fair value of share appreciation rights is measured by using the Black-Scholes Model, and inputs used in the model are as follows:

	Unit: RMB	
Item	December 31, 2018	December 31, 2017
Share price	1.86	2.12
Expected volatility	28.92 - 34.83%	35.34 - 36.37%
Expected dividend yield	4.484%	2.755%

The first grant under the Shares Appreciation Rights Incentive Scheme:

	Unit: RMB	
Item	December 31, 2018	December 31, 2017
Exercise price	3.50	3.50
Expected term	0.96 - 2.96 years	1.96 - 3.96 years
Risk-free rate	1.731 - 1.758%	1.285 - 1.519%

(XI) Share-based Payment (Continued)

2. Cash-settled share-based payment (Continued)

The second batch of Share Appreciation Rights Incentive Scheme:

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Exercise price	2.09	2.09
Expected term	3.95 - 5.95 years	4.95 - 6.95 years
Risk-free rate	1.791 - 1.859%	1.604 - 1.693%

The variables and assumptions used in computing the fair value of the share appreciation rights are based on the Directors' best estimate. Changes in variables of specific assumptions may result in changes in the value of the share appreciation rights.

(XII) Commitments and Contingencies

1. Important commitments

1.1 Capital commitments

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Commitment of acquisition and construction of long-term assets	11,208,650,536.79	10,033,898,375.47
Large-amount contracts	5,063,654,327.32	5,033,372,826.11
Commitment of foreign investment	—	60,270,000.00
Total	16,272,304,864.11	15,127,541,201.58

Notes to the Financial Statements

For the year ended December 31, 2018

(XII) Commitments and Contingencies (Continued)

1. Important commitments (Continued)

1.2 Operating lease commitments

As at the balance sheet date, the Group has entered into non-cancelable operating leases as follows:

	Unit: RMB	
	December 31, 2018	December 31, 2017
Minimum lease payments under non-cancelable operating leases which fall due as follows:		
First year upon the balance sheet date	290,974,795.63	248,314,774.76
Second year upon the balance sheet date	269,572,948.81	156,487,750.76
Third year upon the balance sheet date	214,265,666.50	130,044,133.42
Every year thereafter	682,428,470.31	478,170,621.88
Total	1,457,241,881.25	1,013,017,280.82

2. Contingencies

There are no important contingencies that should be disclosed by the Group.

(XIII) Events after the Balance Sheet Date

On January 4, 2019, the resolution on the equity transfer agreement proposed to be entered into between CGN Engineering and CGNPC was considered and approved by the Board. Pursuant to the equity transfer agreement, CGN Engineering sold 100% equity interests in Shanghai Engineering Science & Technology Co., LTD to CGNPC at a consideration of approximately RMB710 million.

(XIV) Other Important Matters

1. Accounting differences

Retrospective restatement

Based on practical experience, the Group has constantly refined and perfected its management of receivables, and, with reference to practices of A share companies within the same industry and adopting a more prudent approach, revised the method of bad debt provisions over receivables according to relevant regulations under the China Accounting Standards for Business Enterprises. The effects of such accounting differences on the items of the Group and the Company for 2017 and specific amounts are as follows:

Balance sheet item	December 31, 2017	
	The Group	The Company
Bills receivable and accounts receivable	(193,522,174.18)	(440,672.98)
Other receivables	(216,596,728.19)	(648,738.19)
Deferred tax assets	52,996,809.83	—
Total assets	(357,122,092.54)	(1,089,411.17)
Surplus reserve	(108,941.11)	(108,941.11)
Retained earnings	(299,866,423.47)	(980,470.06)
Non-controlling interests	(57,146,727.96)	/
Owners' equity	(357,122,092.54)	(1,089,411.17)

Income statement item	2017	
	The Group	The Company
Asset impairment loss	86,581,620.26	378,844.13
Total profit	(86,581,620.26)	(378,844.13)
Income tax expenses	13,463,357.76	—
Net profit	(73,118,262.50)	(378,844.13)

Notes to the Financial Statements

For the year ended December 31, 2018

(XIV) Other Important Matters (Continued)

2. Segment report

(1) Basis and accounting policies of reporting segments

According to the internal organization structure, management requirements and internal reporting system of the Group, the Group's business is divided into 2 operating segments. The Group's management regularly evaluates the operating results of these segments to determine the resources to be allocated and evaluates its results. The Group has identified two reporting segments on the basis of the operating segments, namely nuclear power business operation, sales of electricity and related technical services segment, and engineering, construction and related technical services segment. These reporting segments are recognized based on income, nature, business model, etc. The major products and services provided by the reporting segments of the Group are electricity sales, engineering, construction and technical services.

Segment reporting information is disclosed in accordance to the accounting policies and measurement basis adopted for reporting to the management by each segment, which are consistent with the accounting policies and measurement basis for preparing the financial statements.

(2) Financial information of reporting segments

Unit: RMB

Item	Nuclear power business operation, sales of electricity and related technical services segment	Engineering, construction and related technical services segment	Inter-segment offset	December 31, 2018/ 2018
Operating revenue	47,591,049,065.35	15,380,638,834.35	(12,143,768,715.27)	50,827,919,184.43
Revenue from external customers	46,963,642,558.24	3,864,276,626.19	—	50,827,919,184.43
Revenue from internal segments	627,406,507.11	11,516,362,208.16	(12,143,768,715.27)	—
Operating cost	24,956,513,521.33	14,755,623,684.17	(11,208,282,595.94)	28,503,854,609.56
Total assets	359,082,755,090.07	22,190,668,289.43	(12,717,753,019.22)	368,555,670,360.28
Total liabilities	243,542,745,063.37	19,412,126,617.10	(7,524,851,427.40)	255,430,020,253.07
Income from investment in associates and joint ventures	901,190,677.89	64,812,379.61	63,506,775.89	1,029,509,833.39
Income tax expenses	1,609,527,139.84	12,120,979.85	(403,849,691.43)	1,217,798,428.26
Long-term equity investment accounted by using the equity method	9,286,006,061.07	1,579,137,447.85	(662,120,332.00)	10,203,023,176.92
Operating profit	16,413,758,393.05	147,405,992.99	(1,615,398,765.72)	14,945,765,620.32
Net profit	14,755,241,159.98	137,985,244.44	(1,211,549,074.29)	13,681,677,330.13

(XIV) Other Important Matters (Continued)

2. Segment report (Continued)

(2) Financial information of reporting segments (Continued)

Unit: RMB

Item	Nuclear power business operation, sales of electricity and related technical services segment	Engineering, construction and related technical services segment	Inter-segment offset	December 31, 2017/ 2017 (Restated)
Operating revenue	43,050,877,275.33	13,981,672,287.65	(11,399,095,642.34)	45,633,453,920.64
Revenue from external customers	42,436,163,659.56	3,197,290,261.08	—	45,633,453,920.64
Revenue from internal segments	614,713,615.77	10,784,382,026.57	(11,399,095,642.34)	—
Operating cost	22,996,009,890.24	12,795,126,797.37	(10,606,092,593.05)	25,185,044,094.56
Total assets	345,484,672,778.06	25,499,694,233.98	(13,683,810,251.80)	357,300,556,760.24
Total liabilities	243,282,185,740.18	22,642,963,393.49	(9,523,802,595.74)	256,401,346,537.93
Income from investment in associates and joint ventures	336,984,309.29	202,070,777.08	63,580,754.01	602,635,840.38
Income tax expenses	1,563,590,372.68	81,333,225.75	(200,851,769.27)	1,444,071,829.16
Long-term equity investment accounted by using the equity method	8,115,889,872.14	1,551,756,255.23	(1,304,015,086.92)	8,363,631,040.45
Operating profit	14,156,062,656.05	854,377,237.51	(803,407,077.09)	14,207,032,816.47
Net profit	12,552,101,086.37	774,641,782.12	(602,555,307.82)	12,724,187,560.67

Notes to the Financial Statements

For the year ended December 31, 2018

(XIV) Other Important Matters (Continued)

2. Segment report (Continued)

(2) Financial information of reporting segments (Continued)

Revenue from external customers by location of revenue sources and non-current assets by location of assets:

Unit: RMB		
Item	2018	2017 (Restated)
Revenue from external customers in the PRC	45,390,544,915.88	40,272,218,281.27
Revenue from external customers in other countries	5,437,374,268.55	5,361,235,639.37
Total	50,827,919,184.43	45,633,453,920.64

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Non-current assets in the PRC	313,120,988,640.64	301,344,956,104.93
Non-current assets in other countries	46,765,425.79	50,949,522.61
Total	313,167,754,066.43	301,395,905,627.54

Dependence on major customers

In 2018 and 2017, the Group's revenue from Guangdong Power Grid Co., Ltd. was RMB25,518,300,748.42 and RMB23,054,062,411.84 respectively, accounting for 50.21% and 50.52% of the Group's operating revenue for the corresponding period respectively.

In 2018 and 2017, the Group's revenue from Guangxi Power Grid Co., Ltd. was RMB4,923,508,523.84 and RMB4,033,787,952.91 respectively, accounting for 9.69% and 8.84% of the Group's operating revenue for the corresponding period respectively.

In 2018 and 2017, the Group's revenue from HKNIC was RMB5,409,246,934.30 and RMB5,332,836,996.25 respectively, accounting for 10.64% and 11.69% of the Group's operating revenue for the corresponding period respectively.

In 2018 and 2017, the Group's revenue from Fujian Electric Power Co., Ltd. was RMB10,220,960,927.38 and RMB9,122,527,247.05 respectively, accounting for 20.11% and 19.99% of the Group's operating revenue for the corresponding period respectively.

(XV) Notes to Major Items in the Financial Statements of the Parent Company

1. Cash at bank and in hand

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Cash at bank:	9,730,127,897.47	7,201,335,054.79
RMB	8,655,201,792.93	6,203,134,276.95
HKD	8,326,721.86	7,865,395.72
USD	1,066,599,382.68	990,335,382.12
Total	9,730,127,897.47	7,201,335,054.79
Include: Total amount deposited overseas	1,074,843,787.32	998,128,862.51

Other explanations:

The Group had no restricted balances such as mortgages or pledges, as well as those deposited overseas with restricted repatriation. As at December 31, 2018, the Group's fixed deposits of more than three months amounted to RMB1,550,000,000.00 (December 31, 2017: RMB100,000,000.00).

2. Bills receivable and accounts receivable

(1) Accounts receivable

(a) Accounts receivable disclosed by category

Unit: RMB		
Item	December 31, 2018	December 31, 2017 (Restated)
Accounts receivable arising from contracts with customers	695,686,105.22	677,809,462.95
Including: Accounts receivable by subsidiaries within the scope of consolidation	481,706,905.25	538,906,935.50
Group 1	213,923,699.97	138,900,527.45
Group 2	55,500.00	2,000.00
Less: Bad debt provisions	3,878,916.62	440,672.98
Carrying value	691,807,188.60	677,368,789.97

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

2. Bills receivable and accounts receivable (Continued)

(1) Accounts receivable (Continued)

(a) Accounts receivable disclosed by category (Continued)

As part of the credit risk management, the Company uses the age of accounts receivable to assess the bad debt loss by grouping of accounts receivable with the same risk characteristics, and the aging data reflects the solvency of such customers when the accounts receivable become due. The credit risk and expected credit loss of each group of accounts receivable are as follows:

Accounts receivable by subsidiaries within the scope of consolidation:

Unit: RMB

Aging	December 31, 2018				December 31, 2017			
	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value
Less than 1 year (inclusive)	0.00%	412,153,302.78	—	412,153,302.78	0.00%	497,352,273.22	—	497,352,273.22
1-2 years	0.00%	69,553,602.47	—	69,553,602.47	0.00%	41,237,185.94	—	41,237,185.94
2-3 years	0.00%	—	—	—	0.00%	317,476.34	—	317,476.34
Total		481,706,905.25	—	481,706,905.25		538,906,935.50	—	538,906,935.50

Group 1:

Unit: RMB

Aging	December 31, 2018				December 31, 2017 (Restated)			
	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value
Less than 1 year (inclusive)	0.30%	146,371,129.32	434,331.59	145,936,797.73	0.30%	138,472,327.45	415,416.98	138,056,910.47
1-2 years	5.00%	67,124,370.65	3,356,218.53	63,768,152.12	5.00%	402,600.00	20,130.00	382,470.00
2-3 years	20.00%	402,600.00	80,520.00	332,080.00	20.00%	25,600.00	5,120.00	20,480.00
3-4 years	30.00%	25,600.00	7,680.00	17,920.00	30.00%	—	—	—
Total	1.81%	213,923,699.97	3,878,750.12	210,044,949.85	0.32%	138,900,527.45	440,666.98	138,459,860.47

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

2. Bills receivable and accounts receivable (Continued)

(1) Accounts receivable (Continued)

(a) Accounts receivable disclosed by category (Continued)

Group 2:

Unit: RMB

	December 31, 2018				December 31, 2017 (Restated)			
	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value
Aging								
Less than 1 year (inclusive)	0.30%	55,500.00	166.50	55,333.50	0.30%	2,000.00	6.00	1,994.00

(b) Changes in provision for bad debts of accounts receivable

Unit: RMB

	2018		Total
	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	
December 31, 2017	—	440,672.98	440,672.98
Remeasurement of provisions for expected credit losses	440,672.98	(440,672.98)	—
January 1, 2018	440,672.98	—	440,672.98
Provisions for expected credit losses for the year	3,438,243.64	—	3,438,243.64
December 31, 2018	3,878,916.62	—	3,878,916.62

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

2. Bills receivable and accounts receivable (Continued)

(1) Accounts receivable (Continued)

(c) Top five debtors with the largest balances of accounts receivable

Unit: RMB

Name of entity	Carrying balance	Percentage to total accounts receivable (%)	Balance of provisions for bad debts at end of the year
Taishan Nuclear	100,463,775.55	14.44	—
CGN Engineering	61,493,014.58	8.84	—
Fangchenggang Nuclear Power	58,531,969.00	8.41	—
Yangjiang Nuclear	43,321,219.82	6.23	—
CGN Operations	43,286,632.51	6.22	—
Total	307,096,611.46	44.14	—

3. Prepayments

(1) Prepayments by aging:

Unit: RMB

Aging	December 31, 2018		December 31, 2017	
	Amount	Percentage (%)	Amount	Percentage (%)
Within 1 year	4,802,433.06	39.85	8,293,860.20	63.77
1 to 2 years	4,603,161.72	38.20	4,712,474.59	36.23
2 to 3 years	2,645,616.80	21.95	—	—
Total	12,051,211.58	100.00	13,006,334.79	100.00

As at December 31, 2018, the Company had no prepayments aged over 1 year and in significant amount.

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

3. Prepayments (Continued)

(2) Top five entities with the largest balances of prepayments:

Unit: RMB

Name of entity	Amount	Percentage to total prepayments (%)
Microsoft (China) Co. Ltd. (Shenzhen Branch) (微軟(中國)有限公司深圳分公司)	2,616,471.70	21.71
New H3C Technology Co., Ltd. (新華三技術有限公司)	2,309,986.75	19.17
King & Wood Mallesons, Beijing (Shanghai Branch)	1,509,433.97	12.53
Grandall Law Firm (Shenzhen)	1,369,811.32	11.37
King & Wood Mallesons, Beijing (Shenzhen)	1,300,000.00	10.79
Total	9,105,703.74	75.57

4. Other receivables

(1) Total other receivables

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
Interest receivable	33,214,060.81	17,386,938.69
Dividends receivable	1,042,667,333.07	3,111,797,821.20
Other receivables	192,071,525.17	212,040,659.71
Total	1,267,952,919.05	3,341,225,419.60

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

4. Other receivables (Continued)

(2) Interest receivable

Unit: RMB

Item	December 31, 2018	December 31, 2017 (Restated)
Fixed deposit	11,119,652.77	2,880,000.01
Entrusted loans	22,094,408.04	14,506,938.68
Total	33,214,060.81	17,386,938.69
Less: Bad debt provisions	—	—
Carrying value	33,214,060.81	17,386,938.69

As at December 31, 2018, the Company had no overdue interest of significant amount.

(3) Dividends receivable

Unit: RMB

Investee	December 31, 2018	December 31, 2017
CGN Investment	294,746,007.44	230,576,050.22
CGN Engineering	679,626,192.13	—
Yangjiang Nuclear	—	1,710,418,225.33
CGN Ninghe Investment	68,295,133.50	338,192,656.31
Lingdong Nuclear	—	312,536,871.67
Ling'ao Nuclear	—	520,074,017.67
Total	1,042,667,333.07	3,111,797,821.20
Less: Bad debt provisions	—	—
Carrying value	1,042,667,333.07	3,111,797,821.20

As at December 31, 2018, the Company had no significant dividends receivable aged over 1 year.

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

(4) Other receivables (Continued)

(4) Other receivables

(a) Other receivables disclosed by category

Unit: RMB

Item	December 31, 2018				January 1, 2018			
	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	Total	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	Total
Other receivables of subsidiaries within the scope of consolidation	414,602.21	—	—	414,602.21	—	—	—	—
Group 1	104,096.57	—	—	104,096.57	212,359,863.00	—	—	212,359,863.00
Group 2	292,224.62	212,513,100.80	—	212,805,325.42	219,534.90	110,000.00	—	329,534.90
Carrying balance	810,923.40	212,513,100.80	—	213,324,024.20	212,579,397.90	110,000.00	—	212,689,397.90
Bad debt provisions	1,188.96	21,251,310.07	—	21,252,499.03	637,738.19	11,000.00	—	648,738.19

(b) Changes in bad debt provisions for other receivables

Unit: RMB

	2018			
	Expected credit losses within 12 months	Expected credit losses during the whole life (no credit impairment occurred)	Expected credit losses during the whole life (credit impairment occurred)	Total
December 31, 2017	—	—	648,738.19	648,738.19
Remeasurement of provisions				
for expected credit losses	637,738.19	11,000.00	(648,738.19)	—
January 1, 2018	637,738.19	11,000.00	—	648,738.19
Provisions for expected credit losses				
for the year	—	21,240,310.07	—	21,240,310.07
Reversals for expected credit losses				
for the year	(636,549.23)	—	—	(636,549.23)
December 31, 2018	1,188.96	21,251,310.07	—	21,252,499.03

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

4. Other receivables (Continued)

(4) Other receivables (Continued)

(c) Top five debtors with the largest balances of other receivables

Unit: RMB

Name of entity	Nature	Amount	Aging	Percentage to total other receivables (%)	Balance of provisions for bad debts at end of the period
CLP Nuclear Power (Yangjiang) Limited	Related party payments	212,359,863.00	1 to 2 years	99.55	21,235,986.30
Yangjiang Nuclear	Related party payments	103,650.55	Within one year	0.05	—
Hongyanhe Nuclear	Related party payments	103,650.55	Within one year	0.05	310.95
Ningde Nuclear	Related party payments	103,650.54	Within one year	0.05	—
GNPJVC	Related party payments	51,825.28	Within one year	0.02	—
Fangchenggang Nuclear	Related party payments	51,825.28	Within one year	0.02	—
Total		212,774,465.20		99.74	21,236,297.25

(d) Other receivables by nature

Unit: RMB

Item	December 31, 2018	December 31, 2017
Related party payments	212,878,561.78	212,359,863.00
Reserve funds	445,462.42	329,534.90
Total	213,324,024.20	212,689,397.90

5. Non-current assets due within one year

Unit: RMB

Item	December 31, 2018	December 31, 2017
Debt investment due within one year	4,000,000,000.00	—

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

6. Other current assets

Unit: RMB		
Item	December 31, 2018	December 31, 2017
VAT retained at the end of the period	22,030,284.53	2,971,498.53
Entrusted loans	5,860,000,000.00	5,961,000,000.00
Total	5,882,030,284.53	5,963,971,498.53

7. Debt investment

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Entrust loans	10,088,000,000.00	/
Total	10,088,000,000.00	/
Less: Debt investment due within one year	4,000,000,000.00	/
Net	6,088,000,000.00	/

8. Long-term receivables

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Entrusted loans	/	4,600,000,000.00
Total	/	4,600,000,000.00
Less: Long-term receivables due within one year	/	—
Net amount	/	4,600,000,000.00

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)
9. Long-term equity investments

Investee	Balance at December 31, 2017	Changes in accounting policies	Carrying balance at January 1, 2018	Additional investment	Reduce investment	Changes in the current year			Balance at December 31, 2018	Closing balance of impairment provision
						Investment gains/ losses recognized under the equity method	Adjustment of other comprehensive gains	Declared cash dividends or profits		
I. Subsidiaries										
GNIC	22,734,177,521.54	—	22,734,177,521.54	—	—	—	—	—	22,734,177,521.54	—
Ling'ao Nuclear	6,883,160,867.23	—	6,883,160,867.23	—	—	—	—	—	6,883,160,867.23	—
Lingdong Nuclear	2,195,503,954.06	—	2,195,503,954.06	—	—	—	—	—	2,195,503,954.06	—
Yangjiang Nuclear	6,162,481,639.48	—	6,162,481,639.48	—	—	—	—	—	6,162,481,639.48	—
CGN Operations	118,807,136.75	—	118,807,136.75	—	—	—	—	—	118,807,136.75	—
CNPRI	1,420,682,040.74	—	1,420,682,040.74	100,000,000.00	—	—	—	—	1,520,682,040.74	—
Daya Bay Environment Protection	99,602,305.72	—	99,602,305.72	—	—	—	—	—	99,602,305.72	—
CGN Investment	8,529,596,590.54	—	8,529,596,590.54	310,444,168.00	—	—	—	—	8,840,040,758.54	—
CGN Ningde Investment	3,306,159,962.85	—	3,306,159,962.85	—	—	—	—	—	3,306,159,962.85	—
Suzhou Nuclear Power Research Institute	1,061,032,900.00	—	1,061,032,900.00	—	—	—	—	—	1,061,032,900.00	—
Taishan Nuclear	3,075,022,661.30	—	3,075,022,661.30	—	—	—	—	—	3,075,022,661.30	—
Taishan Investment	8,769,244,739.87	—	8,769,244,739.87	—	—	—	—	—	8,769,244,739.87	—
CGN Engineering	2,619,094,819.39	—	2,619,094,819.39	—	—	—	—	—	2,619,094,819.39	—
Fangchenggang Nuclear	3,605,879,512.89	—	3,605,879,512.89	—	3,605,879,512.89	—	—	—	—	—
Lufeng Nuclear	2,870,000,000.00	—	2,870,000,000.00	408,000,000.00	—	—	—	—	3,278,000,000.00	—
Fangchenggang Investment	—	—	—	4,559,911,100.00	—	—	—	—	4,559,911,100.00	—
Ocean Power	—	—	—	10,147,205.02	—	—	—	—	10,147,205.02	—
Hebei Thermal Power	—	—	—	10,086,202.41	—	—	—	—	10,086,202.41	—
Power Sales Company	—	—	—	214,754,017.55	—	—	—	—	214,754,017.55	—
Hebei Zhonghuang Clean Thermal Energy Co., Ltd. (河北中庄清源热能有限公司)	—	—	—	81,700,000.00	—	—	—	—	81,700,000.00	—
Sub-total	73,450,446,652.36	—	73,450,446,652.36	5,695,042,692.98	3,605,879,512.89	—	—	—	75,539,609,832.45	—
II. Associate										
CGN Fund Phase I	2,149,995,682.71	131,139,543.08	2,281,075,225.79	40,857,200.00	—	301,823,485.66	66,639,133.53	226,285,920.00	2,464,109,124.98	—
Sub-total	2,149,995,682.71	131,139,543.08	2,281,075,225.79	40,857,200.00	—	301,823,485.66	66,639,133.53	226,285,920.00	2,464,109,124.98	—
Total	75,600,382,335.07	131,139,543.08	75,731,521,878.15	5,735,899,892.98	3,605,879,512.89	301,823,485.66	66,639,133.53	226,285,920.00	78,003,718,957.43	—

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

9. Long-term equity investments (Continued)

Other explanations:

The Company's long-term equity investment in Lingdong Nuclear and Yangjiang Nuclear is restricted. As at December 31, 2018 and December 31, 2017, the Company's net long-term equity investment with restricted ownership in Lingdong Nuclear was RMB2,195,503,954.06. As at December 31, 2018 and December 31, 2017, the Company's long-term equity investment with restricted ownership in Yangjiang Nuclear was RMB6,162,481,639.48.

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

10. Fixed assets

(1) Fixed assets:

		Unit: RMB
Item		Electronic and office equipment
I. Original carrying value		
1. Opening balance		49,974,252.85
2. Additions during the year		11,956,908.90
(1) Acquisition		—
(2) Transfer from construction in progress		11,956,908.90
3. Deductions during the year		—
4. Closing balance		61,931,161.75
II. Accumulated depreciation		
1. Opening balance		14,242,703.41
2. Additions during the year		10,400,903.36
(1) Provisions		10,400,903.36
3. Deductions during the year		—
4. Closing balance		24,643,606.77
III. Impairment provisions		
1. Opening balance		—
2. Additions during the year		—
3. Deductions during the year		—
4. Closing balance		—
IV. Carrying value		
1. Closing carrying value		37,287,554.98
2. Opening carrying value		35,731,549.44

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

10. Fixed assets (Continued)

- (2) As at December 31, 2018, the Company had no temporarily idle fixed assets
- (3) As at December 31, 2018, the Company had no fixed assets under financial leases.
- (4) As at December 31, 2018, the Company had no fixed assets under operating leases.
- (5) As at December 31, 2018, the Company had no fixed assets without proper title certificates.

11. Construction in progress

(1) Construction in progress

Unit: RMB

Name of project	December 31, 2018			December 31, 2017		
	Carrying balance	Impairment provision	Carrying value	Carrying balance	Impairment provision	Carrying value
E-commerce platform construction project	15,798,934.17	—	15,798,934.17	25,616,083.26	—	25,616,083.26
E-Learning System Reconstruction Project	141,156.25	—	141,156.25	141,156.25	—	141,156.25
Others	44,383,560.31	—	44,383,560.31	31,860,036.66	—	31,860,036.66
Total	60,323,650.73	—	60,323,650.73	57,617,276.17	—	57,617,276.17

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

12. Intangible assets

(1) Intangible assets

Unit: RMB

Item	Land use rights	Computer software	Patent rights	Non-patented technology	Total
I. Original carrying value					
1. Opening balance	—	161,610,514.32	132,274,794.34	—	293,885,308.66
2. Additions during the year	—	72,562,755.00	—	—	72,562,755.00
(1) Acquisition	—	57,207,256.92	—	—	57,207,256.92
(2) Transfer from construction in progress	—	15,355,498.08	—	—	15,355,498.08
3. Closing balance	—	234,173,269.32	132,274,794.34	—	366,448,063.66
II. Accumulated amortization					
1. Opening balance	—	50,065,390.56	27,557,249.09	—	77,622,639.65
2. Additions during the year	—	35,091,401.29	13,227,479.40	—	48,318,880.69
(1) Provision	—	35,091,401.29	13,227,479.40	—	48,318,880.69
3. Closing balance	—	85,156,791.85	40,784,728.49	—	125,941,520.34
III. Impairment provisions					
1. Opening balance	—	—	—	—	—
2. Additions during the year	—	—	—	—	—
3. Deductions during the year	—	—	—	—	—
4. Closing balance	—	—	—	—	—
IV. Carrying amount					
1. Closing carrying value	—	149,016,477.47	91,490,065.85	—	240,506,543.32
2. Opening carrying value	—	111,545,123.76	104,717,545.25	—	216,262,669.01

As at December 31, 2018, the Group's intangible assets from internal research and development accounted for 36.10% of the balance of intangible assets, respectively.

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

13. Development cost

Unit: RMB

Item	January 1, 2018	Additions during the year	Deductions during the year			December 31, 2018
			Transfer to intangible asset during the year	Others	Transfer to profit or loss during the year	
Small reactors	272,372,035.78	28,301,886.89	—	—	—	300,673,922.67
Others	84,905,660.69	388,164,277.65	—	—	—	473,069,938.34
Total	357,277,696.47	416,466,164.54	—	—	—	773,743,861.01

14. Other non-current assets

Unit: RMB

Item	December 31, 2018	December 31, 2017
Prepayment for engineering equipment	1,320,650.00	1,132,150.00
Capital of Fangchenggang Nuclear paid in advance	—	601,884,560.00
Others	37,739,834.23	35,163,834.23
Total	39,060,484.23	638,180,544.23

15. Short-term loans

(1) Short-term loans by category

Unit: RMB

Item	December 31, 2018	December 31, 2017
Credit loans	9,604,850,094.84	8,814,455,203.67

- (2) As at 31 December 2018, the Company had no overdue and unsettled short-term loans.

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

16. Bills payable and accounts payable

(1) Accounts payable:

Unit: RMB		
Aging	December 31, 2018	December 31, 2017
Less than 1 year	421,870,802.94	378,465,626.15
1-2 years	1,172,176.43	3,290,469.14
2-3 years	3,263,645.14	2,177,401.20
More than 3 years	2,971,218.67	878,600.27
Total	429,277,843.18	384,812,096.76

(2) As at 31 December 2018, the Company had no accounts payable aged over one year with significant amount.

17. Receipts in advance

(1) Receipts in advance

Unit: RMB		
Aging	December 31, 2018	December 31, 2017
Less than 1 year	—	1,376,000.00
1-2 years	—	—
Total	—	1,376,000.00

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

18. Contract liabilities

(1) Contract liabilities

Unit: RMB		
Item	December 31, 2018	December 31, 2017
Technical service contract payment received in advance	—	/
Others	4,384,800.02	/
Less: Contract liabilities recognized in other non-current liabilities	—	/
Total	4,384,800.02	/

(2) The contract liabilities at the beginning of the year was RMB1,376,000.00, and the amount of income recognized in the book value of the contract liabilities at the beginning of the year is nil.

(3) Qualitative and quantitative analysis of contract liabilities

Service-related revenue is recognized over a period of time, although the customer has paid in advance for partial or full service payments. The Company recognizes the contract liabilities when it initially receives the service payment and transfers it to revenue during the service period.

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial Statements of the Parent Company (Continued)

19. Employee benefits payable

(1) Employee benefits payable

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
I. Short-term employee benefits payable	2,509,002.45	340,384,397.48	340,348,909.27	2,544,490.66
II. Post-employment benefits - defined contribution plan	—	30,139,642.44	30,139,642.44	—
III. Other benefits due within one year	—	—	—	—
IV. Others	—	1,953,131.75	1,953,131.75	—
Total	2,509,002.45	372,477,171.67	372,441,683.46	2,544,490.66

(2) Short-term employee benefits

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
1. Salaries, bonuses, allowances and subsidies	374,046.70	255,168,671.34	255,542,718.04	—
2. Staff welfare	—	35,129,517.49	35,129,517.49	—
3. Social insurance premiums	—	19,611,593.49	19,611,593.49	—
Including: Basic medical insurance	—	9,160,499.83	9,160,499.83	—
Supplementary medical insurance	—	9,255,818.14	9,255,818.14	—
Work-related injury insurance	—	517,219.80	517,219.80	—
Maternity insurance	—	678,055.72	678,055.72	—
4. Housing provident funds	—	19,092,428.96	19,092,428.96	—
5. Labor union expenditures and employees' education expenses	1,982,624.05	5,945,248.73	5,548,492.24	2,379,380.54
6. Other short-term employee benefits	152,331.70	5,436,937.47	5,424,159.05	165,110.12
Total	2,509,002.45	340,384,397.48	340,348,909.27	2,544,490.66

(XV) Notes to Major Items in the Financial (Continued)

19. Employee benefits payable (Continued)

(3) Defined contribution plan

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
1.Basic pension insurance	—	20,411,811.58	20,411,811.58	—
2.Unemployment insurance	—	198,459.21	198,459.21	—
3.Corporate annuity plan	—	9,529,371.65	9,529,371.65	—
Total	—	30,139,642.44	30,139,642.44	—

20. Taxes payable

Unit: RMB

Item	December 31, 2018	December 31, 2017
Withholding individual income tax	2,744,039.12	3,275,419.67
Others	2,578,677.03	1,381,675.69
Total	5,322,716.15	4,657,095.36

21. Other payables

(1) Total other payables

Unit: RMB

Item	December 31, 2018	December 31, 2017
Interest payable	173,222,379.87	80,355,253.34
Other payables	41,028,621.80	39,581,308.07
Total	214,251,001.67	119,936,561.41

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial (Continued)

21. Other payables (Continued)

(2) Interest payable

Unit: RMB

Item	December 31, 2018	December 31, 2017
Corporate bond interest	165,565,753.43	77,605,479.45
Short-term loans interest	7,656,626.44	2,749,773.89
Total	173,222,379.87	80,355,253.34

As at 31 December 2018, the Group had no significant unpaid overdue interest.

(3) Other payables

Unit: RMB

Item	December 31, 2018	December 31, 2017
Amount collected and paid on behalf of others	40,665,143.20	35,163,834.23
Current accounts	—	4,417,473.84
Others	363,478.60	—
Total	41,028,621.80	39,581,308.07

22. Bonds payable

Unit: RMB

Category	December 31, 2018	December 31, 2017
Long-term bonds	4,498,219,043.17	4,495,866,518.52
Medium-term notes (Note (V)34)	3,989,825,356.08	—
Total	8,488,044,399.25	4,495,866,518.52
Less: Bonds payable due within one year	—	—
Bonds payable due after one year	8,488,044,399.25	4,495,866,518.52

23. Long-term employee benefits payable

Unit: RMB

Item	December 31, 2018	December 31, 2017
Cash-settled share-based payment	8,355,898.21	10,309,029.96

(XV) Notes to Major Items in the Financial (Continued)

24. Capital reserve

Unit: RMB

Item	January 1, 2018	Increase during the year	Decrease during the year	December 31, 2018
Share premium	24,441,727,207.50	—	29,086.06	24,441,698,121.44
Including: Capital contributed by investors	26,703,665,259.16	—	—	26,703,665,259.16
Difference arising from combination involving entities under common control	(2,261,938,051.66)	—	29,086.06	(2,261,967,137.72)
Total	24,441,727,207.50	—	29,086.06	24,441,698,121.44

25. Surplus reserve

Unit: RMB

Item	January 1, 2018	Transfer to surplus reserve during the year	Decrease during the year	December 31, 2018
Statutory surplus reserves	2,300,635,494.74	629,168,730.60	—	2,929,804,225.34

26. Retained earnings

Unit: RMB

Item	2018	2017
Retained earnings before the adjustment at the beginning of the year	12,678,305,427.76	10,552,109,306.91
Add: Others	(980,470.06)	(639,510.34)
Retained earnings after the adjustment at the beginning of the year	12,677,324,957.70	10,551,469,796.57
Add: Net profit for the year	6,093,908,629.44	4,937,444,374.17
Less: Appropriation of statutory surplus reserves	609,390,862.94	493,744,437.42
Distributable profits for shareholders	18,161,842,724.20	14,995,169,733.32
Less: Profits payable	3,090,516,570.98	2,317,844,775.62
Add: Other comprehensive income transferred	178,000,808.95	—
Retained earnings at the end of the year	15,249,326,962.17	12,677,324,957.70

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial (Continued)

27. Operating revenue and costs

Unit: RMB

Item	2018		2017	
	Revenue	Cost	Revenue	Cost
From other operations	572,320,051.24	636,255,717.03	535,271,473.36	479,911,286.30

28. Taxes and surcharges

Unit: RMB

Item	2018	2017
Stamp duty	540,466.00	63,841.60
Others	720.00	840.00
Total	541,186.00	64,681.60

29. Administrative expenses

Unit: RMB

Item	2018	2017
Employee remuneration	230,538,169.25	221,192,554.81
Depreciation and amortization	13,457,439.35	27,399,379.71
Rental expenses	53,417,203.32	54,944,497.12
Logistics service expenses	17,662,345.85	38,711,769.78
Insurance expenses	492,664.84	516,251.21
Professional service consulting fees	22,966,166.78	27,850,464.09
Others	85,480,612.09	58,002,236.21
Total	424,014,601.48	428,617,152.93

(XV) Notes to Major Items in the Financial (Continued)

30. R&D expenses

Unit: RMB		
Item	2018	2017
Employee remuneration and travelling expenses	23,797,715.83	108,526,449.27
Amortization expenses	13,449,437.52	—
Others	7,851,158.56	—
Total	45,098,311.91	108,526,449.27

31. Finance cost

Unit: RMB		
Item	2018	2017
Interest expenses	462,810,657.80	644,471,047.81
Less: Interest income	130,221,772.67	226,462,633.70
Exchange losses (gains)	(34,201,435.37)	54,570,123.70
Bank charges and others	820,828.58	2,062,804.62
Total	299,208,278.34	474,641,342.43

32. Asset impairment losses

Unit: RMB		
Item	2018	2017
Accounts receivable	—	(268,630.88)
Other receivables	—	647,475.01
Total	—	378,844.13

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial (Continued)

33. Credit impairment losses

Unit: RMB

Item	2018
Accounts receivable	3,438,243.64
Other receivables	20,603,760.84
Total	24,042,004.48

34. Investment income

Unit: RMB

Item	2018	2017
Long-term equity investment income under the cost method	5,154,448,914.73	3,732,970,037.89
Long-term equity investment income under the equity method	301,823,485.66	133,220,107.51
Income from derivative financial instruments	—	(103,978,902.71)
Interest income from entrusted loans	539,662,405.03	460,959,799.71
Gains from the disposal of long-term equity investments	953,678,637.11 (Note 1)	1,566,778,108.19 (Note 2)
Total	6,949,613,442.53	5,789,949,150.59

Note 1: The Company, holding 61% equity interests in Fangchenggang Nuclear, established Fangchenggang Investment with Shenzhen Guotong Clean Energy Partners Corporation (Limited Partnership) (深圳國同清潔能源合夥企業(有限合夥)). The difference between the carrying value and the fair value of the 61% equity interests in Fangchenggang Nuclear amounted to RMB954,031,587.11 and was recognized in investment income.

The Company also paid service fees to Beijing Equity Exchange in respect of the transfer of its 12% equity interests in Yangjiang Nuclear to CLP Nuclear Power (Yangjiang) Limited, resulting in an investment loss of RMB352,950.00.

Note 2: In December 2017, the Company transferred its 12% equity interests in Yangjiang Nuclear to CLP Nuclear Power (Yangjiang) Limited, resulting in an investment income of RMB1,566,778,108.19.

(XV) Notes to Major Items in the Financial (Continued)

35. Gains arising from changes in fair value

Unit: RMB		
Item	2018	2017
Gains from changes in fair value of derivative financial instruments	—	100,298,982.00
Gains from changes in fair value of cash-settled share-based payments	3,149,636.77	3,168,712.78
Total	3,149,636.77	103,467,694.78

36. Non-operating income

Unit: RMB				
Item	2018	2017	Amount included in non-recurring gains and losses in 2018	Amount included in non-recurring gains and losses in 2017
Gains from indemnity for breach of contract	10,001.10	110,000.00	10,001.10	110,000.00

37. Non-operating expenses

Unit: RMB				
Item	2018	2017	Amount included in non-recurring gains and losses in 2018	Amount included in non-recurring gains and losses in 2017
External donations	2,756,899.60	3,024,000.00	2,756,899.60	3,024,000.00
Others	969,454.72	—	969,454.72	—
Total	3,726,354.32	3,024,000.00	3,726,354.32	3,024,000.00

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial (Continued)

38. Income tax expenses

(1) Income tax expenses

Unit: RMB		
Item	2018	2017
Current income tax expenses	—	—
Deferred income tax expenses	—	—
Total	—	—

(2) Reconciliation of income tax expenses to accounting profits

Unit: RMB		
Item	2018	2017
Accounting profits	6,093,908,629.44	4,937,444,374.17
Income tax calculated at tax rate of 25%	1,523,477,157.36	1,234,361,093.54
Tax effect of non-deductible expenses	106,809.85	136,723.45
Tax effect of non-taxable income	(1,364,068,100.10)	(966,547,536.35)
Tax effect of unrecognized deductible losses and deductible temporary differences	60,651,924.56	(267,950,280.64)
Tax effect of utilization of unrecognized deductible losses and deductible temporary differences in previous years	(220,167,791.67)	—
Income tax expenses	—	—

(XV) Notes to Major Items in the Financial (Continued)

39. Cash flow statements items

(1) Cash received from other operating activities

Unit: RMB		
Item	2018	2017
Amount received by related parties in advance	89,159,022.00	53,161,762.44
Bank settlement and interest	35,418,743.17	25,481,472.13
Government grants related to income	1,701,951.36	1,572,125.93
Liquidated damages, refunds and advances	97,375.79	142,184.48
Others	864,744.07	498,445.37
Total	127,241,836.39	80,855,990.35

(2) Cash paid to other operating activities

Unit: RMB		
Item	2018	2017
Amount paid by related parties in advance	240,219,690.81	177,114,484.85
Income from leasing, consulting and other services	66,683,730.64	64,371,217.46
Employee reimbursement and others	10,020,111.77	23,916,516.58
Withholding taxes	321,740.88	4,312,561.59
Others	9,769,658.24	1,399,446.69
Total	327,014,932.34	271,114,227.17

Notes to the Financial Statements

For the year ended December 31, 2018

(XV) Notes to Major Items in the Financial (Continued)

39. Cash flow statements items (Continued)

(3) Cash received from other investing activities

Unit: RMB		
Item	2018	2017
Recovery of fixed deposits with original maturities of more than three months	100,000,000.00	100,000,000.00
Repayment of advance capital received from Fangchenggang	601,884,560.00	—
Total	701,884,560.00	100,000,000.00

(4) Cash paid to other investing activities

Unit: RMB		
Item	2018	2017
Amount paid by related parties in advance	2,425,189.17	601,884,560.00
Deposit of fixed deposit with maturities of more than three months	1,550,000,000.00	100,000,000.00
Settlement of derivative financial instruments	—	103,978,902.71
Others	1,752,116.67	—
Total	1,554,177,305.84	805,863,462.71

(5) Cash received from other financing activities

Unit: RMB		
Item	2018	2017
Merrill Lynch Galaxy Project (美林銀河項目) sponsor fees	—	6,062,662.17
Guarantee fees and interest payments service fee of 02 CGN Debt	—	4,000,000.00
Dividend distribution agency fees	—	1,022,772.32
Others	995,150.00	—
Total	995,150.00	11,085,434.49

(XV) Notes to Major Items in the Financial (Continued)

40. Supplementary information to cash flow statements

(1) Supplementary information to cash flow statements

	Unit: RMB	
Supplementary information	2018	2017
1. Reconciliation of net profits to cash flow from operating activities:		
Net profit	6,093,908,629.44	4,937,444,374.17
Add: Asset impairment loss	—	378,844.13
Credit impairment loss	24,042,004.48	/
Depreciation of fixed assets	10,400,903.36	5,900,155.03
Amortization of intangible assets	48,318,880.69	36,080,991.44
Losses from changes in fair value (" - ": gains)	(3,149,636.77)	(103,467,694.78)
Financel costs	412,379,836.82	550,738,782.48
Investment losses (" - ": gains)	(6,949,613,442.53)	(5,789,949,150.59)
Decrease in operating receivables (" - ": gains)	(36,614,931.36)	(98,699,605.43)
Increase in operating payables (" - ": decrease)	108,761,926.28	(34,180,726.62)
Net cash flows from operating activities	(291,565,829.59)	(495,754,030.17)
2. Net change in cash and cash equivalents:		
Closing balance of cash	8,180,127,897.47	7,101,335,054.79
Less: Opening balance of cash	7,101,335,054.79	3,299,429,162.77
Net increase cash and cash equivalents	1,078,792,842.68	3,801,905,892.02

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company

1. Related party transactions

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services:

Purchase of goods/Acceptance of services

Unit: RMB

Related party	Related party transaction	2018	2017
CNPRI	Purchase of goods/Acceptance of services	410,081,664.17	239,979,381.30
CGNPC	Purchase of goods/Acceptance of services	62,545,091.72	65,770,376.89
Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	Purchase of goods/Acceptance of services	59,617,535.08	36,610,286.10
Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	Purchase of goods/Acceptance of services	31,501,388.69	22,135,814.92
Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	Purchase of goods/Acceptance of services	28,680,917.09	32,469,596.23
Suzhou Nuclear Power Research Institute	Purchase of goods/Acceptance of services	25,128,080.68	19,321,404.34
CGN Engineering	Purchase of goods/Acceptance of services	19,682,876.37	9,046,368.36
Shenzhen Lvyan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	Purchase of goods/Acceptance of services	14,755,468.23	18,439,060.69
CGN Operations	Purchase of goods/Acceptance of services	11,308,317.84	16,201,784.01
CGN Design	Purchase of goods/Acceptance of services	8,452,641.51	627,358.49
CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	Purchase of goods/Acceptance of services	7,145,440.10	—
Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	Purchase of goods/Acceptance of services	5,319,978.40	5,045,330.71
CGN Services Group	Purchase of goods/Acceptance of services	2,699,585.85	910,781.26
Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司)	Purchase of goods/Acceptance of services	1,025,567.36	1,059,270.93
CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業(深圳)有限公司)	Purchase of goods/Acceptance of services	975,957.11	743,361.92
Inspection Company	Purchase of goods/Acceptance of services	481,132.07	9,622,641.55
CGN Import & Export Co., Ltd. (中廣核電進出口有限公司)	Purchase of goods/Acceptance of services	209,844.00	160,980.00
CNPSTC	Purchase of goods/Acceptance of services	94,339.62	94,339.62
Daya Bay Company	Purchase of goods/Acceptance of services	56,603.77	608,546.23
Nengzhahui and its subsidiaries	Purchase of goods/Acceptance of services	—	519,811.32
China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	Purchase of goods/Acceptance of services	—	1,500,000.00
Finance Company	Purchase of goods/Acceptance of services	—	188,679.25
Shanghai Engineering Science & Technology Co., LTD (上海中廣核工程科技有限公司)	Purchase of goods/Acceptance of services	—	157,799.05
Total		689,762,429.66	481,212,973.17

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(1) Related party transactions for purchase and sale of goods, rendering and acceptance of services: (Continued)

Sale of goods/Rendering of services

Unit: RMB

Related party	Related party transaction	2018	2017
CGN Engineering	Rendering of services	57,929,608.12	57,217,374.80
Taishan Nuclear	Rendering of services	46,959,885.71	76,135,359.14
CGN Operations	Rendering of services	41,179,940.83	35,158,970.97
Yangjiang Nuclear	Rendering of services	40,964,605.49	39,817,506.72
CGN Wind Energy Co., Ltd. and its subsidiaries	Rendering of services	40,797,379.49	39,370,791.83
Hongyanhe Nuclear	Rendering of services	33,460,323.76	30,328,938.39
Fangchenggang Nuclear	Rendering of services	30,170,416.65	32,285,100.80
Ningde Nuclear	Rendering of services	29,776,426.90	37,615,728.94
Swakop Uranium (Pty) Ltd.	Rendering of services	28,088,878.83	(2,942,499.07)
CGN Design	Rendering of services	23,817,395.52	26,744,271.61
CNPRI	Rendering of services	19,331,809.20	20,539,458.18
Lingdong Nuclear	Rendering of services	18,637,685.07	19,523,958.69
Ling'ao Nuclear	Rendering of services	18,637,685.06	19,523,958.69
GNPJVC	Rendering of services	18,637,685.05	19,523,958.68
Suzhou Nuclear Power Research Institute	Rendering of services	12,702,059.74	13,948,123.74
CGNPC Uranium Resources Co., Ltd. and its subsidiaries	Rendering of services	11,227,419.42	9,659,318.53
CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	Rendering of services	11,104,569.85	5,323,485.58
Techenergy	Rendering of services	8,964,523.89	7,003,924.57
CGN Services Group	Rendering of services	8,650,012.53	6,397,823.91
CGN Energy Conservation Industry Development Co., Ltd. (中廣核節能產業發展有限公司) and its subsidiaries	Rendering of services	8,436,868.63	1,527,189.10
Lufeng Nuclear	Rendering of services	7,578,103.49	8,305,063.17
CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	Rendering of services	7,113,057.73	2,047,020.55
CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	Rendering of services	4,538,228.30	4,148,683.05
DNMC	Rendering of services	4,390,470.24	4,956,053.15
Finance Company	Rendering of services	4,256,008.53	4,240,553.42
CGN Solar Energy Development Co., Ltd.	Rendering of services	4,249,546.04	3,967,135.78
CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	Rendering of services	3,726,128.02	3,351,558.26
Inspection Company	Rendering of services	3,258,614.56	2,917,661.76
CGN Nuclear Technology Application Co., Ltd. (中廣核核技術應用有限公司) and its subsidiaries	Rendering of services	2,672,329.70	—
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	Rendering of services	2,100,473.97	825,010.38
Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. (中琺國際核能工程有限公司)	Rendering of services	1,406,509.43	1,543,773.58
Xianning Nuclear Power Co., Ltd. (咸寧核電有限公司)	Rendering of services	1,055,748.70	1,165,530.49
China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	Rendering of services	487,153.81	540,992.73
CGN Energy Development Co., Ltd. (中廣核能源開發有限責任公司) and its subsidiaries	Rendering of services	390,309.62	805,508.20
CGNPC	Rendering of services	—	(766,698.11)
Others	Rendering of services	1,924,804.77	1,986,637.87
Total		558,622,666.65	534,737,228.08

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

(2) Related party transactions for leasing

The Company as lessee:

		Unit: RMB	
Name of lessor	Type of leased assets	Rental costs recognized in 2018	Rental costs recognized in 2017
CGNPC	Buildings	76,746,004.47	68,923,122.60

(3) Related party transactions for funds lending:

		Unit: RMB	
Related party	Amount in 2018	Amount in 2017	
Borrowing from			
CGNPC	800,000,000.00	800,000,000.00	
Total	800,000,000.00	800,000,000.00	
Lending to			
Taishan Nuclear	4,129,000,000.00	945,000,000.00	
Ling'ao Nuclear	950,000,000.00	1,250,000,000.00	
Lingdong Nuclear	575,000,000.00	875,000,000.00	
Yangjiang Nuclear	2,890,000,000.00	2,890,000,000.00	
Lufeng Nuclear	2,991,000,000.00	1,000,000.00	
Total	11,535,000,000.00	5,961,000,000.00	

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(4) Other related party transactions

The Company has established a cash management service system in accordance with the Cash Management Service Agreement entered into by the Company and Finance Company. The Company opened a current account with Finance Company as the main account, while each subsidiary opened a settlement account with Finance Company as a sub-account under the main account of the Company, and the bank deposits in the sub-accounts are automatically included in the main account. For the amount included in the Company's main account from the aforesaid subsidiaries, the Company accounted for as short-term loans, whereas each subsidiary accounted for as entrusted loans. As at December 31, 2018, the Company's balance of short-term loans for such business amounted to RMB8,804,850,094.84 (December 31, 2017: RMB8,014,455,203.67). For the year, the interest incurred on such business amounted to RMB107,681,669.76 (December 31, 2017: RMB51,006,710.71)

On April 30, 2018, the Company acquired 100% equity interests in Power Sales Company, 100% equity interests in Ocean Power and 100% equity interests in Hebei Thermal Power, from CGNPC and Nengzhihui, and the final transaction price was RMB235,016,511.04.

Unit: RMB		
Item	2018	2017
Interest income from Finance Company	94,803,334.44	48,672,486.05
Entrusted loan interest income from GNIC	207,595,854.28	208,726,200.21
Entrusted loan interest income from Yangjiang Nuclear	108,137,511.79	114,108,707.58
Entrusted loan interest income from Lufeng Nuclear	79,631,333.20	17,314.86
Entrusted loan interest income from Taishan Nuclear	66,835,673.54	49,700,438.70
Entrusted loan interest income from Ling'ao Nuclear	49,695,786.15	52,004,500.78
Entrusted loan interest income from Lingdong Nuclear	27,766,246.07	36,402,637.58
Total	539,662,405.03	460,959,799.71
Interest expenses on CGNPC	29,990,833.33	168,244,438.44
Interest expenses on Finance Company	—	35,126,250.00
Total	29,990,833.33	203,370,688.44
Fees expenses on Finance Company	5,650.00	9,186.60

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties

Receivables

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017
Cash at bank and in hand	Finance Company	8,483,282,705.56	5,802,899,525.97
Bills receivable and accounts receivable	Taishan Nuclear	100,463,775.55	117,272,877.41
	CGN Engineering	61,493,014.58	58,786,404.85
	Fangchenggang Nuclear	58,531,969.00	63,123,827.37
	CGN Wind Energy Co., Ltd. and its subsidiaries	54,889,838.39	47,235,200.45
	Yangjiang Nuclear	43,321,219.82	44,164,033.47
	CGN Operations	43,286,632.51	69,152,309.24
	Swakop Uranium (Pty) Ltd.	36,014,080.23	6,239,868.68
	Hongyanhe Nuclear	35,063,933.69	33,131,974.93
	Ningde Nuclear	32,562,012.39	40,056,172.70
	CGN Design	25,246,439.26	28,348,927.90
	Lingdong Nuclear	21,565,946.18	20,695,396.22
	GNPJVC	21,565,946.18	20,695,396.22
	Ling'ao Nuclear	21,565,946.17	20,695,396.22
	CNPRI	20,491,717.75	21,771,825.68
	Suzhou Nuclear Power Research Institute	13,464,183.28	14,785,011.16
	CGNPC Uranium Resources Co., Ltd and its subsidiaries	11,901,488.79	10,238,877.86
	CGN Capital Holdings Co., Ltd. (中廣核資本控股有限公司) and its subsidiaries	10,179,498.79	2,220,894.73

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Receivables (Continued)

Item name	Related party	December 31, 2018	December 31, 2017
	Techenergy	9,502,395.29	7,424,160.04
	CGN Services Group	9,169,013.27	6,781,693.34
	CGN Energy Conservation Industry Development Co., Ltd. (中廣核節能產業發展有限公司) and its subsidiaries	8,943,080.74	1,618,820.45
	Lufeng Nuclear	8,032,789.68	8,803,366.96
	CGNPC Huamei Investment Limited (中廣核華美投資有限公司) and its subsidiaries	7,539,841.18	2,590,555.78
	CGN Solar Energy Development Co., Ltd. and its subsidiaries	7,253,781.79	6,954,426.93
	CGN Huizhou Nuclear Power Co., Ltd. (中廣核惠州核電有限公司)	4,810,521.99	4,397,604.04
	DNMC	4,653,898.44	5,253,416.34
	Finance Company	4,511,369.04	1,839,986.63
	CGN Cangnan Nuclear Power Co., Ltd. (中廣核蒼南核電有限公司)	3,949,695.69	3,552,651.75
	Inspection Company	3,454,131.43	3,092,721.47
	CGN Nuclear Technology Application Co., Ltd. (中廣核核技術應用有限公司) and its subsidiaries	2,830,669.48	—
	CGNPC	1,800,000.00	1,800,000.00
	Worldwide Engineering CGNPC AREVA Nuclear Co., Ltd. (中法國際核能工程有限公司)	1,490,900.00	1,636,400.00
	Hualong Pressurized Water Reactor Technology Corporation, Ltd. (華龍國際核電技術有限公司)	885,967.95	885,967.95
	China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	516,383.03	573,452.29
	Others	4,678,523.66	1,987,843.89
	Total	695,630,605.22	677,807,462.95

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Receivables (Continued)

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017
Other receivables	CGN Engineering	679,626,192.13	—
	CGN Investment	294,746,007.44	230,576,050.22
	CLP Nuclear Power		
	(Yangjiang) Limited	212,359,863.00	212,359,863.00
	CGN Ninghe Investment	68,295,133.50	338,192,656.31
	Finance Company	11,119,652.77	2,880,000.01
	GNIC	6,676,388.89	6,676,388.89
	Taishan Nuclear	5,311,996.10	1,233,225.00
	Lufeng Nuclear	4,307,593.89	1,395.63
	Yangjiang Nuclear	3,875,100.55	1,714,189,675.33
	Ling'ao Nuclear	1,314,533.61	521,735,476.00
	Lingdong Nuclear	816,096.11	313,699,892.50
	Hongyanhe Nuclear	103,650.55	—
	Ningde Nuclear	103,650.54	—
	Fangchenggang Nuclear	51,825.28	—
	GNPJVC	51,825.28	—
	Others	446.02	—
	Total	1,288,759,955.66	3,341,544,622.89

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Receivables (Continued)

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017
Other current assets	Yangjiang Nuclear	2,890,000,000.00	2,890,000,000.00
	Taishan Nuclear	1,445,000,000.00	945,000,000.00
	Ling'ao Nuclear	950,000,000.00	1,250,000,000.00
	Lingdong Nuclear	575,000,000.00	875,000,000.00
	Lufeng Nuclear	—	1,000,000.00
	Total	5,860,000,000.00	5,961,000,000.00
Prepayments	Shenzhen Nuclear Power	500,000.10	2,367,037.89
	Material Supply Co., Ltd. (深圳市核電物資 供應有限公司)		
	CGN Operations	424,060.98	—
	Total	924,061.08	2,367,037.89
Non-current assets due within one year	GNIC	4,000,000,000.00	—
Other non-current assets	Fangchenggang Nuclear	—	601,884,560.00
Debt investments	Lufeng Nuclear	2,991,000,000.00	/
	Taishan Nuclear	2,497,000,000.00	/
	GNIC	600,000,000.00	/
	Total	6,088,000,000.00	/
Long-term receivables	GNIC	—	4,600,000,000.00

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Payables

Unit: RMB

Item name	Related party	December 31, 2018	December 31, 2017
Short-term loans	GNIC	2,280,284,943.64	1,819,322,663.84
	CGN Engineerin	1,946,462,475.07	994,271,474.10
	CGNPC	800,000,000.00	800,000,000.00
	Yangjiang Nuclear	796,610,346.87	613,215,115.82
	Fangchenggang Investment	502,722,708.06	—
	Lingdong Nuclear	486,147,119.42	441,828,425.32
	CNPRI	477,701,184.12	288,823,842.41
	Lufeng Nuclear	459,376,702.99	1,790,506,585.12
	Ningde Nuclear	444,592,218.60	250,788,578.48
	Ling'ao Nuclear	411,468,911.00	180,778,599.21
	CGN Operations	327,020,255.27	249,375,338.83
	CGN Design	175,050,996.14	489,963,938.63
	Suzhou Nuclear Power		
	Research Institute	131,656,362.34	198,989,525.39
	Taishan Nuclear	128,015,014.99	249,480,298.03
	Inspection Company	48,398,227.17	47,262,282.64
	CNPSTC	32,709,182.83	75,067,159.75
	Shanghai Engineering Science & Technology Co., LTD		
	(上海中廣核工程科技有限公司)	32,597,057.30	13,957,196.96
	Daya Bay Environment Protection	29,617,877.52	26,121,526.45
	Power Sales Company	25,097,308.37	—
	CGN Import & Export Co., Ltd.		
	(中廣核電進出口有限公司)	22,924,960.60	22,305,848.35
	China Nuclear Power (Shenzhen)		
	Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	19,624,895.77	19,167,308.35
	Fangchenggang Nuclear	13,539,735.16	240,134,945.48
	Hebei Thermal Power	10,140,345.87	—
	CGN Ninghe Investment	1,791,912.85	1,463,411.23
	CGN Investment	1,299,352.89	1,631,139.28
	Total	9,604,850,094.84	8,814,455,203.67

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Payables (Continued)

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017
Bills payable and accounts payable	Shenzhen Nuclear Power Property Co., Ltd. (深圳市核電物業有限公司)	47,144,648.26	110,717,909.19
	CGNPC	25,256,529.23	—
	Shenzhen Nuclear Power Material Supply Co., Ltd. (深圳市核電物資供應有限公司)	14,006,505.63	23,339,943.55
	CNPRI	12,075,471.69	67,094,339.62
	Suzhou Nuclear Power Research Institute	10,140,950.20	7,043,893.51
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	8,062,717.28	4,321,131.42
	CGN Design	6,132,075.47	627,358.49
	CGN Beigu Technology Co., Ltd. (中廣核貝穀科技有限公司)	4,771,090.52	519,811.32
	Shenzhen Nuclear Power Huantong Automobile Service Co., Ltd. (深圳核電環通汽車服務有限公司)	4,003,081.07	4,054,689.43
	Shenzhen Kezhi Management Consulting Co., Ltd. (深圳市科智管理諮詢有限公司)	3,218,585.00	967,120.00
	CGN Operations	1,522,643.24	3,618,906.70
	Shenzhen Lvyuan Restaurant Management Co., Ltd. (深圳綠源餐飲管理有限公司)	530,227.29	10,080,227.52
	CGN Services Group	403,920.00	—
	CNPSTC	94,339.62	—
	CGN Engineering	—	4,150,943.40
	China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司)	—	1,500,000.00
	CGN Environmental Protection Industry (Shenzhen) Co., Ltd. (中廣核環保產業(深圳)有限公司)	—	2,202,786.61
	CGN Import & Export Co., Ltd. (中廣核電進出口有限公司)	—	141,000.00
	Total	137,362,784.50	240,380,060.76

Notes to the Financial Statements

For the year ended December 31, 2018

(XVI) Related Parties and Related Party Transactions of Parent Company (Continued)

1. Related party transactions (Continued)

(5) Amounts due from/due to related parties (Continued)

Payables (Continued)

		Unit: RMB	
Item name	Related party	December 31, 2018	December 31, 2017
Other payables	CGN Engineering	19,045,499.87	17,997,841.54
	Ling'ao Nuclear	7,561,515.84	7,351,666.38
	CGN Design	7,083,731.86	7,037,501.31
	Fangchenggang Investment	3,331,007.78	—
	CGNPC	2,425,012.99	246,500.00
	Taishan Nuclear	2,392,038.89	80,040.28
	CGNPRI	2,115,013.89	1,828,000.00
	Yangjiang Nuclear	866,000.00	896,708.33
	Lingdong Nuclear	791,718.61	826,292.21
	Lufeng Nuclear	423,530.56	539,733.33
	CGN Nuclear Technology Application Co., Ltd. (中廣核技術應用有限公司) and its subsidiaries	393,863.46	158,813.62
	CGN Operations	358,486.12	269,796.38
	GNIC	342,271.48	—
	CGN Import & Export Co., Ltd. (中廣核電進出口有限公司)	315,033.33	35,199.99
	Inspection Company	283,188.89	112,138.89
	Daya Bay Environment Protection	220,648.62	66,068.06
	Shenzhen Bailu Health Service Co., Ltd. (深圳市白鷺健康服務有限公司)	130,358.60	—
	CNPSTC	86,000.00	394,720.83
	CGNPC Uranium Resources Co., Ltd.	60,302.44	—
	Fangchenggang Nuclear	60,000.00	20,166.67
	Power Sales Company	34,312.50	—
	Total	48,319,535.73	37,861,187.82
Receipts in advance	Nengzhihui and its subsidiaries	—	2,000.00

Supplementary Information

For the year ended December 31, 2018

1. Breakdown of Non-recurring Gains or Losses

Unit: RMB

Item	2018	2017 (Restated) (Note 2)
Gains or losses from disposal of non-current assets	(665,199.14)	1,850,564,891.86
Government grants recognized in profit or loss for the current period (except for those closely related to the Company's business and for fixed or quantitative purposes in accordance with national uniform standards)	143,333,834.97	118,535,257.69
Net gains or losses of the subsidiaries as a result of business combination under common control from the beginning of the period to the combination date (Note 1)	415,889.99	399,920.63
Except for the effective hedging transactions related to the normal operation of the Company, the gains or losses from changes in fair value arising from holding financial assets and liabilities held for trading, as well as the investment income arising from disposal of financial assets and liabilities held for trading and available-for-sale financial assets	7,850,932.34	29,936,167.21
Other non-operating income and expenses other than the items above, net	(46,289,861.93)	(38,773,426.64)
Other gains or losses items that meet the definition of non-recurring gains or losses	11,136,508.04	10,183,550.29
Total	115,782,104.27	1,970,846,361.04
Income tax effect of non-recurring gains or losses	15,645,554.97	309,803,540.24
Effect of non-recurring gains or losses attributable to minority shareholders	7,016,832.13	70,970,514.40
Effect of non-recurring gains or losses attributable to shareholders of the parent company, net	93,119,717.17	1,590,072,306.40

Note 1: The amount of this item has taken into account the offset of internal unrealized gains and losses between related parties and the corresponding income tax effect.

Note 2: In April 2018, the Company acquired Ocean Power and Hebei Thermal Power from its parent company, CGNPC, and acquired Power Sales Company from the wholly-owned subsidiary of CGNPC, Nengzhihui. Such transaction was business combination under common control. When preparing the breakdown of non-recurring gains or losses, according to the Accounting Standards for Business Enterprises, for the new subsidiaries from business combination under common control, the Group has restated the comparative data in last year.

Supplementary Information

For the year ended December 31, 2018

2. Return on Equity and Earnings Per Share

The statements for return on equity and earnings per share have been prepared by CGN Power in accordance with the relevant requirements under the Rules on the Preparation and Report of Information Disclosure for Companies Publicly Issuing Securities No. 9 – Calculation and Disclosure of Return on Equity and Earnings Per Share (2010 Revision) issued by China Securities Regulatory Commission.

Profit for the reporting period (2018)	Weighted average return on equity (%)	Earnings per share	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to holders of ordinary shares of the Company	12.99	0.191	N/A
Net profit attributable to holders of ordinary shares of the Company (excluding the non-recurring gains or losses)	12.87	0.189	N/A

Profit for the reporting period (2017) (Restated)	Weighted average return on equity (%)	Earnings per share	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to holders of ordinary shares of the Company	16.22	0.210	N/A
Net profit attributable to holders of ordinary shares of the Company (excluding the non-recurring gains or losses)	13.58	0.175	N/A

Company Information

Joint Company Secretaries

Mr. Jiang Dajin
Mr. Lee Kwok Fai Kenneth

Auditor

Deloitte Touche Tohmatsu
Certified Public Accountants LLP
30/F, Bund Center, 222 Yan An Road East,
Shanghai, PRC

Legal Advisors

Hong Kong Law

King & Wood Mallesons
13/F, Gloucester Tower, The Landmark,
15 Queen's Road Central, Central, Hong Kong

PRC Law

King & Wood Mallesons
28/F, Landmark, 4028 Jintian Road, Futian District,
Shenzhen, PRC

Principal Bankers

China Development Bank Corporation (Shenzhen Branch)
11/F – 15/F, Citic Building,
1093 Shennan Zhong Road,
Futian District, Shenzhen,
Guangdong Province, PRC

Bank of China Limited (Shenzhen Branch)
International Finance Building,
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Guangdong Province, PRC

Industrial and Commercial Bank of China Limited (Shenzhen Branch)
1/F, North Tower, World Financial Centre,
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Guangdong Province, PRC

Agricultural Bank of China Limited (Shenzhen Branch)
5008 Shennan East Road, Luohu District, Shenzhen,
Guangdong Province, PRC

Postal Savings Bank of China Co., Ltd. (Shenzhen Branch)
43/F, Postal Information Complex Building,
5055 Yitian Road, Futian District, Shenzhen,
Guangdong Province, PRC

Company Information

Contact Us

Annual Report

This report was available on our website at www.cgnp.com.cn on April 8, 2019 and posted on April 9, 2019 to Shareholders who have elected to receive corporate communications from the Company in printed form.

Those Shareholders who (a) received our 2018 Annual Report electronically and would like to receive a printed copy or vice versa; or (b) received a printed copy of our 2018 Annual Report in either English or Chinese language only and would like to receive a printed copy of the other language version or to receive printed copies of both language versions in the future, are requested to write to the Company or the Company's Registrar.

Shareholders may at any time change their choice of the language version or means of receipt of the Company's corporate communications free of charge by notice in writing to the Company or the Company's Registrar.

Annual General Meeting

The 2018 AGM is scheduled to be held in May 2019, and the relevant details (including shareholders' right to demand a poll) are set out in the circular to be despatched together with a proxy form to the Shareholders.

Transfer of Shares

For the purposes of receiving final cash dividends and attending the AGM, the details of the procedures of registration of shares and book closure dates are set out in the circular to be despatched to shareholders of the Company.

H Share Registrar

Computershare Hong Kong Investor Services Limited
Address: Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong

Our Stock Name and Stock Code

Stock Name: CGN Power
Stock Code: HKSE 1816

Contact Details

Headquarters in the PRC: 18/F, South Tower, CGN Building, No.2002 Shennan Road, Futian District, Shenzhen, Guangdong Province, China

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E-mail: IR@cgnpc.com.cn
Website: www.cgnp.com.cn

FEEDBACK FORM

Dear Reader:

Thank you for reading the 2018 Annual Report published by CGN Power. For our continuous improvement in preparation of such reports in future, we attach great importance to and would like to hear your comments on our 2018 Annual Report.

You are welcomed to complete the following form and return the same to us by e-mail, fax or post. We would like to express our deepest gratitude for your valuable comments!

1. Feedback Form (please tick “√” where appropriate)

	I can easily understand the contents				I can get useful information			
	Strongly agree	Agree	Disagree	Strongly Disagree	Strongly agree	Agree	Disagree	Strongly Disagree
Business at a glance for the year								
Chairman’s Statement								
President’s Review								
Shareholder Value								
Finance, Assets and Investment								
Financial Performance and Analysis								
Assets and Investment								
Business Performance and Outlook								
Industry Overview								
Business Performance and Analysis								
Future Outlook								
Capitals								
Production Capital								
Intellectual Capital								
Human Capital								
Financial Capital								
Environmental Capital								
Social and Relationship Capital								
Corporate Governance								
Board of Directors, Supervisory Committee and Senior Management								
Corporate Governance Report								
Directors’ Report								
Audit and Risk Management Committee Report								
Remuneration Committee Report								
Nomination Committee Report								
Nuclear Safety Committee Report								
Supervisory Committee Report								
Risk Management Report								
Financial Report								
Company Information								
Overall Rating of the Annual Report								

2. Which parts of the Annual Report are you most interested in?
3. What additional information do you expect to be provided in the Annual Report?
4. Any other comments/suggestions?

Please provide your information* below if you so wish:

Name:

Work Unit:

Tel:

E-mail:

* *Your personal data provided in this form may be used in connection with our management of your request, inquiry, comments or suggestions, or conducting or publishing statistical and data analysis. Your supply of personal data is on a voluntary basis. However, we may not be able to follow up your request or inquiry unless you provide us with your personal data.*

Your personal data will not be transferred to any third party.

Your personal data will be retained for such period as may be necessary for the above purposes and its directly related purpose(s) and will be destroyed within two years after the date of receipt of your personal data.

Our Contact Details:

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Computershare Hong Kong Investor Services Limited

香港中央證券登記有限公司
Freepost No. 37 簡便回郵號碼
Hong Kong 香港



CGN Power

A world-class nuclear power supplier and service provider
with international competitiveness



本年度報告以環保紙張印製。

This annual report is printed on environmentally friendly paper.