Hong Kong Exchanges and Clearing Limited and The Stock Exchange of Hong Kong Limited take no responsibility for the contents of this announcement, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this announcement.

CGN Power Co., Ltd.*

中國廣核電力股份有限公司

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

(Stock Code: 1816)

ANNUAL RESULTS ANNOUNCEMENT FOR THE YEAR ENDED DECEMBER 31, 2019

FINANCIAL HIGHLIGHTS

For the year ended December 31, 2019:

- Operating revenue of the Group was approximately RMB60,875,176,000, representing an increase of 19.8% over 2018.
- Net profit attributable to shareholders of the parent company was approximately RMB9,465,700,000, representing an increase of 8.8% over 2018.
- Net profit attributable to shareholders of the parent company (excluding the effects of non-recurring gains or losses) was approximately RMB9,086,301,000, representing an increase of 5.5% over 2018.
- The Board recommended a payment of final cash dividend of RMB0.076 (inclusive of tax) per share.

Note: For details of non-recurring profit and loss, please refer to note 24 to the financial information of this announcement.

* *For identification purpose only*

The board of directors (the "**Board**") of CGN Power Co., Ltd. (the "**Company**", "**we**" or "**us**") hereby announces the consolidated operating results of the Company and its subsidiaries (the "**Group**") for the year ended December 31, 2019 (the "**Reporting Period**") together with the comparative figures for the year 2018. The financial data of the Group for the year ended December 31, 2019 shown in this results announcement is based on the audited consolidated financial statements prepared in accordance with the China Accounting Standards for Business Enterprises ("**CASBE**") and the disclosure requirements of the Hong Kong Companies Ordinance (Chapter 622 of the Laws of Hong Kong) ("**Hong Kong Companies Ordinance**") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Listing Rules**" or the "**Stock Exchange Listing Rules**").

FINANCIAL INFORMATION

The financial information set out below in this announcement is extracted from the Company's 2019 annual report (the "**2019 Annual Report**"). Such financial information has been reviewed by the audit and risk management committee of the Company, approved by the Board and agreed by Deloitte Touche Tohmatsu Certified Public Accountants LLP, the external auditor of the Company. The consolidated financial statements of the Company for the year 2019 prepared in accordance with the CASBE has been audited by the external auditor of the Company with unqualified audit opinion being issued.

CONSOLIDATED INCOME STATEMENT

For the year ended December 31, 2019
(Expressed in RMB)

		NOTES	**2019**	2018 (Audited and restated)
I.	Operating revenue	*4*	**60,875,176,254.90**	50,827,919,184.43
	Less: Operating costs	*4*	**35,471,460,119.46**	28,503,854,609.56
	Taxes and surcharges		**699,868,278.64**	632,770,128.93
	Selling expenses		**78,997,912.92**	102,120,591.17
	Administrative expenses		**2,579,433,181.20**	2,362,898,123.90
	Research and development expenses		**1,483,443,965.15**	1,019,825,909.61
	Finance costs	*5*	**7,697,736,375.83**	6,000,868,773.69
	Including: Interest expenses		**7,996,857,031.69**	6,141,359,054.43
	Interest income		**339,092,835.28**	254,816,814.36
	Add: Other gains	*6*	**2,405,291,535.32**	1,563,140,899.78
	Investment income	*7*	**1,307,058,211.00**	1,044,558,662.97
	Including: Income from investment in associates and joint ventures	*7*	**1,096,412,691.22**	1,029,509,833.39
	Gain on derecognition of financial assets measured at amortized cost		**–**	–
	Gains from changes in fair value		**4,470,971.69**	16,076,115.36
	Gains (losses) from credit impairment	*8*	**36,863,278.74**	223,491,277.23
	Asset impairment gains (losses)	*9*	**(30,151,843.83)**	(107,189,032.49)
	Gains (losses) from disposal of assets		**(157,727.76)**	106,649.90
II.	Operating profit		**16,587,610,846.86**	14,945,765,620.32
	Add: Non-operating income		**18,329,088.25**	7,639,433.82
	Less: Non-operating expenses		**50,844,819.09**	53,929,295.75
III.	Total profit		**16,555,095,116.02**	14,899,475,758.39
	Less: Income tax expenses	*10*	**1,769,854,993.38**	1,217,798,428.26
IV.	Net profit		**14,785,240,122.64**	13,681,677,330.13
	(I) Classified by continuity of operations			
	1. Net profit from continuing operations		**14,785,240,122.64**	13,681,677,330.13
	2. Net profit from discontinued operations		**–**	–
	(II) Classified by ownership			
	1. Net profit attributable to shareholders of the parent company		**9,465,700,355.79**	8,702,632,650.82
	2. Non-controlling interests		**5,319,539,766.85**	4,979,044,679.31

		NOTES	2019	2018 (Audited and restated)
V.	Other comprehensive income, net of tax		**97,934,302.89**	225,716,697.62
	Other comprehensive income attributable to shareholders of the parent company, net of tax		**66,730,520.92**	154,367,152.58
	(I) Other comprehensive income that will not be reclassified to profit or loss		**(26,794,950.00)**	(58,991,366.47)
	1. Change arising from remeasurement of defined benefit plan		**9,375.00**	(880,250.00)
	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		**(26,804,325.00)**	(124,750,250.00)
	(II) Other comprehensive income that may be reclassified to profit or loss		**93,525,470.92**	213,358,519.05
	1. Other comprehensive income that can be transferred to profit or loss under the equity method		**–**	(788,366.06)
	2. Translation differences arising from translation of foreign currency financial statements		**93,525,470.92**	214,146,885.11
	Other comprehensive income attributable to non-controlling interests, net of tax		**31,203,781.97**	71,349,545.04
VI.	Total comprehensive income		**14,883,174,425.53**	13,907,394,027.75
	Total comprehensive income attributable to shareholders of the parent company		**9,532,430,876.71**	8,856,999,803.40
	Total comprehensive income attributable to non-controlling interests		**5,350,743,548.82**	5,050,394,224.35
VII.	Earnings per share			
	(I) Basic earnings per share	*11*	**0.201**	0.191
	(II) Diluted earnings per share	*11*	**0.201**	0.191

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at December 31, 2019

(Expressed in RMB)

	NOTES	**December 31, 2019**	December 31, 2018 (Audited and restated)
Current assets:			
Cash at bank and in hand		**19,571,648,773.58**	15,596,386,387.95
Derivative financial assets		**3,149,401.93**	4,753,642.10
Bills receivable	*12*	**669,170,265.04**	18,433,532.76
Accounts receivable	*13*	**7,483,893,725.25**	6,630,947,443.89
Prepayments		**9,197,503,376.81**	5,128,948,753.87
Other receivables		**147,196,275.50**	519,127,589.11
Inventories		**18,370,637,240.89**	21,372,255,356.38
Contract assets		**3,421,177,653.57**	3,409,787,026.47
Non-current assets due within one year		**245,345.98**	3,659,033.86
Other current assets		**3,058,761,231.75**	2,703,617,527.46
Total current assets		**61,923,383,290.30**	55,387,916,293.85
Non-current assets:			
Long-term equity investments		**11,199,291,810.53**	10,203,023,176.92
Other investment in equity instruments		**391,155,000.00**	422,689,500.00
Other non-current financial assets		**–**	812,257.18
Investment properties		**183,747,207.19**	210,346,041.36
Fixed assets		**256,954,693,283.42**	210,850,206,582.15
Construction in progress		**39,240,570,013.29**	74,624,722,113.05
Right-of-use assets		**1,045,156,326.10**	–
Intangible assets		**4,937,028,458.97**	4,719,796,447.25
Development costs		**2,274,225,675.05**	1,962,455,756.90
Goodwill		**419,242,673.32**	419,242,673.32
Long-term deferred expenses		**1,473,427,773.32**	1,734,658,492.05
Deferred tax assets		**1,904,063,349.16**	1,774,868,398.17
Other non-current assets		**6,029,249,666.14**	6,244,932,628.08
Total non-current assets		**326,051,851,236.49**	313,167,754,066.43
Total assets		**387,975,234,526.79**	368,555,670,360.28

	NOTES	**December 31, 2019**	December 31, 2018 (Audited and restated)
Current liabilities:			
Short-term loans	*14*	**14,263,273,458.48**	16,366,742,257.35
Derivative financial liabilities		**–**	2,724,971.67
Bills payable	*15*	**2,618,383,795.01**	2,260,164,887.24
Accounts payable	*16*	**19,983,479,765.09**	15,986,899,682.85
Receipts in advance		**40,000.00**	2,058,361.07
Contract liabilities		**1,543,242,352.55**	835,799,748.43
Employee benefits payable		**51,046,738.75**	42,616,433.80
Taxes payable		**1,456,753,322.33**	1,431,294,200.96
Other payables		**3,817,756,635.31**	3,878,479,167.43
Non-current liabilities due within one year	*17*	**22,747,589,472.72**	18,853,766,355.93
Other current liabilities		**536,334,171.47**	964,545,364.41
Total current liabilities		**67,017,899,711.71**	60,625,091,431.14
Non-current liabilities:			
Long-term loans	*18*	**167,859,812,159.47**	179,639,946,139.80
Bonds payable	*19*	**8,987,133,846.98**	8,488,044,399.25
Lease liabilities		**695,555,684.54**	–
Long-term employee benefits payable		**119,769,817.00**	102,267,273.40
Provisions	*20*	**4,910,629,589.95**	4,001,531,754.01
Deferred income		**1,873,337,839.76**	1,395,854,838.75
Deferred tax liabilities		**1,217,228,385.92**	1,177,284,416.72
Total non-current liabilities		**185,663,467,323.62**	194,804,928,821.93
Total liabilities		**252,681,367,035.33**	255,430,020,253.07
Shareholders' equity:			
Share capital	*21*	**50,498,611,100.00**	45,448,750,000.00
Capital reserve		**10,702,322,842.13**	3,350,519,181.82
Other comprehensive income		**766,584,661.43**	699,854,140.51
Specific reserve		**222,401,570.36**	197,139,693.40
Surplus reserve		**3,944,339,314.63**	3,341,495,665.44
Retained earnings		**23,667,716,575.70**	18,077,156,831.53
Total equity attributable to shareholders of the parent company		**89,801,976,064.25**	71,114,915,512.70
Non-controlling interests		**45,491,891,427.21**	42,010,734,594.51
Total shareholders' equity		**135,293,867,491.46**	113,125,650,107.21
Total liabilities and shareholders' equity		**387,975,234,526.79**	368,555,670,360.28

1. COMPANY OVERVIEW

The Company was established in the People's Republic of China (the "**PRC**") on March 25, 2014 as a joint stock company with limited liability under the Company Law of the PRC, and its shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited ("**Stock Exchange**") on December 10, 2014, and listed on the SME Board of the Shenzhen Stock Exchange ("**Shenzhen Stock Exchange**") on August 26, 2019.

The parent and the ultimate holding company of the Company is China General Nuclear Power Corporation (中國廣核集團有限公司) ("**CGNPC**"), a state-owned enterprise in the PRC controlled by the State-Owned Assets Supervision and Administration Commission of the State Council.

The consolidated financial statements are presented in Renminbi ("**RMB**"), which is also the functional currency of the Company and its principal subsidiaries.

The scope of business of 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 of nuclear power plants ("**NPP(s)**") engineering projects; organization of the operation, repairment and related businesses of NPPs; organization of the design development and scientific research for NPPs; and engagement in related investment, import and export businesses.

2. BASIS OF PREPARATION

The Group adopts the CASBE 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) (《公開發行證券的公司信息披露編報規則第15號－財務報告的一般規定(2014年修訂)》). In addition, the financial statements also include information disclosure according to the relevant requirements under the Hong Kong Companies Ordinance and the Stock Exchange Listing Rules.

3. CHANGES IN SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

From January 1, 2019, the Group commenced the adoption of the Accounting Standards for Business Enterprises No. 21 – Leases (Cai Kuai [2018] No. 35, the "**New Standards for Leases**") (《企業會計準則第21號－租賃》(財會[2018]35號)), which was revised by the Ministry of Finance in 2018, and the Accounting Standards for Business Enterprises No. 7 – Exchange of Non-monetary Assets (Cai Kuai [2019] No. 8, the "**New Standards for Exchange of Non-monetary Assets**") (《企業會計準則第7號－非貨幣性資產交換》(財會[2019]8號)), and the Accounting Standards for Business Enterprises No. 12 – Debt Restructuring (Cai Kuai [2019] No. 9, the "**New Standards for Debt Restructuring**") (《企業會計準則第12號－債務重組》(財會[2019]9號)), which were both revised by the Ministry of Finance in 2019. Besides, the financial statements have been prepared in accordance with the Notice of the Revised Format of Financial Statements for General Business Enterprises for 2019 (Cai Kuai [2019] No. 6, the "**Cai Kuai No. 6 Document**") (《關於修訂印發2019年度一般企業財務報表格式的通知》(財會[2019]6號)), issued by the Ministry of Finance on April 30, 2019.

The New Standards for Leases improved the definition of lease and added the identification, split and consolidation of leases; cancelled the classification of operating leases and finance leases of the lessee, and required right-of-use assets and lease liabilities to be recognized for all leases (except short-term leases and leases of low-value assets) at the beginning of leases and depreciation and interest expenses to be recognized respectively. Also, it improved lessee's subsequent measurement of leases, added accounting treatment under the scenarios of option revaluation and modification of lease; and increased the related disclosure requirements. In addition, the disclosure requirements for the lessor were also added.

For contracts subsisting prior to the date of initial adoption, the Group has elected, at the date of initial adoption, not to reassess whether such contracts are leases or contain a lease.

The Group as a lessee, shall, based on the cumulated affected amounts for the initial adoption of the New Standards for Leases, adjust the retained earnings and the amount of other relevant items in financial statements at the date of initial adoption, and shall not adjust the information of the comparative period.

For operating leases other than low-value leases prior to the date of initial adoption, the Group has decided to adopt one or a number of the following simplified approaches based on each lease:

- for a lease that would be completed within 12 months from the date of initial adoption, it was treated as a short-term lease;
- the same discount rate was applied to the leases with similar characteristics in measuring the lease liabilities;
- the measurement of right-of-use assets did not include initial direct costs;
- the use of hindsight before the date of initial adoption in determining the lease term where the contract contains options to extend or terminate the lease;
- the Group relied on previous assessments on whether leases are onerous applying the Accounting Standards for Business Enterprises No.13 – Contingencies immediately before the date of initial adoption as an alternative to performing an asset impairment test, and adjusted right-of-use assets based on the provision for loss included in the balance sheet before the date of initial adoption; and
- the Group conducted accounting treatment based on the final arrangement of the lease modification for modification of leases before the date of initial adoption.

On the date of initial adoption, the Group has made the following adjustments due to the implementation of the New Standards for Leases: for the operating lease before the date of initial adoption, the lease liabilities are recognized according to the present value of outstanding lease payments discounted by the incremental borrowing interest rate determined by the lessee on the date of initial adoption. And the right-of-use assets is measured according to one of the following for each lease:

– the carrying value assuming the adoption of the New Standards for Leases on the date of commencement of leases (using the incremental borrowing interest rate determined by the lessee on the date of initial adoption); and

– the amount equal to the lease liabilities adjusted by the lease prepayments if necessary.

On January 1, 2019, the Group recognized lease liabilities of RMB826,483,276.87 and right-of-use assets of RMB1,202,135,473.97. For operating leases before the date of initial adoption, the Group used the present value discounted by the incremental borrowing interest rate on the date of initial adoption to measure lease liabilities. The weighted average of these incremental borrowing interest rate was 4.66%.

The impacts of the adoption of the New Standards for Leases on relevant items on the consolidated balance sheet as at January 1, 2019 are as follows:

Unit: RMB

Item	December 31, 2018	Adjustment	January 1, 2019
Current Assets:			
Prepayments	5,128,948,753.87	(39,725,475.46)	5,089,223,278.41
Other receivables	519,127,589.11	(363,594.11)	518,763,995.00
Non-current Assets:			
Right-of-use assets	–	1,202,135,473.97	1,202,135,473.97
Long-term deferred expenses	1,734,658,492.05	(57,615,631.40)	1,677,042,860.65
Current Liabilities:			
Non-current liabilities due within one year	18,853,766,355.93	277,947,496.13	19,131,713,852.06
Non-current liabilities:			
Lease liabilities	-	826,483,276.87	826,483,276.87

(2) The New Standards for Exchange of Non-monetary Assets revised the definition of non-monetary assets exchange, clarified the application scope of the standard, specified the point of time of recognition and derecognition of assets exchanges, and provided accounting treatment principles in circumstances where the recognition time points of recognition and derecognition are inconsistent. It also refined the accounting treatment for the non-monetary assets exchange and increased requirements about disclosure. The implementation of the New Standards for Exchange of Non-monetary Assets did not affect the current financial statements of the Group.

(3) The New Standards for Debt Restructuring revised the definition of debt restructuring, clarified the scope of application of the standard, revised the accounting treatment of debt restructuring and simplified the disclosure requirements for debt restructuring. The implementation of the New Standards for Debt Restructuring has no significant impact on the current financial statements of the Group.

(4) The Group prepared the 2019 annual financial statements in accordance with Cai Kuai No. 6 Document promulgated by the Ministry of Finance on April 30, 2019. The Cai Kuai No. 6 Document revised the reporting items in the balance sheet and income statement by splitting the items of "bills receivable and accounts receivable" into "bills receivable" and "accounts receivable" and "bills payable and accounts payable" into "bills payable" and "accounts payable". At the same time, it specified or revised the reporting contents of sub-line items of "interest income", "other gains", "gains (losses) from assets disposal", "non-operating income" and "non-operating expenses" under the items of "non-current liabilities due within one year", "deferred income", "other investment in equity instruments", "R&D expenses" and "finance costs", adjusted the location of the item of "asset impairment losses", and specified the reporting contents of the item of "capital investment from holders of other equity instruments". For the changes to the above-mentioned reporting items, the Group retrospectively adjusted the comparative data for the previous year.

4. OPERATING REVENUE AND OPERATING COSTS

Unit: RMB

Item	2019		2018	
	Revenue	**Cost**	Revenue	Cost
From principal business operations	**60,589,245,467.36**	**35,185,491,661.50**	50,543,922,149.96	28,227,621,577.00
Of which: Sales of electricity	**52,783,020,377.01**	**27,743,385,671.64**	46,071,750,901.61	23,425,317,972.01
Construction, installation and design services	**6,163,681,030.01**	**6,144,634,380.26**	3,178,563,261.77	3,812,574,569.31
Rendering of services	**900,621,726.14**	**589,537,703.67**	721,858,441.79	494,359,016.18
Sales of goods and others	**741,922,334.20**	**707,933,905.93**	571,749,544.79	495,370,019.50
From other business operations	**285,930,787.54**	**285,968,457.96**	283,997,034.47	276,233,032.56
Total	**60,875,176,254.90**	**35,471,460,119.46**	50,827,919,184.43	28,503,854,609.56

5. FINANCE COSTS

Unit: RMB

Item	2019	2018
Interest expenses	**9,965,497,005.44**	9,947,795,170.31
Less: Capitalized interest expenses	**2,265,282,162.32**	4,004,039,487.10
Less: Interest income	**339,092,835.28**	254,816,814.36
Exchange losses	**17,841,553.47**	192,710,406.19
Less: Capitalized exchange losses	**18,471,806.91**	96,248,163.36
Interest expenses on the provision for nuclear power plant decommissioning	**243,382,214.01**	197,603,371.22
Bank charges and others	**40,602,432.86**	17,864,290.79
Interest expenses on the lease liabilities	**53,259,974.56**	–
Total	**7,697,736,375.83**	6,000,868,773.69

6. OTHER GAINS

Unit: RMB

Item	**2019**	2018
Value-added tax refunds (Note)	**2,079,868,288.09**	1,408,237,981.06
Other government grants	**315,301,019.19**	143,333,834.97
Others	**10,122,228.04**	11,569,083.75
Total	**2,405,291,535.32**	1,563,140,899.78

Note: For the value-added tax ("**VAT**") refunds received by the Group, the Group adopted the VAT "levy first, refund later" policy in respect of its sale of electricity generated by 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**"), Guangxi Fangchenggang Nuclear Power Co., Ltd. (廣西防城港核電有限公司) ("**Fangchenggang Nuclear**") and Fujian Ningde Nuclear Power Co., Ltd. (福建寧德核電有限公司) ("**Ningde Nuclear**") to grid companies.

7. INVESTMENT INCOME

Unit: RMB

Item	**2019**	2018
Income from long-term equity investments accounted for using the equity method	**1,096,412,691.22**	1,029,509,833.39
Investment income (loss) from disposal of long-term equity investments	**143,073,493.12**	(771,849.04)
Income from disposal of derivative financial instruments	**934,342.44**	2,911,325.02
Investment income from holding other equity instruments	**22,493,800.00**	15,382,800.00
Income from disposal of financial assets held for trading	**47,509,589.03**	–
Others	**(3,365,704.81)**	(2,473,446.40)
Total	**1,307,058,211.00**	1,044,558,662.97

8. GAINS (LOSSES) FROM CREDIT IMPAIRMENT

Unit: RMB

Item	**2019**	2018
Bad debts losses of accounts receivable	**(8,800,329.85)**	105,075,832.81
Bad debts losses of other receivables	**20,858,296.55**	158,046,217.19
Bad debt losses for dividends receivable	**25,885,115.12**	(30,637,207.57)
Impairment losses of contract assets	**(1,079,803.08)**	(8,993,565.20)
Total	**36,863,278.74**	223,491,277.23

9. ASSET IMPAIRMENT GAINS (LOSSES)

Unit: RMB

Item	**2019**	2018
Impairment losses of inventories	**(30,151,843.83)**	(139,409,032.49)
Impairment losses of prepayments	**–**	32,220,000.00
Total	**(30,151,843.83)**	(107,189,032.49)

10. INCOME TAX EXPENSES

Unit: RMB

Item	**2019**	2018
Current income tax expenses	**1,904,040,504.38**	1,555,897,354.32
Deferred income tax expenses	**(101,078,797.50)**	(336,958,473.33)
Adjustments to income tax of previous years	**(33,106,713.50)**	(1,140,452.73)
Total	**1,769,854,993.38**	1,217,798,428.26

The Company and its subsidiaries are subject to enterprise income tax ("**EIT**") at 25%, except for the following subsidiaries which enjoyed certain tax exemption and relief.

China Nuclear Power Design Co., Ltd. (Shenzhen) (深圳中廣核工程設計有限公司) ("**CGN Design**"), Lingdong Nuclear, Guangdong Nuclear Power Joint Venture Co, Ltd. (廣東核電合營有限公司) ("**GNPJVC**"), China Nuclear Power (Shenzhen) Radiation Monitoring Technology Co., Ltd. (中廣核(深圳)輻射監測技術有限公司), China Nuclear Power (Beijing) Simulation Technology Corporation Ltd. (中廣核(北京)仿真技術有限公司) ("**CNPSTC**"), CGN Inspection Technology Co., Ltd. (中廣核檢測技術有限公司) ("**Inspection Company**"), Suzhou Nuclear Power Research Institute (蘇州熱工研究院有限公司) ("**SNPRI**"), China Nuclear Power Technology Research Institute (中廣核研究院有限公司) ("**CNPRI**"), Ling'ao Nuclear, China Nuclear Power Engineering Co., Ltd. (中廣核工程有限公司) ("**CGN Engineering**"), Yangjiang Nuclear, Fangchenggang Nuclear, CGN Lufeng Nuclear Power Co., Ltd. (中廣核陸豐核電有限公司) ("**Lufeng Nuclear**"), Ningde Nuclear, Taishan Nuclear Power Joint Venture Co., Ltd. (台山核電合營有限公司) ("**Taishan Nuclear**"), CGN Ocean Power Co., Ltd. (中廣核海洋能源有限公司) ("**Ocean Power**"), CGN Hebei Thermal Power Co., Ltd. (中廣核河北熱電有限公司) ("**Hebei Thermal Power**"), China Nuclear Power Operations Co., Ltd. (中廣核核電運營有限公司) ("**CGN Operations**") and Sansha Advanced Energy Co., Ltd. (三沙先進能源有限公司) ("**Sansha Energy**") were entitled to tax reduction and exemption in accordance with the relevant EIT laws and regulations.

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) (《財政部、國家税務總局關於執行公共基礎設施項目企業所得税優惠目錄有關問題的通知》(財税[2008]46號)) 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) (《關於公共基礎設施項目享受企業所得税優惠政策問題的補充通知》(財税[2014]55號)), as Yangjiang Nuclear, Fangchenggang Nuclear, Ningde Nuclear, Taishan Nuclear and Lufeng Nuclear fall under the Tax Benefit Scheme in relation to the Investment in and Operation of Key Public Infrastructure Projects Supported by the State, these subsidiaries were entitled to EIT exemption for the first three years followed by 50% exemption for the next three years commencing from their first revenue generating year.

Yangjiang Unit 1 and Unit 2 were subject to EIT at 12.5% in 2018 and 2019; Unit 3 was entitled to EIT exemption in 2018, and was subject to EIT at 12.5% in 2019; Unit 4 and Unit 5 were entitled to EIT exemption in 2018 and 2019. Yangjiang Unit 6 was entitled to EIT exemption in 2019.

Fangchenggang Unit 1 and Unit 2 were entitled to EIT exemption in 2018, and were subject to EIT at 7.5% in 2019.

Ningde Unit 1 was subject to EIT at 12.5% in 2018, and was subject to EIT at 25% in 2019; Unit 2 and Unit 3 were subject to EIT at 12.5% in 2018 and 2019; and Unit 4 was entitled to EIT exemption in 2018, and was subject to EIT at 12.5% in 2019.

Taishan Unit 1 and Unit 2 commenced commercial production in December 2018 and September 2019, respectively, and were entitled to EIT exemption in 2019.

As at December 31, 2019, Lufeng Nuclear had not yet generated operating revenue.

Preferential tax policy for high-tech enterprises

On June 19, 2015, GNPJVC was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201544200288) with a validity of three years. On October 16, 2018, GNPJVC was again recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201844202215) with a validity of three years. GNPJVC paid EIT at 15% in 2018 and 2019.

On November 21, 2016, Ling'ao Nuclear was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201644201738) with a validity of three years. The 2019 High-Tech Enterprise Certificate (GR201944200999) has been announced on the high-tech enterprise certification management work network. Ling'ao Nuclear prepaid EIT at 15% in 2018 and 2019.

On December 1, 2017, Lingdong Nuclear was recognized as a national high-tech enterprise, and obtained 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 2018 and 2019.

On October 31, 2017, CNPRI was again recognized as a national high-tech enterprise, and obtained 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 2018 and 2019.

On December 22, 2016, CNPSTC was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201611006000) with a validity of three years. The 2019 High-tech Enterprise Certificate (GR201911008275) has been announced on the high-tech enterprise certification management work network, CNPSTC paid EIT at 15% in 2018 and 2019.

On November 17, 2017, SNPRI was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201732000370) with a validity of three years. SNPRI paid EIT at 15% in 2018 and 2019.

On October 31, 2017, the Inspection Company was recognized as a national high-tech enterprise, and obtained 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 2018 and 2019.

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) was recognized as a national high-tech enterprise, and obtained 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. paid EIT at 15% in 2018 and 2019.

On November 21, 2016, CGN Engineering was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201644203168) with a validity of three years. The 2019 Hightech Enterprise Certificate (GR201944205623) has been announced on the high-tech enterprise certification management work network, CGN Engineering paid EIT at 15% in 2018 and 2019.

On November 9, 2018, CGN Design was recognized as a national high-tech enterprise, obtaining a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201844203078) with a validity of three years. CGN Design paid EIT at 15% in 2018 and 2019.

On December 18, 2019, CGN Operations was recognized as a national high-tech enterprise, and obtained a High-Tech Enterprise Certificate (《高新技術企業證書》) (GR201944205802) with a validity of three years. CGN Operations paid EIT at 15% in 2019.

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 met both conditions of the western development tax preferential policy, and those for investment of public infrastructure projects, it was entitled to both tax preferential policies with EIT exemption in 2018 and subject to EIT at 7.5% in 2019.

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 in 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 PRC Enterprise Income Tax Law and the Notice on Implementing the Inclusive Tax Deduction and Exemption Policies for Micro and Small Enterprises (Cai Shui [2019] No. 13) (《關於實施小微企業普惠性稅收減免政策的通知》) (財稅[2019]13號), Ocean Power, Hebei Thermal Power and Sansha Energy were qualified as small profit-making enterprises. Ocean Power and Hebei Thermal Power were subject to EIT at 20% in 2018 and 2019. Sansha Energy was subject to EIT at 20% for the periods from August 31 (the date of establishment of the company) to December 31, 2018 and in 2019, respectively.

Pursuant to the PRC Enterprise Income Tax Law and the Notice on Implementing the Inclusive Tax Deduction and Exemption Policies for Small Profit-making Enterprises ((Cai Shui [2019] No. 13) (《關於實施小微企業普惠性稅收減免政策的通知》([財稅2019]13號)), Fujian Ningde Nuclear Power Sales Co., Ltd. (福建寧核售電有限公司) and Guangxi Fangchenggang Nuclear Power Sales Co., Ltd. (廣西防核售電有限公司) were qualified as small profit-making enterprises. Fujian Ningde Nuclear Power Sales Co., Ltd. was subject to EIT at 5% for the periods from June 4 (the date of establishment of the company) to December 31, 2019. Guangxi Fangchenggang Nuclear Power Sales Co., Ltd. was subject to EIT at 5% for the periods from September 3 (the date of establishment of the company) to December 31, 2019.

11. EARNINGS PER SHARE

Basic earnings per share are calculated by dividing the net profit attributable to shareholders of the parent company by the weighted average number of ordinary shares of the Company in issue.

Unit: RMB

Item	**2019**	2018
Net profit attributable to shareholders of the parent company	**9,465,700,355.79**	8,702,632,650.82
Weighted average number of ordinary shares of the Company in issue	**47,132,037,033.33**	45,448,750,000.00
Basic earnings per share	**0.201**	0.191

In 2019 and 2018, the Group did not have dilutive potential ordinary shares. Therefore, diluted earnings per share equaled to basic earnings per share.

12. BILLS RECEIVABLE

Unit: RMB

Item	**December 31, 2019**	December 31, 2018
Bank acceptance bills	**669,120,265.04**	18,433,532.76
Commercial acceptance bills	**50,000.00**	–
Total	**669,170,265.04**	18,433,532.76

13. ACCOUNTS RECEIVABLE

Unit: RMB

Item	December 31, 2019	December 31, 2018
Accounts receivable arising from contracts with customers	**7,613,182,646.09**	6,751,528,146.34
Including: Group 1	**7,147,764,943.75**	6,249,212,682.38
Group 2	**382,333,306.49**	417,994,768.11
Accounts receivable for which provision for bad debts has been individually made	**83,084,395.85**	84,320,695.85
Less: Impairment provisions	**129,288,920.84**	120,580,702.45
Including: Group 1	**25,390,418.37**	22,967,372.36
Group 2	**20,814,106.62**	13,292,634.24
Accounts receivable for which provision for bad debts has been individually made	**83,084,395.85**	84,320,695.85
Carrying value	**7,483,893,725.25**	6,630,947,443.89

As part of the Group's 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, 2019				December 31, 2018			
	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	**0.30%**	**7,125,993,950.07**	**21,377,819.74**	**7,104,616,130.33**	0.30%	6,206,957,852.57	18,680,010.40	6,188,277,842.17
1 to 2 years	**5.00%**	**6,226,834.99**	**311,377.95**	**5,915,457.04**	5.00%	27,766,996.20	1,388,349.81	26,378,646.39
2 to 3 years	**20.00%**	**15,544,158.69**	**3,701,220.68**	**11,842,938.01**	20.00%	14,473,379.27	2,894,675.85	11,578,703.42
3 to 4 years	**30.00%**	**-**	**-**	**-**	30.00%	14,454.34	4,336.30	10,118.04
Total		**7,147,764,943.75**	**25,390,418.37**	**7,122,374,525.38**		6,249,212,682.38	22,967,372.36	6,226,245,310.02

Group 2:

Unit: RMB

Aging	December 31, 2019				December 31, 2018			
	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	0.30%	266,120,053.64	792,229.89	265,327,823.75	0.30%	372,626,834.11	1,117,768.49	371,509,065.62
1 to 2 years	10.00%	93,874,162.29	9,383,996.87	84,490,165.42	10.00%	23,679,042.99	2,367,904.30	21,311,138.69
2 to 3 years	30.00%	10,259,256.96	3,081,299.03	7,177,957.93	30.00%	15,557,407.02	4,667,222.11	10,890,184.91
3 to 4 years	50.00%	8,745,306.60	4,372,653.30	4,372,653.30	50.00%	1,706,689.31	853,344.66	853,344.65
4 to 5 years	80.00%	725,000.00	574,400.53	150,599.47	80.00%	692,000.00	553,600.00	138,400.00
More than 5 years	100.00%	2,609,527.00	2,609,527.00	-	100.00%	3,732,794.68	3,732,794.68	–
Total		382,333,306.49	20,814,106.62	361,519,199.87		417,994,768.11	13,292,634.24	404,702,133.87

Accounts receivable for which provision for bad debts has been individually made:

Unit: RMB

Aging	December 31, 2019				December 31, 2018			
	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value	Expected average loss rate	Carrying balance	Bad debt provisions	Carrying value
2 to 3 years	100.00%	-	-	-	100.00%	75,495,391.80	75,495,391.80	–
3 to 4 years	100.00%	74,259,091.80	74,259,091.80	-	100.00%	3,400,000.00	3,400,000.00	–
4 to 5 years	100.00%	3,400,000.00	3,400,000.00	-	100.00%	5,100,000.00	5,100,000.00	–
More than 5 years	100.00%	5,425,304.05	5,425,304.05	-	100.00%	325,304.05	325,304.05	–
Total		83,084,395.85	83,084,395.85	-		84,320,695.85	84,320,695.85	–

The ageing analysis of accounts receivable is counted starting from the date when revenue is recognized.

14. SHORT-TERM LOANS

Unit: RMB

Item	December 31, 2019	December 31, 2018
Credit loans	**14,246,581,618.90**	16,296,240,042.13
Short-term loans interest payable	**16,691,839.58**	70,502,215.22
Total	**14,263,273,458.48**	16,366,742,257.35

As at December 31, 2019, the Group had no overdue and unsettled short-term loans.

15. BILLS PAYABLE

Unit: RMB

Item	December 31, 2019	December 31, 2018
Commercial acceptance bills	**24,936,897.30**	104,438,140.29
Bank acceptance bills	**2,593,446,897.71**	2,155,726,746.95
Total	**2,618,383,795.01**	2,260,164,887.24

As at December 31, 2019, the Group had no overdue and unsettled bills payable.

16. ACCOUNTS PAYABLE

Unit: RMB

Aging	December 31, 2019	December 31, 2018
Less than 1 year	**16,816,576,820.68**	13,578,695,513.73
1-2 years	**1,429,846,114.77**	1,047,166,567.09
2-3 years	**654,954,693.70**	893,219,613.47
More than 3 years	**1,082,102,135.94**	467,817,988.56
Total	**19,983,479,765.09**	15,986,899,682.85

The ageing analysis of accounts payable is counted starting from the date when purchases are recognized.

17. NON-CURRENT LIABILITIES DUE WITHIN ONE YEAR

Unit: RMB

Item	December 31, 2019	December 31, 2018
Long-term loans due within one year	**19,409,032,724.59**	15,792,525,241.13
Long-term loans interest payable	**318,957,134.52**	331,672,129.46
Bonds payable due within one year	**2,499,772,044.29**	2,500,000,000.00
Bonds payable interest payable	**238,679,631.17**	226,984,986.30
Post-employment benefit scheme liabilities due within one year	**2,783,999.04**	2,583,999.04
Lease liabilities due within one year	**278,363,939.11**	–
Total	**22,747,589,472.72**	18,853,766,355.93

18. LONG-TERM LOANS

Unit: RMB

Item	December 31, 2019	December 31, 2018
Credit loans	**24,379,836,231.47**	28,575,767,074.65
Guaranteed loans(1)	**3,000,000,000.00**	6,000,000,000.00
Pledged loans(2)	**159,011,962,139.45**	160,675,985,135.51
Mortgaged loans(3)	**877,046,513.14**	180,719,170.77
Total	**187,268,844,884.06**	195,432,471,380.93
Less: Long-term loans due within one year	**19,409,032,724.59**	15,792,525,241.13
Long-term loans due after one year	**167,859,812,159.47**	179,639,946,139.80

Notes:

(1) In August 2012, Guangdong Nuclear Power Investment Co., Ltd. (廣東核電投資有限公司) ("**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) ("**Taiping Asset**") pursuant to which Taiping Asset initiated the establishment of "Taiping Asset – CGN Power Project Debt Investment Plan" with the actual investment proceeds of RMB3,000,000,000.00. 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. As at December 31, 2019, the loan had not expired.

(2) Pledged loans are pledged by the Group with its interests under sales agreements of electricity, insurance contracts and equity interest held.

(3) Secured loans are secured by the Company's subsidiaries SNPRI, CGN Engineering and CNPRI with land use rights and buildings.

The annual interest rate range of the above loans:

	2019	2018
Annual interest rate range of the above loans	**0.49%-5.30%**	0.49%-5.30%

19. BONDS PAYABLE

Unit: RMB

Category	**December 31, 2019**	December 31, 2018
Long-term bonds	**4,499,772,044.29**	4,498,219,043.17
Medium-term notes(Note)	**6,987,133,846.98**	3,989,825,356.08
Private placement financing instruments	**–**	2,500,000,000.00
Total	**11,486,905,891.27**	10,988,044,399.25
Less: Bonds payable due within one year	**2,499,772,044.29**	2,500,000,000.00
Bonds payable due after one year	**8,987,133,846.98**	8,488,044,399.25

Note: The Group issued 18 CGN Power MTN001, MTN002, MTN003, MTN004, 19 CGN Power MTN001 and MTN002 (medium-term notes) on April 24, 2018, April 24, 2018, August 21, 2018, October 17, 2018, January 18, 2019 and July 22, 2019, respectively. These medium-term notes, with nominal values amounting to RMB1,000,000,000.00, RMB1,000,000,000.00, RMB1,000,000,000.00, RMB1,000,000,000.00, RMB1,500,000,000.00 and RMB1,500,000,000.00, and a total cost of issuance of RMB21,000,000.00, will become due and payable in April 2021, April 2021, August 2021, October 2021, January 2022 and July 2022, respectively.

20. PROVISIONS

Unit: RMB

Item	**December 31, 2019**	December 31, 2018
Provision for nuclear power facilities decommissioning(1)	**4,415,795,933.61**	3,689,783,017.22
Provision for low and medium level radioactive waste disposal(2)	**493,740,971.87**	310,281,961.52
Others	**1,092,684.47**	1,466,775.27
Total	**4,910,629,589.95**	4,001,531,754.01

(1) It is the discounted value of the best estimate of the expected cost of processing the decommissioning of the Group's nuclear power facilities.

(2) It is the best estimate of the expected disposal cost of long-term and short-term low of medium level radioactive waste generated by NPPs.

21. SHARE CAPITAL

Unit: RMB

	December 31, 2019	December 31, 2018
Registered, issued and fully paid ordinary shares of RMB1.00 each		
Domestic shares	**39,334,986,100.00**	34,285,125,000.00
Of which: CGNPC	**29,176,641,375.00**	29,176,641,375.00
Guangdong Hengjian Investment Holding Co., Ltd.	**3,428,512,500.00**	3,428,512,500.00
China National Nuclear Corporation	**1,679,971,125.00**	1,679,971,125.00
Other domestic shares	**5,049,861,100.00**	–
Overseas listed foreign shares (H shares)	**11,163,625,000.00**	11,163,625,000.00
Share capital	**50,498,611,100.00**	45,448,750,000.00

On August 16, 2019, the Company completed the initial public offering of 5,049,861,100 RMB ordinary shares (A shares) of RMB1.00 each on the Shenzhen Stock Exchange. The additional registered capital (share capital) of the Company amounted to RMB5,049,861,100.00 and the share premium of RMB7,339,914,459.44 was included in the capital reserve. The above share capital was verified in the verification reports De Shi Bao (Yan) Zi (15) No. 0003, De Shi Bao (Yan) Zi (15) No. 0004 and De Shi Bao (Yan) Zi (19) No. 00386 issued by Deloitte Touche Tohmatsu Certified Public Accountants LLP.

22. DIVIDEND

Subsequent to the end of the Reporting Period, a final dividend of RMB0.076 per share (tax inclusive) to our Shareholders as of the record date of dividend payment in respect of the year ended December 31, 2019 amounting to RMB3,837,894,443.60 in total has been proposed by the Board and is subject to approval by the shareholders of the Company (the "**Shareholders**") in the 2019 annual general meeting.

During the Reporting Period, a final dividend of RMB0.072 per share (tax inclusive) in respect of the year ended December 31, 2018 was declared to the owners of the Company amounting to RMB3,272,296,962.43 in total, which was approved by the Shareholders at the 2019 first extraordinary general meeting convened on April 23, 2019. The Company has paid the dividend by May 31, 2019.

23. SHARE-BASED PAYMENT

(1) Overall Share-based Payment

Unit: unit

	2019		2018	
Item	**First batch**	**Second batch**	First batch	Second batch
Total equity instruments of the Company at the beginning of the year	**207,599,986**	**543,640,000**	213,119,999	543,640,000
Total equity instruments granted by the Company during the year	—	—	—	—
Total equity instruments exercised by the Company during the year	—	—	—	—
Total equity instruments of the Company that have expired during the year	**77,653,335**	**81,279,997**	5,520,013	—
Total equity instruments of the Company at the end of the year	**129,946,651**	**462,360,003**	207,599,986	543,640,000
The range of exercise price of outstanding share appreciation rights of the Company at the end of the year The remaining period of the contract	**HKD2.09** **0.96 - 1.96 years**	**HKD3.50** **2.95 - 4.95 years**	HKD2.09 0.96 - 2.96 years	HKD3.50 3.95 - 5.95 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, 256,240,000 units of SAR were granted to Incentive Recipients of the Group (including Liaoning Hongyanhe Nuclear Power Co., Ltd. (遼寧紅沿河核電有限公司) ("**Hongyanhe Nuclear**")) 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 (which was expired and lapsed on December 16, 2019), 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 (including Hongyanhe Nuclear) 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 to be exercised within the specified services periods and the exercise period is three 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.

(2) Cash-Settled Share-based Payment

Unit: RMB

	2019	2018
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	**78,312,817.00**	61,728,273.40
Total fees recognized in respect of cash-settled share-based payment during the year	**16,584,543.60**	36,778,539.27
Fair value in respect of cash-settled share-based payment at the end of the year	**116,848,373.45**	159,532,209.48

The fair value of share-based payment is measured by using the Black-Scholes Model, and inputs used in the model are as follows:

Unit: RMB

Item	**December 31, 2019**	December 31, 2018
Share price(HKD)	**2.08**	1.86
Expected volatility	**18.94 - 31.94%**	28.92 - 34.83%
Expected dividend yield	**4.051%**	4.484%

The first grant under the Scheme:

Unit: RMB

Item	**December 31, 2019**	December 31, 2018
Exercise price(HKD)	**3.50**	3.50
Expected term	**0.96 - 1.96 years**	0.96 - 2.96 years
Risk-free rate	**1.734 - 1.831%**	1.731 - 1.758%
Fair value (HKD)	**0.0003 - 0.0049**	0.004 - 0.043

The second batch of the Scheme:

Item	**December 31, 2019**	December 31, 2018
Exercise price(HKD)	**2.09**	2.09
Expected term	**2.95 - 4.95 years**	3.95 - 5.95 years
Risk-free rate	**1.657 - 1.716%**	1.791 - 1.859%
Fair value (HKD)	**0.18 - 0.40**	0.30 - 0.34

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. The expected volatility is determined with reference to the historical volatility of the stock prices of the Group and other listed power generation companies. The expected term used in the model has been adjusted based on the management's best estimates on the restrictions imposed in respect of the non-transferability and behavioral considerations.

24. BREAKDOWN OF NON-RECURRING GAINS OR LOSSES

Unit: RMB

Item	2019	2018
Gains or losses from disposal of non-current assets	**142,915,765.36**	(665,199.14)
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)	**315,301,019.19**	143,333,834.97
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)	**–**	415,889.99
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 investment financial assets and liabilities	**50,068,406.00**	7,850,932.34
Reversal of impairment provision for receivables which are impaired individually	**1,297,136.47**	–
Other non-operating income and expenses other than the items above, net	**(32,515,730.84)**	(46,289,861.93)
Other gains or losses items that meet the definition of non-recurring gains or losses	**2,846,497.16**	11,136,508.04
Total	**479,913,093.34**	115,782,104.27
Income tax effect of non-recurring gains or losses	**58,103,067.16**	15,645,554.97
Effect of non-recurring gains or losses attributable to minority shareholders	**42,410,497.94**	7,016,832.13
Effect of non-recurring gains or losses attributable to shareholders of the parent company, net	**379,399,528.24**	93,119,717.17

Note: 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.

FINANCE, ASSETS AND INVESTMENTS

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

(I) FINANCIAL PERFORMANCE AND ANALYSIS

Key Financial Indicators

Item	2019	2018
Indicators of profitability		
EBITDA margin (%) [(1)]	**57.2**	57.1
Net profit margin (%) [(2)]	**24.3**	26.9
Indicators of investment returns		
Return on equity (excluding non-controlling interests) (%) [(3)]	**11.8**	12.8
Return on total assets (%) [(4)]	**6.5**	5.8
Indicators of solvency		
Asset-liability ratio (%) [(5)]	**65.1**	69.3
Debt to equity ratio (%) [(6)]	**143.0**	183.5
Interest coverage [(7)]	**2.5**	2.1

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,			
	2019	2018	**Fluctuations increase/ (decrease)**	**Percentage change increase/ (decrease)**
	RMB'000	RMB'000	RMB'000	%
Operating revenue	**60,875,176.25**	50,827,919.18	10,047,257.07	19.8
Operating costs	**35,471,460.12**	28,503,854.61	6,967,605.51	24.4
Finance costs (1)	**7,697,736.38**	6,000,868.77	1,696,867.61	28.3
Other gains (2)	**2,405,291.54**	1,563,140.90	842,150.64	53.9
Investment income (3)	**1,307,058.21**	1,044,558.66	262,499.55	25.1
Including: Income from investment in associates and joint ventures	**1,096,412.69**	1,029,509.83	66,902.86	6.5
Non-recurring gains or losses (4)	**479,913.09**	115,782.10	364,130.99	314.5
Net profit attributable to shareholders of the parent company	**9,465,700.36**	8,702,632.65	763,067.71	8.8
Net profit attributable to shareholders of the parent company (excluding the effects of non-recurring gains or losses)	**9,086,300.83**	8,609,512.93	476,787.90	5.5

(1) The increase in finance costs was primarily due to the fact that we ceased to capitalize interest expenses and included such expenses in finance costs as a result of the commencement of commercial operation of Yangjiang Units 5 and 6 and Taishan Units 1 and 2 in July 2018, July 2019, December 2018 and September 2019, respectively.

(2) The increase in other gains was primarily due to the gain from increase in VAT refunds received and gains from government grants.

(3) The increase in investment income was primarily due to the gains of RMB143.1 million from the disposal of Shanghai Engineering Science & Technology Co., Ltd (上海中廣核工程科技有限公司) ("**Shanghai Company**"), being our subsidiary, by CGN Engineering, and the increase in investment income from CGN Finance Co., Ltd. (中廣核財務有限責任公司) ("**CGN Finance**"), being our associate.

(4) The increase in non-recurring gains or losses was primarily due to the gains of RMB143.1 million from the disposal of Shanghai Company, being our subsidiary, by CGN Engineering, and the increase in government grants (excluding those closely related to the Company's business and for fixed or quantitative purposes in accordance with national uniform standards) received in excess of RMB172.0 million in the corresponding period of previous year.

Revenue from Operations

	For the year ended December 31,			
	2019	2018	**Fluctuations increase/ (decrease)**	**Percentage change increase/ (decrease)**
	RMB'000	RMB'000	RMB'000	%
Revenue from principal business operations	**60,589,245.47**	**50,543,922.15**	**10,045,323.32**	**19.9**
Including: Sales of electricity (1)	**52,783,020.38**	46,071,750.90	6,711,269.48	14.6
Construction, installation and design services (2)	**6,163,681.03**	3,178,563.26	2,985,117.77	93.9
Revenue from other business operations	**285,930.79**	**283,997.03**	**1,933.76**	**0.7**
Total revenue from business operations	**60,875,176.25**	**50,827,919.18**	**10,047,257.07**	**19.8**

(1) The increase in revenue from sales of electricity was primarily due to the commencement of commercial operation of Yangjiang Units 5 and 6 and Taishan Units 1 and 2 in July 2018, July 2019, December 2018 and September 2019, respectively.

(2) The increase in revenue from construction, installation and design services was primarily due to the increase in the construction volume of Huizhou Nuclear Power and wind power business of CGN Engineering.

Cost of Operations

	For the year ended December 31,			
	2019	2018	**Fluctuations increase/ (decrease)**	**Percentage change increase/ (decrease)**
	RMB'000	RMB'000	RMB'000	%
Cost of principal business operations	**35,185,491.66**	**28,227,621.58**	**6,957,870.08**	**24.6**
Including: Cost of sales of electricity	**27,743,385.67**	23,425,317.97	4,318,067.70	18.4
Of which: Cost of nuclear fuel (1)	**8,062,452.58**	7,338,796.57	723,656.01	9.9
Depreciation of fixed assets (2)	**9,284,137.38**	6,956,778.93	2,327,358.45	33.5
Provision for spent fuel management (3)	**1,666,053.67**	1,332,687.59	333,366.08	25.0
Construction, installation and design services (4)	**6,144,634.38**	3,812,574.57	2,332,059.81	61.2
Other costs of business operations	**285,968.46**	**276,233.03**	**9,735.43**	**3.5**
Total cost of operations	**35,471,460.12**	**28,503,854.61**	**6,967,605.51**	**24.4**

(1) The increase in cost of nuclear fuel was primarily due to the commencement of commercial operation of Yangjiang Units 5 and 6 and Taishan Units 1 and 2 in July 2018, July 2019, December 2018 and September 2019, respectively.

(2) The increase in depreciation of fixed assets was primarily due to the commencement of commercial operation of Yangjiang Units 5 and 6 and Taishan Units 1 and 2 in July 2018, July 2019, December 2018 and September 2019, respectively.

(3) The increase in provision for spent fuel management was primarily due to the commencement of provision and payment for spent fuel management as Yangjiang Unit 1 and Ningde Unit 2 commenced commercial operation for five years in 2019.

(4) The increase in cost of construction, installation and design services was primarily due to the increase in the construction volume of Huizhou Nuclear Power and wind power business of CGN Engineering.

Financial Position

The bank and other borrowings, receivables, payables, inventories, fixed assets and intangible assets 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, 2019 RMB'000	December 31, 2018 RMB'000 (Restated)	**Fluctuations increase/ (decrease)** RMB'000	**Percentage change increase/ (decrease)** %
Bank and other borrowings [(1)]	**213,002,332.39**	222,716,755.82	(9,714,423.43)	(4.4)
Receivables [(2)]	**20,918,941.30**	15,707,244.35	5,211,696.95	33.2
Payables [(3)]	**27,962,902.55**	22,963,401.85	4,999,500.70	21.8
Inventories [(4)]	**18,370,637.24**	21,372,255.36	(3,001,618.12)	(14.0)
Fixed assets and intangible assets [(5)]	**261,891,721.74**	215,570,003.03	46,321,718.71	21.5

(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, accounts receivable, prepayments, contract assets and other receivables. The increase in receivables was primarily due to the change in the procurement of nuclear fuel from the commissioned processing method to the procurement of components. Payments made before the arrival of nuclear fuel components are included in prepayment, resulting in a significant increase in prepayments.

(3) Payables comprise bills payable, accounts payable, receipts in advance, contract liabilities and other payables. The increase in payables was primarily due to the transfer to fixed assets according to estimated amounts as a result of the commencement of commercial operation of Yangjiang Unit 6 and Taishan Unit 2.

(4) The decrease in inventories was mainly due to the change in the procurement of nuclear fuel from the commissioned processing method to the procurement of components. The amount paid before the arrival of nuclear fuel components was included in prepayments, resulting in a significant reduction in the amount included in inventories.

(5) The main reason for the increase in fixed assets and intangible assets was that Yangjiang Unit 6 and Taishan Unit 2 commenced commercial operation in July 2019 and September 2019, respectively, and the relevant construction in progress was transferred to fixed assets.

Analysis of Cash Usage

In 2019, the Company's cash flow position was better than the corresponding period of previous year, in which the net cash inflows from operating activities increased as compared with 2018, mainly because the income increased as compared with 2018. Net cash outflows from investment activities decreased as compared with 2018, mainly due to the decrease in the cash paid for the acquisition of fixed assets as compared with last year as a result of the successive commencement of commercial operation of Yangjiang Unit 6 and Taishan Unit 2, the increases in the cash received from investment come from associates and the cash received from disposal of Shanghai Company. The net cash outflows from financing activities also increased as compared with 2018, mainly due to the higher repaid loan amount as compared with previous year.

	For the year ended December 31,			
	2019	2018	**Fluctuations increase/ (decrease)**	**Percentage change increase/ (decrease)**
	RMB'000	RMB'000	RMB'000	%
Net cash flows from operating activities	**30,598,898.95**	28,409,570.58	2,189,328.37	7.7
Net cash flows from investment activities	**(14,636,838.25)**	(16,382,045.13)	1,745,206.88	(10.7)
Net cash flows from financing activities	**(12,823,306.93)**	(10,910,023.69)	(1,913,283.24)	17.5

(II) ASSETS AND INVESTMENTS

The Group was mainly engaged in the investment in construction of nuclear power generating units, technical improvement in the NPPs in operation, and research and development of technologies related to nuclear power for the year ended December 31, 2019.

INVESTMENT IN FIXED ASSETS

For the year ended December 31, 2019, the Group's investment in fixed assets amounted to approximately RMB21,897.4 million, representing an increase of RMB2,995.0 million or 15.8% from RMB18,902.4 million in 2018, mainly due to the commencement of commercial operation of Yangjiang Unit 6 and Taishan Unit 2, resulting in fixed assets being carried out according to estimated amount.

MAJOR INVESTMENTS IN EQUITY

For the year ended December 31, 2019, the Group increased its capital investment in associates by RMB730.5 million, mainly attributable to the amounts of RMB481.3 million, RMB120.0 million, RMB63.6 million and RMB45.6 million made to Hongyanhe Nuclear, CGN Finance, Ningde Second Nuclear, CGN Industry Investment Fund Phase I Co., Ltd (中廣核一期產業投資基金有限公司), respectively.

MAJOR ACQUISITION AND DISPOSAL

On January 4, 2019, CGN Engineering entered into the equity transfer agreement with CGNPC. Pursuant to the equity transfer agreement, CGN Engineering should sell 100% equity interests in Shanghai Company held by it to CGNPC at a consideration for the equity transfer of approximately RMB719.6 million. The formalities for the equity transfer were completed on January 31, 2019.

Saved for the above-mentioned matter, the Group had no other material acquisition or disposal for the year ended December 31, 2019.

USE OF PROCEEDS

Use of proceeds from the H share offering

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, 2019, the Company had used RMB20,636.8 million of the net proceeds for the purposes as set out in the prospectus, representing 95.5% of the net proceeds from the offering.

Item	**Movements** RMB'000
Net proceeds from the listing	21,603,535
Less: Proceeds used	20,636,796
Among which: Acquisition of 60% equity interest in Taishan Nuclear Power Industry Investment Co., Ltd (台山核電產業投資有限公司) and 12.5% equity interest in Taishan Nuclear	9,700,196
Capital expenditure for NPPs under construction	8,714,300
Research and development activities	888,900
Replenishment of working capital	1,333,400
Proceeds unused as at December 31, 2019	966,739

All of the remaining unused net proceeds are intended to be used for overseas market expansion. As the Company has not carried out any overseas project, such portion of proceeds remain unused. Given the current international development trend of nuclear power, the Company has not yet determined the specific target of overseas market expansion, and it is expected that there will be no foreign investment project in the coming years. Given the orderly progression of the Company's construction of nuclear power projects under construction, in order to increase the efficiency of use of proceeds and reduce capital precipitation, all of such portion of proceeds is intended to be used on the aforesaid "Capital expenditure for NPPs under construction", i.e. the construction expense of Fangchenggang Units 3 and 4. For the construction progress of Fangchenggang Units 3 and 4, please refer to the "Business Performance and Outlook" section of this announcement.

The above change in use of net proceeds from the H share offering is subject to approval at the general meeting. For details, please refer to the circular of the 2019 annual general meeting to be published by the Company in due course at a later date.

Use of proceeds from the A share offering

The Company issued 5,049,861,100 RMB ordinary shares (A shares) on the Shenzhen Stock Exchange in August 2019 through the initial public offerings with net proceeds of RMB12,389.8 million after deducting various issuance costs. As of December 31, 2019, the Company had used all of the net proceeds from the offering, of which RMB10,727.3 million was used for replacement of self-financing funds committed in advance to investment projects, RMB272.7 million was invested in the construction of Fangchenggang Units 3 and 4, and RMB1,389.8 million was used for replenishment of working capital.

External Financing Environment

In 2019, there was a slowdown in global economic recovery and the greater downward pressure on the economy due to trade frictions and geopolitical tensions.

The moderate economic expansion in the United States with a slowdown in the growth rate prompted the United States Federal Reserve Board of Governors to change its monetary policy. The federal funds rate was cut three times to 1.50%-1.75% during the year. A further slowdown in the growth rate of the Eurozone economy and the uncertainties over the global trade tensions put downward pressure on the Eurozone economy, thus making it continue to maintain a loose monetary policy. The PRC's gross domestic product (GDP) grew by 6.1% year on year. The national economy operated steadily in general and the major development targets were better achieved.

In 2019, the monetary policy in the PRC was neither loose nor tight but moderate. The liquidity was reasonably ample and the market interest rate of RMB stayed low. The People's Bank of China reformed and improved the loan prime rate (LPR) mechanism to facilitate the interest rate liberalization reform, and bring the loan rate down. The costs of outstanding corporate loans were stable and the interest rate of new short-term loans was slightly lowered. Facing the ever-changing internal and external environment, the Company continued to strengthen the organization, coordination and risk monitoring of financing, making full use of internal and external financing channels and ensuring capital security. The Company capitalized on the loose market environment to refinance, thus reducing its financing costs, and effectively leveraged the net proceeds from the A share offering to enhance the return on capital employed.

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 high capital expenditure and good earnings forecasts, we will prudently consider the use of equity financing to balance the risks and to enhance shareholders' value.

On July 26, 2019, the Company obtained an approval under the Approval in Relation to the Initial Public Offering of CGN Power Co., Ltd.* (Zheng Jian Xu Ke [2019] No. 1381) (《關於核准中國廣核電力股份有限公司首次公開發行股票的批覆》(證監許可[2019]1381號)). On August 9, 2019, the Company published the Prospectus for the Initial Public Offering of Shares (A Shares) of CGN Power Co., Ltd.* (《中國廣核電力股份有限公司首次公開發行股票(A股)招股説明書》). The Company published the Announcement on A Share Offering Results on August 16, 2019. Under the A share offering, 5,049,861,100 A shares were issued at an issuance price of RMB2.49 per share. The proceeds raised amounted to RMB12,574,154,139.00 in total, and the actual net proceeds amounted to RMB12,389,775,559.44. The above-mentioned proceeds were all received on August 16, 2019, and verified by Deloitte Touche Tohmatsu Certified Public Accountants LLP which issued a capital verification report (De Shi Bao (Yan) Zi (19) No. 00386). On August 26, 2019, the A shares of the Company were listed and traded on the Shenzhen Stock Exchange.

Debt Financing

In 2019, we continued to improve diversified ways of financing, reasonable mix of currencies and term structure so as to provide stable and economical source of funding for the business development of the Company. As of December 31, 2019, the Group's total borrowings amounted to RMB213,002.3 million with major financing channels including bank borrowings (approximately 90%), bond financing (approximately 5%), entrusted loans and insurance debt, etc. We maintained a debt structure mainly comprising RMB-denominated and long-term debts, which not only satisfied our operational characteristics of focusing on nuclear power projects, but also effectively prevented liquidity risks and systematic exchange rate risks.

In 2019, the Company paid continuous attention to the changes in financial market, timely issued mid-term notes, facilitated the adjustments in bank borrowing interest rates, optimized the debt structure and financing costs, and strived to reduce the impact of changes in the financial environment on the Company's operations.

Debt Risk Management

In recent years, we proactively eliminated our exposure to risk on foreign exchange rate associated with debts denominated in foreign currencies by stages and in batches through various measures including forward transactions, debts replacement and early repayment, and actively changed our financing methods for foreign business contracts to exercise control over new debts denominated in foreign currencies, thereby effectively reducing the impact of major risks in exchange rate. In 2019, the Company adhered to the established strategies and continued to adopt relevant measures to minimize the impact from the fluctuation in RMB exchange rates. As compared with the end of 2018, the Group's total bank borrowings denominated in foreign currencies decreased by RMB3,560.2 million at the end of the Reporting Period.

To manage liquidity risks, we monitored and maintained our cash and cash equivalents as well as the level of unutilized banking facilities. As of December 31, 2019, we had credits for unutilized general banking facilities of RMB118,657.8 million, and cash at bank and in hand of RMB19,571.6 million, for the provision of sufficient cash support for the operation of the Company and the reduction in the impact from cash flow fluctuation.

Credit Rating

In June 2019, 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 based on the reasons that "the Company's projects under construction are being put into operation and the operations of nuclear power generating units in operation are stable", it concluded that "the power generation capacity of the Company will be further strengthened and the on-grid power generation will continue to increase with stronger profitability and cash generating ability" and maintained our AAA credit rating with stable outlook.

Contingencies

External Guarantees

The Group confirmed that, for the year ended December 31, 2019, the Group had not provided any external guarantee.

Assets with Restricted Ownership

As of December 31, 2019, the Group's assets pledged to banks and related parties or with restricted ownership due to other reasons amounted to RMB20,072.6 million in carrying value, which secured loans for the Group. As of December 31, 2018, the carrying value of the Group's assets pledged to banks and related parties or with restricted ownership due to other reasons was RMB19,674.0 million.

As of December 31, 2019 and December 31, 2018, the electricity tariff collection rights of Ling'ao Nuclear, Lingdong Nuclear, Yangjiang Nuclear, Fangchenggang Nuclear, Ningde Nuclear and Taishan Nuclear were pledged to secure the facilities and loans from banks and related parties to these entities.

Legal Proceedings

The Group confirmed that, for the year ended December 31, 2019, 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 NPPs under construction according to its investment schedules, continue to fund the technological improvement in NPPs in operation to enhance operation, make continuous investment in the research, development and innovation of technologies, and fund the acquisitions of contingent assets in 2020. 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 with CGNPC and relevant undertakings entered into before the listing of A shares of the Company, thereby laying a solid foundation for the Company's future development.

BUSINESS PERFORMANCE AND OUTLOOK

(I) Industry Overview

The 19th National Congress of the Communist Party of China has embarked on a new journey to build a strong socialist modernized country. The central government promoted the construction of ecological civilization in every aspect, and intensified environmental protection and clean development. According to the Report on the Development of China's Nuclear Energy published by the China Nuclear Energy Association in April 2019, the PRC's economy will continue to expand, and rigid energy demand will exist for a long time. Clean substitution and electric energy substitution are the only roads for energy reform. Nuclear power has prominent advantages in the transformation of clean substitution, electric energy substitution, and the revolution in energy production and consumption. The proportion of nuclear power in the PRC's power generation will increase from 4.76% in 2019 to about 10% in 2035. As proposed in the Research on the PRC's Nuclear Power Development Planning (《我國核電發展規劃研究》) published by China Nuclear Power Development Center under the National Energy Administration and State Grid Energy Research Institute Co. Ltd. in July 2019, nuclear power development should maintain a stable pace. It is estimated that to realize nuclear power scale of 170 GW by 2035, the industry will need to maintain a scale of putting about six units in construction per year by 2030. We believe there is an extensive room of development and market prospects.

In 2019, the central government promulgated policies on clean energy consumption one after another, which focused on the supply-side structural reform and promoted clean energy consumption, in order to facilitate green development of the power industry and optimization of the energy structure. In January 2019, the National Development and Reform Commission (the "**NDRC**") and the National Energy Administration published the Notice on Standardizing the Management of the Plan of Priority Power Generation and Priority Purchase (《關於規範優先發電優先購電計劃管理的通知》), which mentioned that clean energy such as nuclear power should be fully discharged under safe operation. In June 2019, the NDRC published the Notice on Full Liberalization of Power Generation and Utilization Plan of Operating Electricity Users (《關於全面放開經營性電力用戶發用電計劃的通知》), which proposed to study and advance the implementation of the policy of guaranteeing priority power generation, and to focus on the guaranteed acquisition of clean energy such as nuclear power, hydropower, wind power and solar power. Most of our nuclear power generating units are located in Guangdong Province. The development of the Guangdong-Hong Kong-Macao Greater Bay Area has also put forward requirements for the development of nuclear power. The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area mentioned the need to build a clean, low-carbon, safe and efficient energy supply system, including "safe and efficient development of nuclear power". We also aim at making contributions to the Guangdong-Hong Kong-Macao Greater Bay Area with our continuous development and safe and stable operation of nuclear power generating units.

In 2019, the overall economy in the PRC continued to operate within an appropriate range. According to the 2019 National Power Industry Statistics Overview (《2019年全國電力工業統計快報一覽表》) issued by the China Electricity Council ("**CEC**"), in 2019, the electricity consumption in the PRC increased by 4.5% over the corresponding period of previous year. The growth of electricity consumption in the PRC slowed down from previous year. The balance between supply and demand of the power supply in the PRC remained loose in general. The national average utilization hours of power generating units was 3,825 hours, representing a year-on-year decrease of 54 hours. The national average utilization hours of nuclear power was 7,394 hours, representing a year-on-year decrease of 149 hours.

	Ratio of installed capacity by type of energy (%)		Ratio of generation capacity by type of energy (%)		Average utilization hours (hours)	
	2019	2018	**2019**	2018	**2019**	2018
Nuclear power	**2.4**	2.4	**4.8**	4.2	**7,394**	7,543
Thermal power	**59.2**	60.2	**68.9**	70.4	**4,293**	4,378
Hydropower	**17.7**	18.6	**17.8**	17.6	**3,726**	3,607
Wind power	**10.4**	9.7	**5.5**	5.2	**2,082**	2,103

Note: Data from the 2019 National Power Industry Statistics Overview of the CEC.

In 2019, 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 39.2% of national power generation in 2019, increasing by 9% as compared with 2018.

(II) Business Performance and Analysis

As of the end of 2019, we managed 24 nuclear power generating units in operation and five nuclear power generating units under construction (including one unit under construction which was entrusted to the Company by the controlling Shareholder for management). In 2019, we had two new nuclear power generating units commencing commercial operation, namely Yangjiang Unit 6 and Taishan Unit 2.

As of December 31, 2019, the number and capacity of nuclear power generating units in operation and nuclear power generating units under construction managed by the Company are as follows:

		As at December 31, 2019	As at December 31, 2018	**Growth rate**
Nuclear power generating units in operation	Number	**24**	22	9.09%
	Capacity	**27,142 MW**	24,306 MW	11.67%
Nuclear power generating units under construction	Number	**4**	6	-33.33%
	Capacity	**4,598 MW**	7,434 MW	-38.15%
Nuclear power generating units under construction as entrusted to the Company by the controlling shareholder for management	Number	**1**	0	N/A
	Capacity	**1,202 MW**	0 MW	N/A

The analysis below is based on the nuclear power generating units we own, excluding nuclear power projects entrusted to the Company by the controlling Shareholder.

We will introduce and analyse the Company's business performance in 2019 in 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 continued 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 continued to promote internal and external supervision as well as dynamic and transparent experience feedback. We organized regular emergency drills under different emergent scenarios and ensured effective operation of safety management system so as to promote the further enhancement of the Company's safety management level.

According to the 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**"), the NPPs we operated and managed have maintained our all-time good safety record of no nuclear event at level 2[note] or above in 2019.

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 2019 environmental, social and governance 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 2019, all nuclear power generating units in operation managed by us maintained safe and stable operation, including Yangjiang Unit 6 and Taishan Unit 2 which have newly commenced commercial operation, with a total annual on-grid power generation of 178,969.73 GWh, representing an increase of 13.96% as compared with that of 2018.

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 148,206.20 GWh, representing an increase of 15.09% as compared with that of 2018. The total annual on-grid power generation from NPPs managed by our associates (Hongyanhe Nuclear Power Station) amounted to 30,763.53 GWh, representing an increase of 8.82% as compared with that of 2018.

Name of NPP	**On-grid power generation from January to December 2019 (GWh)**	On-grid power generation from January to December 2018 (GWh)	**Change rate for the corresponding period (%)**
From subsidiaries			
Daya Bay Nuclear Power Station	**15,475.75**	15,751.48	-1.75
Ling'ao Nuclear Power Station	**14,381.73**	14,260.61	0.85
Lingdong Nuclear Power Station	**15,487.12**	16,125.83	-3.96
Yangjiang Nuclear Power Station[1]	**41,287.06**	35,138.39	17.50
Fangchenggang Nuclear Power Station[2]	**16,119.45**	15,081.60	6.88
Ningde Nuclear Power Station[3]	**29,277.45**	31,732.44	-7.74
Taishan Nuclear Power Station[4]	**16,177.65**	684.09	2,264.85
Subsidiaries, total	**148,206.20**	128,774.43	15.09
From associates			
Hongyanhe Nuclear Power Station[5]	**30,763.53**	28,270.15	8.82
Subsidiaries and associates, total	**178,969.73**	157,044.58	13.96

Notes:

1. Yangjiang Unit 5 commenced commercial operation on July 12, 2018. Yangjiang Unit 6 commenced commercial operation on July 24, 2019. Duration of refuelling outage of Yangjiang Nuclear Power Station in 2019 was shorter as compared with the corresponding period of 2018.

2. Duration of refuelling outage of Fangchenggang Nuclear Power Station in 2019 was shorter as compared with the corresponding period of 2018.

3. Duration of refuelling outage of Ningde Nuclear Power Station in 2019 was longer as compared with the corresponding period of 2018. Due to the relatively great precipitation and at the request of power grids, it had a longer time of temporary operation at reduced load or shutdown as compared with the corresponding period of 2018.

4. Taishan Unit 1 commenced commercial operation on December 13, 2018. Taishan Unit 2 commenced commercial operation on September 7, 2019.

5. Duration of refuelling outage of Hongyanhe Nuclear Power Station in 2019 was longer as compared with the corresponding period of 2018. Duration of temporary operation at reduced load or shutdown as requested by power grids was shorter as compared with the corresponding period of 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 affected by 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 carried 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 the transmission line maintainence or temporary operation at reduced load or shutdown resulting from the demand and supply conditions of the electricity market.

In 2019, we had 24 nuclear power generating units in operation, with an average capacity factor of 92.42%, an average load factor of 86.15% and average utilization hours of 7,507 hours, as compared with 92.75%, 86.94% and 7,554 hours of the 22 nuclear power generating units in operation in 2018. The details of the operation performance of generating units we operated and managed in 2019 are as follows:

	Capacity factor (%)		Load factor (%)		Utilization hours (hours)	
Nuclear power generating unit	**2019**	2018	**2019**	2018	**2019**	2018
From subsidiaries						
Daya Bay Unit 1[1]	**92.94**	89.25	**94.36**	90.34	**8,268**	7,915
Daya Bay Unit 2[2]	**92.35**	99.72	**93.52**	100.87	**8,194**	8,838
Ling'ao Unit 1[3]	**95.04**	87.52	**90.62**	84.19	**7,936**	7,373
Ling'ao Unit 2[4]	**87.12**	92.09	**82.70**	87.61	**7,242**	7,672
Lingdong Unit 1[5]	**99.98**	89.32	**93.22**	88.12	**8,159**	7,720
Lingdong Unit 2[6]	**89.29**	98.34	**80.11**	91.85	**7,011**	8,047
Yangjiang Unit 1[7]	**89.23**	88.23	**88.27**	86.09	**7,813**	7,541
Yangjiang Unit 2[8]	**90.24**	99.98	**83.78**	99.72	**7,337**	8,736
Yangjiang Unit 3[9]	**99.99**	91.61	**96.37**	88.58	**8,442**	7,759
Yangjiang Unit 4[10]	**91.72**	82.42	**78.73**	73.79	**6,798**	6,464
Yangjiang Unit 5[11]	**82.10**	99.60	**75.08**	95.05	**6,574**	8,326
Yangjiang Unit 6[12]	**95.99**	Under construction	**91.33**	Under construction	**8,001**	Under construction
Fangchenggang Unit 1[13]	**99.29**	89.60	**95.85**	83.32	**8,397**	7,299
Fangchenggang Unit 2[14]	**92.14**	99.98	**84.46**	85.87	**7,398**	7,522
Ningde Unit 1[15]	**97.54**	88.50	**89.90**	84.48	**7,876**	7,401
Ningde Unit 2[16]	**91.13**	89.13	**74.22**	86.30	**6,502**	7,560
Ningde Unit 3[17]	**91.62**	92.54	**83.01**	89.54	**7,271**	7,843
Ningde Unit 4[18]	**90.92**	99.99	**81.65**	94.27	**7,152**	8,258
Taishan Unit 1[19]	**90.88**	96.47	**83.28**	94.97	**7,296**	8,319
Taishan Unit 2[20]	**99.99**	Under construction	**93.11**	Under construction	**8,156**	Under construction
From associates						
Hongyanhe Unit 1[21]	**90.30**	99.98	**87.78**	95.95	**7,689**	8,406
Hongyanhe Unit 2[22]	**91.57**	89.80	**87.66**	84.03	**7,679**	7,362
Hongyanhe Unit 3[23]	**84.75**	91.17	**81.35**	71.11	**7,127**	6,231
Hongyanhe Unit 4[24]	**92.02**	85.16	**77.17**	56.56	**6,760**	4,956

Notes:

1. Daya Bay Unit 1 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was shorter as compared with 2018.

2. Daya Bay Unit 2 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

3. Ling'ao Unit 1 completed a refuelling outage in 2019 and refuelling outage duration in 2019 was shorter as compared with 2018.

4. Ling'ao Unit 2 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was longer as compared with 2018.

5. Lingdong Unit 1 did not conduct any refuelling outage in 2019 and completed a refuelling outage in 2018.

6. Lingdong Unit 2 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

7. Yangjiang Unit 1 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was shorter as compared with 2018.

8. Yangjiang Unit 2 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

9. Yangjiang Unit 3 did not conduct any refuelling outage in 2019 and completed a refuelling outage in 2018.

10. Yangjiang Unit 4 completed a refuelling outage in 2019, and completed the initial outage after commencement of operation in 2018 which had longer duration, being similar to that of a ten-year outage. Duration of refuelling outage in 2019 was shorter as compared with 2018.

11. Yangjiang Unit 5 completed the initial outage after commencement of operation in 2019 and its duration was longer, being similar to that of a ten-year outage.

12. Yangjiang Unit 6 commenced commercial operation on July 24, 2019.

13. Fangchenggang Unit 1 did not conduct any refuelling outage in 2019 and completed a refuelling outage in 2018.

14. Fangchenggang Unit 2 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

15. Ningde Unit 1 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was shorter as compared with 2018.

16. Ningde Unit 2 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was shorter as compared with 2018.

17. Ningde Unit 3 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was longer as compared with 2018.

18. Ningde Unit 4 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

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

20. Taishan Unit 2 commenced commercial operation on September 7, 2019.

21. Hongyanhe Unit 1 completed a refuelling outage in 2019 and did not conduct any refuelling outage in 2018.

22. Hongyanhe Unit 2 completed a refuelling outage in 2019 and duration of refuelling outage in 2019 was shorter as compared with 2018.

23. Hongyanhe Unit 3 completed two refuelling outages in 2019 and duration of refuelling outage in 2019 was longer as compared with 2018.

24. Hongyanhe Unit 4 completed a refuelling outage in 2019, and completed the initial outage after commencement of operation in 2018 which had longer duration, being similar to that of a ten-year outage. The duration of refuelling outage in 2019 was shorter as compared with 2018.

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. Taking the safety and economic considerations for NPPs into account, nuclear power operators often make use of the refuelling period to intensively conduct preventive and corrective maintenance, inspection and testing projects as well as various modifications projects, and this is usually referred to as refuelling outage by NPPs. The refuelling intervals of Hongyanhe Units 3 and Hongyanhe Unit 4 are generally 12 months, while the refuelling internals for other nuclear power generating units are generally 18 months. According to the technical requirements for the operation of NPPs, inspection, testing and maintenance for major equipment are required every ten years. Such activities will be conducted during the refuelling period of generating units, and this is usually referred to as ten-year outage by NPPs. In addition to the refuelling outage and ten-year outage, the refuelling outage of new generating units conducted in the next year after commencement of operation is usually referred to as initial outage.

During the refuelling outage period, we carry out inspection, maintenance and modifications for equipment with selectivity based on the requirements of nuclear power station preventive maintenance guidelines, in-service inspection guidelines, requirements on regular testing and supervision as well as the experience on the operation of generating units to secure the safety of the units, improve the operating performance of the equipment, and ensure that the units would maintain good operating conditions in the next cycle according to the design requirements.

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 with 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 2019, we successfully completed 19 refuelling outages, including the initial outage after commencement of commercial operation of Yangjiang Unit 5. To improve the overall economic efficiency of nuclear power generators, the Company adopts adaptive outage strategy. The two outages in Hongyanhe Unit 3 was arranged and completed in 2019.

In 2019, the total accumulated number of days for refuelling outages was approximately 564 days.

"Pursuit of Excellence" is one of the basic principles of the Company. In order to discover our inadequacies and make sustained improvements, we continued to compare our indicators with international counterparts. When compared with the one-year benchmark value of all 12 performance indicators for the PWR set by the World Association of Nuclear Operators ("**WANO**"), for our nuclear power units, the ratio of performance indicators achieving the world's top 1/4 (advanced level) and top 1/10 (excellent level) remained at a high level, leading among industry peers. Ling'ao Unit 1 has been operating without unplanned reactor shutdown for more than 4,953 days (excluding refueling outages duration), meaning that it has been operating safely and stably for 14 consecutive years.

The following table indicates the comparison of our 24 nuclear power generating units for 2019 and the one-year benchmark value of the 12 performance indicators for the PWR set by WANO in 2018:

	2019	2018
Number of units	**24**	22
Total number of indicators	**288**	264
Including:		
Number/percentage of indicators ranked top 1/4 (advanced level) in the world	**220/76.39%**	208/78.79%
Number/percentage of indicators ranked top 1/10 (excellent level) in the world	**208/72.22%**	193/73.11%

Environmental Performance

We continued to improve radioactive waste management, optimize the control over the discharge process of liquid radioactive waste and gas radioactive waste (the "**Discharge**") and strictly complied with emission control standards. In 2019, the radioactive waste management of the 24 generating units in operation managed by us strictly complied with the national laws and regulations, and met the standards of the relevant technical specifications.

The following table sets forth the amounts of the various types of radioactive waste discharged at our NPPs for the period indicated as a percentage of the national standards. The total amounts of the Discharge from our NPPs were far below the applicable national 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	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Discharged liquid radioactive waste (radionuclides other than tritium) as a percentage of the national standards	**0.27%**	0.35%	**0.55%**	0.29%	**0.29%**	0.43%	**0.24%**	0.30%	**3.02%**	0.54%	**0.19%**	0.21%
Discharged gas radioactive waste (inert gases) as a percentage of the national standards	**0.43%**	0.56%	**0.30%**	0.24%	**0.29%**	0.35%	**0.28%**	0.30%	**1.59%**	0.71%	**0.20%**	0.21%
Solid radioactive waste (m^3)	**244.8**	248.6	**60.8**	44.8	**67.6**	64.6	**124.8**	136.8	**0**	0	**118.4**	159.6
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 6 and Taishan Unit 2 commenced commercial operation in 2019; the annual discharge limit of Taishan Nuclear Power Station was different from other power stations, and there is no comparability between the power stations.

The national regulatory authorities continuously monitored the time used for absorption (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 54.93 million tons of standard coal consumption, approximately 150.51 million tons of CO2 emissions, with an equivalent effect of planting a forest of approximately 0.4 million hectares.

Nuclear Power Generating Units under Construction

The quality of nuclear power generating 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. All major projects milestone that need to be inspected by the national regulatory authorities could only enter into the next phase of work after being inspected and confirmed that all requirements are being complied. We also attach importance to learning from experience feedbacks of domestic and foreign construction of nuclear power generating units, and improving of the safety and quality of our construction work.

As of December 31, 2019, among five nuclear power generating units we construct, two were in the civil construction phase (including one unit under construction which was entrusted to the Company by the controlling shareholder for management), two were in the equipment installation phase and one was in the commissioning phase.

We controlled, supervised and managed aspects including the safety, quality, progress, investment, technology and environment of our construction projects, so as to ensure that the projects under construction complied 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
From subsidiaries					
Fangchenggang Unit 3		✓			2022
Fangchenggang Unit 4	✓				2022
From associates					
Hongyanhe Unit 5			✓ Entered into the commissioning phase on October 10, 2019		Second half of 2021
Hongyanhe Unit 6		✓			First half of 2022

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. "Commissioning" phase refers to the process of conducting cold function tests for nuclear island main system and commencing joint commissioning 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 units are capable for power generation.

Nuclear Power generating units may be affected by various factors during the construction process, including delays in delivery, increased costs for major equipment and materials, delays in obtaining regulatory approvals, permits, or licenses, and unexpected engineering, environmental, or geographic issues, changes in localization rates, as well as implementation of other Chinese nuclear safety regulations and safety requirements, therefore, the actual date of operation may not match the expected date, and we will publish the latest information from time to time in accordance with the requirements of relevant rules.

Hongyanhe Nuclear completed the assessment of the construction related risks of Hongyanhe Unit 5 and Hongyanhe Unit 6, and after due consideration, the expected time of commencement of operation of Hongyanhe Unit 5 and Hongyanhe Unit 6 are adjusted to the second half of 2021 and the first half of 2022, respectively. For details, please refer to the relevant announcement of the Company dated December 27, 2019.

Sales of Electricity

Over 85% 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 2019, the on-grid power generation of our subsidiaries was 148,206.20 GWh and the sales revenue of electricity was approximately RMB52,783.02 million, representing 86.71% of our operating revenue for the year.

In 2019, as the economic development condition of each region differs, the demand and supply for electricity in the provinces where our nuclear power generating units were located varied. 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 electricity tariff, striving for development and utilization of incremental market and striving for more shares in power transmission across provinces and regions", and surpassed the target of our power plan for the year and guaranteed the overall economic benefits of the Company. In 2019, according to the amendments to the Implementation Details of the Operation of the Grid of the Power Plants (《發電廠併網運行管理實施細則》) and the Implementation Details of the Auxiliary Service Management of Grid-connected Power Plants (《併網發電廠輔助服務管理實施細則》) by relevant local regulatory authorities, our related nuclear power generating units recorded a higher auxiliary service fee as compared with 2018.

We actively communicated and coordinated with national and provincial competent governing bodies to actively promote the policies relating to power generating units of Taishan Nuclear on power generation and tariffs, and was permitted to follow the government tariff policies regarding electricity execution plan of Taishan Unit 1 and Unit 2 within their designated operation hours, offering a certain guarantee for the electricity sales of Taishan Nuclear.

In 2019, our nuclear power generating units in operation achieved a total on-grid power generation of 178,969.73 GWh, representing a year-on-year increase of 13.96%. Among which, the market-based power generation volume accounted for approximately 32.88% of the total on-grid power generation, which remained basically flat as compared with 2018.

Guangdong Province: The electricity consumption increased by 5.89% in 2019 over the corresponding period of previous year. The Company's nuclear power units in Guangdong Province continued to participate in electricity market in the "full capacity power generation with favourable tariff" model in 2019, and the on-grid power generation increased by 25.44% over the corresponding period of previous year.

Fujian Province: The electricity consumption increased by 3.83% in 2019 over the corresponding period of previous year. In 2019, Ningde Nuclear, due to the relatively great precipitation and at the request of power grids, had a longer time of temporary operation at reduced load as compared with the corresponding period of previous year, and the on-grid power generation decreased by 7.74% over the corresponding period of 2018.

Guangxi Zhuang Autonomous Region: The electricity consumption increased by 12.00% in 2019 over the corresponding period of previous year. In 2019, Fangchenggang Nuclear actively developed the incremental market, and obtained market-based power generation targets that surpassed the corresponding period of 2018. A year-on-year increase of 6.88% was recorded in on-grid power generation.

Liaoning Province: The electricity consumption increased by 4.30% in 2019 over the corresponding period of previous year. With proactive market expansion, Hongyanhe Nuclear entered into larger transactions within the province, and recorded a year-on-year increase in the trading volume of bilateral trades in the province and a year-on-year increase of 8.82% in the on-grid power generation.

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. On March 20, 2019, the NDRC approved the trial on-grid tariff for planned generation of Taishan units, which is set at RMB0.4350/kWh (tax inclusive) effective from the date of commencement of commercial operation to the end of 2021. For details, please refer to the relevant announcement of the Company on March 28, 2019.

While striving to increase on-grid power generation, we also paid close attention to the on-grid tariffs of operating units. NDRC issued the Notice on Lowering General Industrial and Commercial Electricity Prices (《關於降低一般工商業電價的通知》) on May 15, 2019. Pursuant to the above-mentioned notice, the nuclear power on-grid tariffs approved by the NDRC (except for the third-generation nuclear power units) were adjusted by the provincial pricing authorities after considering the factors that the VAT rate is reduced and became effective from July 1, 2019. Therefore, this adjustment did not affect Taishan Units 1 and 2 of the Group. The on-grid tariffs of Taishan Unit 1 and Unit 2 remained at RMB0.4350/kWh (tax inclusive). The provinces where our nuclear power generating units in operation are located adjusted their nuclear power tax inclusive on-grid tariff, which became effective from July 1, 2019.

As of December 31, 2019, the on-grid tariffs (VAT included) of the planned electricity sales of our nuclear power generating units in operation were as follows:

Nuclear Power Generating Units	Clients	On-grid Tariffs (VAT included) (RMB/kWh)
Daya Bay Unit 1	Guangdong Power Grid Co., Ltd.	0.4056
Daya Bay Unit 2	Guangdong Power Grid Co., Ltd.	0.4056
Ling'ao Unit 1	Guangdong Power Grid Co., Ltd.	0.4143
Ling'ao Unit 2	Guangdong Power Grid Co., Ltd.	0.4143
Lingdong Unit 1	Guangdong Power Grid Co., Ltd.	0.4153
Lingdong Unit 2	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 1	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 2	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 3	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 4	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 5	Guangdong Power Grid Co., Ltd.	0.4153
Yangjiang Unit 6	Guangdong Power Grid Co., Ltd.	0.4153
Fangchenggang Unit 1	Guangxi Power Grid Co., Ltd.	0.4063
Fangchenggang Unit 2	Guangxi Power Grid Co., Ltd.	0.4063
Ningde Unit 1	Fujian Electric Power Co., Ltd.	0.4153
Ningde Unit 2	Fujian Electric Power Co., Ltd.	0.4153
Ningde Unit 3	Fujian Electric Power Co., Ltd.	0.3916
Ningde Unit 4	Fujian Electric Power Co., Ltd.	0.3590
Taishan Unit 1	Guangdong Power Grid Co., Ltd.	0.4350
Taishan Unit 2	Guangdong Power Grid Co., Ltd.	0.4350
Hongyanhe Unit 1	Liaoning Electric Power Co., Ltd.	0.3823
Hongyanhe Unit 2	Liaoning Electric Power Co., Ltd.	0.3823
Hongyanhe Unit 3	Liaoning Electric Power Co., Ltd.	0.3823
Hongyanhe Unit 4	Liaoning Electric Power Co., Ltd.	0.3823

Lean Management

We continue to put efforts into lean management. In 2019, we made certain achievements in lean management.

Under the lean strategy, in 2019, we achieved good results in the cost management of nuclear power generating units in operation. We continued to advance the implementation of the three-year plan on cost reduction, improved and deepened the our cost management system, formulated various cost standards in accordance with domestic and foreign industry benchmarks and our actual conditions, consolidated the integration of business and finance tasks, and worked in concert with power stations to develop key areas including dedicated cost control. For example, we have continued to carry out lean management of outage in recent years. Through the implementation of the minimum operating unit management, the Company optimized spare parts management, promoted an all-round contractor management model, and further increased independent maintenance ratios and standard working hours settlement to achieve the cost control target of 2019 on the premise of ensuring safety and quality.

III. Future Outlook

With the PRC's economy entering into a period of high-quality development from the period of rapid 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 principles of "Safety First, Quality Foremost, Pursuit of Excellence" as well as the core value of "Doing Things Right in One Go" to explore new ideas, actively plan and respond.

In 2020, we plan to carry out the following initiatives:

- In conformity with the development in a new environment, we will continue to carry out safety standardization and international benchmarking, reinforce the implementation of intensive measures applying new technology to avoid human errors, and enhance industrial safety, fire control and network information security management, in order to facilitate development while guaranteeing safety;

- In the premise of ensuring safety and quality, we will push forward construction of Fangchenggang Units 3 and 4 and Hongyanhe Units 5 and 6 and entrusted management projects as planned, and further strengthen management of nuclear power construction projects;

- We will ensure the safe and stable operation of all the generating units in operation. We plan to conduct 18 refuelling outages during the year (including two refuelling outages and two refuelling outages conducted over to the next year). According to the regular arrangement of power grids during holidays, we plan to mainly conduct three refuelling outages in the first quarter, four in the second quarter, two in the third quarter, and nine in the fourth quarter of 2020;

- We will adapt to the changes in the electricity market situation, continuously optimize the marketing system, and mechanism of electricity market, and strengthen the development of marketing capabilities for electricity market to strive for more on-grid generation through various channels and initiatives, striving to achieve an average utilization hour of generating units in 2020 not less than that in 2019;

- 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.

HUMAN RESOURCES

The total number of employees of the Group was 18,383 (excluding our affiliates) as of December 31, 2019. The Group implements remuneration policy that is competitive in the industry, and pays commissions and discretionary bonus to its employees with reference to performance of the Group and individual employees. The total cost of the employees for the year ended December 31, 2019 amounted to approximately RMB981.54 million (exclusive of our associates and joint ventures).

The Company has established a long-term share appreciation rights incentive scheme to enhance its attractiveness to key talents and create more value for Shareholders. The H Shares Appreciation Rights Scheme was approved at the 2014 annual general meeting held on June 12, 2015. The details of the grant of the SAR are set out in Note 23 to the financial information in this announcement.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

Neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended December 31, 2019.

FINAL DIVIDEND AND CLOSURE OF SHARE REGISTER OF MEMBERS

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 30% of the net profit attributable to shareholders of the parent company for the year. The Board and the management of the Company pay attention to providing its Shareholders with steady and growing dividend. By attaching great importance to the safe and stable operation of nuclear power generating units and striving to achieve the stable growth of the Company's overall operation, the Company intends to achieve the target of maintaining a reasonable increase in dividend (subject to approval at the general meeting of the relevant financial year) for each of the three financial years of 2018, 2019 and 2020 based on the annual dividend per share for 2017.

The Board has proposed to declare a final cash dividend of RMB0.076 (tax inclusive) per share for the year from January 1, 2019 to December 31, 2019 to our Shareholders as of the record date of dividend payment. The ratio of final dividend distribution for the year is based on the consideration of various factors including the business performance of the Company for the year 2019. The distribution of dividends for 2019 shall be subject to the Shareholders' approval at the 2019 annual general meeting of the Company and it is expected to be paid on or around July 10, 2020.

The H share register of members of the Company will be closed from May 26, 2020 (Tuesday) to May 28, 2020 (Thursday) (both days inclusive) to determine H share Shareholders' entitlement to the final dividend. In order to qualify for the final dividend, all the transfer documents of the Company accompanied by relevant share certificates, must be lodged to Hong Kong Investor Services Limited, the share registrar for H shares at Shops 1712-1716, 17th Floor, Hopewell Center, 183 Queen's Road East, Wanchai, Hong Kong ("**H Share Registrar**") no later than 4:30 p.m. on May 25, 2020 (Monday). For details of the distribution of the final dividend of the Company, please refer to the relevant circular to be issued by the Company in due time.

EXCHANGE RATE

For the year ended December 31, 2019, the Group has not suffered any major difficulties of or impacts on its operations or liquidity due to exchange rate fluctuations. 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.

SUBSEQUENT EVENT

(1) On January 8, 2020, the Company convened the fourteenth meeting of the second session of the Board, at which the Resolution on the First Exercise Plan of the Second Grant of the H-Shares Appreciation Rights Incentive Scheme of CGN Power Co., Ltd. was considered and approved. Pursuant to the calculation rules specified in the Second Grant of the H-Shares Appreciation Rights Incentive Scheme, after deducting the amount of 2018 dividends, the exercise price under the second grant of the H-Shares Appreciation Rights Incentive Scheme is changed to HK$1.9223 per share from HK$2.09 per share.

(2) Since the nationwide outbreak of the novel coronavirus pneumonia (the "**COVID-19**") in January 2020, the Group has strictly implemented the epidemic prevention requirements of the central and local governments to ensure the safe and stable operation of nuclear power generating units in operation. COVID-19 epidemic has certain impacts on the overall economic operation and power demand, which have led to a certain degree of load reduction of nuclear power units after the Spring Festival. With the resumption of work and production, power demand of the community has gradually increased, and the impact of the COVID-19 epidemic on the production and operation of the Group has been gradually reduced. The Group will constantly pay close attention to the development of the COVID-19 epidemic, continue to do a good job in safe production as well as epidemic prevention and control, and evaluate its impact on the financial position and operating results of the Group. As of the date of this announcement, the evaluation work is still in progress.

ANNUAL GENERAL MEETING AND CLOSURE OF SHARE REGISTER OF MEMBERS

The Company intends to convene the 2019 annual general meeting in May 2020. The H share register of members of the Company will be closed from April 20, 2020 (Monday) to May 20, 2020 (Wednesday) (both days inclusive) to determine H share Shareholders' entitlement to attend and vote at the annual general meeting. In order to be entitled to attend and vote at the annual general meeting, all the transfer documents of the Company accompanied by relevant share certificates, must be lodged to the H Share Registrar of the Company in Hong Kong no later than 4:30 p.m. on April 17, 2020 (Friday). For the exact date in relation to the closure of share register, please refer to the circular of the 2019 annual general meeting to be issued by the Company in due course.

Apart from voting in person or by proxy, holders of A shares of the Company can also cast their votes online. For details about the voting methods and registration for attending the annual general meeting, please refer to relevant announcement of the Company published on the website of Shenzhen Stock Exchange at an appropriate time.

For the matters to be considered and approved at the 2019 annual general meeting and the date of the 2019 annual general meeting, please refer to the circular of the 2019 annual general meeting to be issued by the Company in due course at a later date.

COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

The Company has complied with the code provisions as set out in the Corporate Governance Code and Corporate Governance Report (the "**Stock Exchange Codes**") contained in Appendix 14 to the Listing Rules. Meanwhile, on November 14, 2018, the Board approved the second revision of the Corporate Governance Code of the Company that was adopted by the Company. This revision mainly considered and absorbed the suggested revision requirements of the Listing Rules. The Corporate Governance Code of the Company includes the basic requirements of the Stock Exchange Code and in many aspects exceeds the standards of its recommended best practices.

During the period from January 1, 2019 to December 31, 2019, the Company had complied with the all code provisions contained in the Stock Exchange Codes. Subsequent to the listing of A shares of the Company, the Company has also complied with all recommended best practices under the Stock Exchange Codes.

According to the features of the industry, we have established the nuclear safety committee under the Board, which enables us to enhance the supervision on nuclear safety and management for the Company. The nomination committee of the Board has established the board diversity policy with indicators, set up the standards of the board composition and the quantified indicators for Directors' performance. We set up early schedules for the Board meetings, specialized committee meetings, supervisory meetings, trainings for supervisors and inspection planning throughout the year, reporting the information on operation and production of the Company to the Board in a regular manner.

COMPLIANCE WITH THE MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") as set out in Appendix 10 to the Listing Rules as the code of conduct regarding securities transactions of the Company by directors and supervisors of the Company. The Company has also formulated and adopted the Code for Securities Transactions by Directors and Specified Individuals on terms no less exacting than those of the Model Code. According to the specific enquiry made to all Directors and supervisors of the Company, all Directors and supervisors of the Company have confirmed that they have strictly complied with the standards set out in the Model Code throughout the Reporting Period.

AUDIT AND RISK MANAGEMENT COMMITTEE

The Company has established an audit and risk management committee (the "**Audit and Risk Management Committee**") in compliance with the requirements of Rule 3.21 of the Listing Rules and the Stock Exchange Codes with written terms of reference. 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, and A Guide for Effective Audit Committees published by the Hong Kong Institute of Certified Public Accountants. The terms of reference are detailed in the Terms of Reference for the Audit and Risk Management Committee under the Board of Directors of the Company and set out on the websites of the Company and the Stock Exchange. As of the date of this announcement, the Audit and Risk Management Committee comprises one non-executive Director (Mr. Zhang Yong) and two independent non-executive Directors (Mr. Na Xizhi and Mr. Francis Siu Wai Keung). Mr. Francis Siu Wai Keung, who possesses accounting qualification, acts as the chairman of the Audit and Risk Management Committee.

The Audit and Risk Management Committee has reviewed the 2019 annual results and the consolidated financial statements for the year ended December 31, 2019 of the Group prepared in accordance with the CASBE.

AUDITORS

Deloitte Touche Tohmatsu Certified Public Accountants LLP has audited the consolidated financial statements for the year ended December 31, 2019 prepared by the Company in accordance with the CASBE.

PUBLICATION OF ANNUAL RESULTS AND ANNUAL REPORT

This results announcement is published on the Stock Exchange's website (http://www.hkexnews.hk) and the Company's website (http://www.cgnp.com.cn), respectively.

The Company will dispatch to the Shareholders in due course all the information required by the Listing Rules together with the 2019 Annual Report of the Company, which will also be published on the websites of the Company and the Stock Exchange.

By order of the Board
CGN Power Co., Ltd.*
Jiang Dajin
Vice President, Joint Company Secretary and Board Secretary

The PRC, March 25, 2020

If there is any discrepancy between the English version and the Chinese version in respect of this announcement, the Chinese version shall prevail.

As of the date of this announcement, the Board of the Company comprises Mr. Gao Ligang as executive Director; Mr. Tan Jiansheng, Mr. Shi Bing and Mr. Zhang Yong, as non-executive Directors; Mr. Na Xizhi, Mr. Hu Yiguang and Mr. Francis Siu Wai Keung, as independent non-executive Directors.