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華能國際電力股份有限公司

HUANENG POWER INTERNATIONAL, INC.

(a Sino-foreign joint stock limited company incorporated in the People's Republic of China)

(Stock Code: 902)

2019 Interim Results Announcement

Consolidated operating revenue:	RMB83.603 billion
Net profit attributable to equity holders of the Company:	RMB3.442 billion
Earnings per share:	RMB0.2

INTERIM RESULTS

The Board of Directors of Huaneng Power International, Inc. (the “Company”) announces the unaudited operating results for the six months ended 30 June 2019 and a comparison with the operating results for the same period of last year. For the six months ended 30 June 2019, the Company and its subsidiaries recorded consolidated operating revenue of RMB83.603 billion, representing an increase of 1.45% compared to the same period of last year. The net profit attributable to equity holders of the Company was RMB3.442 billion, representing an increase of 98.78% compared to the same period of last year. The earnings per share was RMB0.2. The net asset (excluding equity interests attributable to minority of shareholders) per share was RMB5.69.

Please refer to the unaudited financial information below for details of the operating results.

BUSINESS REVIEW FOR THE FIRST HALF OF THE YEAR

In the first half of the year, faced with the macroeconomic environment in which the national economy underwent structural transformation and the growth rate of total electricity consumption witnessed a substantial decline, the Company continued to strengthen the level of safe and clean production, actively participated in the power industry reform, intensified efforts on investment and development of low-carbon clean energy, steadily promoted the efficiency and performance of enterprises, made progress in technological innovations, continuously enhanced the ability of fuel supply and price control, and successfully fulfilled the established goals and targets under an unfavourable business environment.

1. Power Generation

In the first half of the year, the Company's total power generation by the power plants within China on consolidated basis amounted to 195.375 billion kWh, representing a decrease of 6.15% over the same period last year. Total electricity sold by the Company amounted to 185.032 billion kWh, representing a decrease of 5.78% over the same period last year. The utilisation hours reached 1,900 hours, representing a decrease of 151 hours over the same period last year.

The decrease in the Company's power generation was mainly attributable to: (i) In the first half of the year, the growth rate of the electricity consumption nation-wide showed a significant decline compared to the same period last year; (ii) Hydropower and nuclear power generation had increased substantially, crowding out the space for growth in thermal power generation; (iii) Areas like East China, Guangdong, Shandong and other regions where the Company has a relatively large proportion of installed capacity have significantly increased the power supply from external sources, thereby crowding out the space for growth of the thermal power generation by local coal-fired power generation units.

2. Cost Control

In the first half of the year, both the coal and power industries intensified efforts to ensure full delivery of coal supplies under the long- and medium-term contracts, the railway enhanced the rail dispatch capacity, and the imported coal functioned as a supplementary supply, the supply of coal of the Company therefore achieved an overall stable performance. Concurrently, the reduced thermal power generation caused the demand for thermal coal to fall short of expectations, and the inventory of port and client-side remained at a fairly high level, giving rise to the downward movement of coal price. The unit fuel cost of our domestic power plants throughout the year occurred for sales of power was RMB223.81/MWh, representing a year-on-year decrease of 5.57%.

3. Energy conservation and environmental protection

The Company maintained its leading positions in certain economic and technical indicators for power sector, such as coal consumption for power supply and house consumption rate. All of its coal-fired power plants have obtained the sewage discharge permit. Emission of all kinds of pollutants has met the national and local environmental requirements. As an advanced electric energy production enterprise, the Company actively implements energy-saving renovation projects, promotes new energy-saving technologies such as waste heat recovery, conducts various energy-saving and environmental protection activities, strengthens the operation and maintenance management of environmental protection facilities, and intensifies energy conservation and environmental protection supervision and assessment.

4. Project development and construction

In the first half of the year, the Company proceeded smoothly in the construction of power generation projects. The capacity of the commissioned units was 174.2 MW, including Jiangsu Dafeng Offshore Wind Farm with a capacity of 71.4 MW, Henan Mianchi Fenghuangshan Wind Farm with a capacity of 38 MW, Guangxi Guigang Qixingling Wind Farm with a capacity of 60 MW, Henan Zhenyao Wind Farm with a capacity of 2 MW, Zhejiang Jiapu Photovoltaic with a capacity of 1.03 MW and Zhejiang Xitang Photovoltaic with a capacity of 1.77 MW. In the meantime, some of the power plants invested or controlled by the Company underwent changes in capacity. As of 30 June 2019, the Company had a controlled generation capacity of 106,136 MW and an equity-based generation capacity of 93,520 MW. The proportion of the installed capacity of clean energy sources (gas turbine, hydro, wind, photovoltaic and biomass power generation) reached 16.05%.

5. Tuas Power Limited

In the first half of the year, the accumulated power generation of Tuas Power Limited in Singapore, which is wholly-owned by the Company, accounted for a market share of 20.5%, representing a decrease of 0.3 percentages compared to the same period of last year. The sales revenue was RMB6.39 billion, representing an increase of 18.25% compared with the RMB5.403 billion of the same period of last year. The net loss attributable to the equity holders of the Company from its operations in Singapore was RMB200 million.

PROSPECT FOR THE SECOND HALF OF 2019

In the second half of the year, it is expected that the national economy will perform within the reasonable range, and will sustain the momentum of progress in overall stability. The Company will stress the essentials, bolster the weaknesses and strengthen the undertakings with the aim of striving for better business performance by adhering to problem-oriented approach and leading standards.

In terms of the power market, the reform was in steady advancement. In the second half of the year, economic growth and power demand will remain stable. The newly increased installed capacity recorded a decline while retaining a considerable scale, with nationwide power supply capacity having surplus on the whole. The Company will strengthen communication and coordination with governments at all levels and power grid companies, actively participate in the power industry reform, examine and closely monitor the market trends so as to identify and seize market potential for maintaining and expanding the Company's market share.

In terms of the coal market, in the second half of the year, the supply and demand of thermal coal will transit from tight equilibrium to basic loose, with the volatility further narrowing. The Company will continue to study and analyse the market trends and strengthen the research on policy interpretation. The Company will also intensify its efforts to develop new resources, and will strive for railway capacity support for transportation. It will also strive to ensure full delivery of coal supplies and onsite procurement under the long- and medium-term contracts, optimise imported coal so as to firmly control fuel costs.

In terms of the capital market, in 2019, the State placed a stable economic growth and the prevention of systemic risks in a prominent position. The prudent monetary policy placed emphasis on stability, moderate amount and optimised credit structure, with no “big flood irrigation”. It is expected that in the second half of the year the central bank would continue to stress on pre-adjustment and fine-tuning to ensure that the scale of monetary credit and social financing is stable and moderate. It is expected that the cost of capital would be at the same level as in the first half of the year. The Company will pay close attention to the capital market and, on the basis of ensuring the safety of the Company’s funds, seize the window and actively manage to reduce the cost of comprehensive funds.

In the second half of the year, the Company will continue to strengthen production safety, focus on energy conservation and emission reduction, promote the development in low-carbon clean energy, enhance quality and efficiency, initiatively adapt to the power industry reform, proactively increase market share, strive to reduce fuel cost, optimise debt structure and constantly improve business performance so as to consistently provide long-term, sustainable and increasing returns for the shareholders of the Company.

MANAGEMENT'S DISCUSSION AND ANALYSIS (2019 INTERIM)

(Prepared under IFRS)

I. Comparison and Analysis of Operating Results

Summary

According to the statistics of Huaneng Power International, Inc., (the “Company”), for the second quarter of 2019, the Company’s total power generation by power plants within China on consolidated basis amounted to 91.536 billion kWh, representing a decrease of 11.86% over the same period last year. Total electricity sold by the Company amounted to 86.778 billion kWh, representing a decrease of 11.52% over the same period last year. In the first half of 2019, the Company’s total power generation by the power plants within China on consolidated basis amounted to 195.375 billion kWh, representing a decrease of 6.15% over the same period last year. Total electricity sold by the Company amounted to 185.032 billion kWh, representing a decrease of 5.78% over the same period last year. In the first half of 2019, the Company’s average on-grid electricity settlement price for its power plants within China amounted to RMB419.51 per MWh, representing an increase of 0.22% over the same period last year. In the first half of 2019, the Company’s market based electricity sold amounted to 87.553 billion kwh, with a ratio of 47.05% comparing to the corresponding total electricity sold, representing an increase of 10.15 percentage points over the same period last year.

The decrease in the Company’s power generation was mainly attributable to the following factors: (i) in the first half of the year, the growth rate of the electricity consumption nation-wide showed a significant decline compared to the same period last year; (ii) hydropower and nuclear power generation had increased substantially, crowding out the space for growth in thermal power generation; and (iii) areas like East China, Guangdong, Shandong and other regions where the Company has a relatively large proportion of installed capacity have significantly increased the power supply from external sources, thereby crowding out the space for growth of the thermal power generation by local coal-fired power generation units.

The power generation (in billion kWh) by each of the Company's domestic power plants is listed below:

Region	Power Generation				Electricity Sold			
	April to June 2019	Change	January to June 2019	Change	April to June 2019	Change	January to June 2019	Change
Heilongjiang Province	3.735	2.89%	6.719	-3.05%	3.434	0.48%	6.216	-4.41%
Coal-fired	3.388	1.34%	6.016	-5.81%	3.095	-1.12%	5.530	-7.36%
Wind-power	0.309	12.27%	0.631	19.48%	0.301	9.75%	0.615	18.67%
PV	0.038	200.73%	0.072	351.90%	0.037	17.34%	0.071	353.07%
Jilin Province	2.813	1.26%	4.975	-2.24%	2.660	0.67%	4.690	-2.72%
Coal-fired	2.410	0.90%	4.214	-4.29%	2.271	0.17%	3.956	-4.93%
Wind-power	0.311	9.25%	0.590	13.74%	0.304	9.12%	0.575	13.75%
Hydro-power	0.020	-49.41%	0.027	-37.71%	0.019	-49.85%	0.026	-37.34%
PV	0.017	164.62%	0.032	164.46%	0.017	166.61%	0.032	165.28%
Biomass power	0.055	-5.93%	0.112	-0.37%	0.049	-5.28%	0.101	-0.13%
Liaoning Province	4.319	-8.65%	8.755	-6.07%	4.040	-8.80%	8.141	-5.93%
Coal-fired	4.155	-8.68%	8.446	-6.21%	3.877	-8.83%	7.836	-6.06%
Wind-power	0.115	-3.16%	0.208	-0.89%	0.115	-2.89%	0.207	-0.71%
Hydro-power	0.001	-93.36%	0.014	-38.90%	0.001	-93.52%	0.014	-38.72%
PV	0.048	9.08%	0.087	4.91%	0.047	7.77%	0.085	3.74%
Inner Mongolia	0.066	1.78%	0.114	-11.11%	0.065	2.25%	0.112	-10.84%
Wind-power	0.066	1.78%	0.114	-11.11%	0.065	2.25%	0.112	-10.84%
Hebei Province	3.314	-8.21%	6.685	3.82%	3.107	-8.29%	6.270	3.63%
Coal-fired	3.243	-8.23%	6.553	4.61%	3.038	-8.33%	6.141	4.41%
Wind-power	0.055	-10.22%	0.104	-27.47%	0.053	-10.02%	0.102	-27.18%
PV	0.016	4.65%	0.028	-8.41%	0.016	7.03%	0.027	-6.61%
Gansu Province	1.943	-26.79%	5.808	-10.69%	1.844	-26.78%	5.517	-10.71%
Coal-fired	1.399	-35.34%	4.793	-13.22%	1.312	-35.81%	4.525	-13.49%
Wind-power	0.544	10.87%	1.014	3.52%	0.532	12.15%	0.992	4.68%
Ningxia	0.007	-0.74%	0.012	6.54%	0.007	1.22%	0.011	7.55%
PV	0.007	-0.74%	0.012	6.54%	0.007	1.22%	0.011	7.55%
Beijing	1.479	-15.72%	3.682	-6.97%	1.433	-15.84%	3.479	-7.82%
Coal-fired	–	–	0.656	50.48%	–	–	0.581	52.32%
Combined Cycle	1.479	-15.72%	3.026	-14.08%	1.433	-15.84%	2.898	-14.59%

Region	Power Generation				Electricity Sold			
	April to June 2019	Change	January to June 2019	Change	April to June 2019	Change	January to June 2019	Change
Tianjin	1.373	-12.46%	3.202	-10.93%	1.295	-12.12%	3.007	-10.71%
Coal-fired	1.072	-18.26%	2.446	-15.03%	1.002	-18.12%	2.275	-14.87%
Combined Cycle	0.300	17.18%	0.755	5.40%	0.292	17.26%	0.731	5.28%
PV	0.001	5.88%	0.002	7.38%	0.001	6.26%	0.002	5.31%
Shanxi Province	2.171	-3.37%	5.224	8.99%	2.008	-3.52%	4.877	8.79%
Coal-fired	2.141	-3.86%	3.986	10.85%	1.978	-4.05%	3.672	10.64%
Combined Cycle	0.006	542.43%	1.196	3.01%	0.006	833.33%	1.164	3.20%
PV	0.024	25.72%	0.042	14.12%	0.024	24.52%	0.042	13.53%
Shandong Province	20.895	-3.82%	42.713	-0.36%	19.787	-2.91%	40.335	0.55%
Coal-fired	20.520	-4.11%	42.039	-0.52%	19.420	-3.20%	39.680	0.36%
Wind-power	0.247	19.13%	0.455	9.26%	0.242	20.47%	0.441	15.17%
PV	0.128	8.73%	0.219	14.24%	0.125	6.16%	0.214	11.92%
Henan Province	4.761	-29.60%	10.795	-14.95%	4.477	-29.82%	10.152	-15.14%
Coal-fired	4.464	-29.38%	10.361	-14.64%	4.193	-29.48%	9.732	-14.77%
Combined Cycle	0.148	-64.14%	0.186	-62.45%	0.144	-64.38%	0.181	-62.65%
Wind-power	0.141	572.29%	0.236	411.96%	0.132	537.90%	0.226	391.23%
PV	0.007	3.73%	0.013	-3.25%	0.007	4.31%	0.013	-3.13%
Jiangsu Province	8.767	-10.75%	19.352	-5.72%	8.301	-10.90%	18.341	-5.82%
Coal-fired	7.137	-7.35%	16.527	-0.90%	6.710	-7.34%	15.579	-0.81%
Combined Cycle	1.185	-30.80%	1.997	-32.46%	1.162	-30.76%	1.960	-32.45%
Wind-power	0.410	5.69%	0.771	-9.86%	0.394	4.42%	0.747	-10.53%
PV	0.035	68.40%	0.057	64.59%	0.034	79.30%	0.056	70.05%
Shanghai	3.350	-25.36%	8.828	-11.73%	3.160	-25.57%	8.357	-11.77%
Coal-fired	2.980	-25.94%	7.746	-15.85%	2.800	-26.14%	7.300	-16.02%
Combined Cycle	0.370	-20.51%	1.082	35.78%	0.360	-20.80%	1.056	35.53%
Chongqing	2.333	38.63%	5.203	15.18%	2.166	40.63%	4.846	16.12%
Coal-fired	1.964	26.94%	4.514	9.38%	1.806	28.25%	4.174	10.03%
Combined Cycle	0.296	117.91%	0.574	47.18%	0.289	118.85%	0.560	47.41%
Wind-power	0.073	–	0.115	–	0.071	–	0.112	–
Zhejiang Province	5.830	-29.39%	12.033	-18.68%	5.593	-29.61%	11.551	-18.83%
Coal-fired	5.707	-28.83%	11.821	-18.13%	5.472	-29.04%	11.343	-18.27%
Combined Cycle	0.104	-52.33%	0.183	-44.51%	0.102	-52.31%	0.179	-44.61%
PV	0.019	-0.84%	0.029	-2.24%	0.018	-1.12%	0.028	-2.87%

Region	Power Generation				Electricity Sold			
	April to June 2019	Change	January to June 2019	Change	April to June 2019	Change	January to June 2019	Change
Hubei Province	4.057	14.45%	9.708	20.39%	3.812	15.33%	9.142	21.33%
Coal-fired	3.816	14.64%	9.310	20.68%	3.576	14.93%	8.751	21.19%
Wind-power	0.158	53.68%	0.281	46.48%	0.156	87.18%	0.276	73.40%
Hydro-power	0.076	-28.67%	0.107	-26.56%	0.074	-28.65%	0.104	-26.98%
PV	0.006	-7.22%	0.010	-10.77%	0.006	-7.36%	0.010	-10.54%
Hunan Province	2.022	-13.15%	4.970	-10.05%	1.882	-13.86%	4.652	-10.38%
Coal-fired	1.754	-14.89%	4.397	-12.73%	1.618	-15.79%	4.086	-13.24%
Wind-power	0.133	-16.56%	0.325	-0.16%	0.132	-16.76%	0.322	-0.10%
Hydro-power	0.126	31.62%	0.237	62.42%	0.124	31.50%	0.233	62.54%
PV	0.008	-23.99%	0.011	-30.04%	0.008	-23.90%	0.011	-29.89%
Jiangxi Province	4.067	-15.80%	9.262	-7.78%	3.884	-15.83%	8.865	-7.74%
Coal-fired	3.935	-16.93%	8.972	-8.97%	3.755	-17.00%	8.580	-8.96%
Wind-power	0.132	41.44%	0.290	55.05%	0.129	42.08%	0.285	54.38%
Anhui Province	1.377	1.39%	2.999	6.88%	1.306	0.79%	2.861	6.89%
Coal-fired	1.272	1.86%	2.809	7.21%	1.202	1.23%	2.673	7.03%
Wind-power	0.069	-5.32%	0.142	3.26%	0.068	-6.30%	0.141	7.13%
Hydro-power	0.036	1.80%	0.048	-0.62%	0.036	0.59%	0.048	-1.01%
Fujian Province	2.316	-24.05%	4.475	-24.95%	2.601	-9.68%	4.872	-13.53%
Coal-fired	2.313	-24.05%	4.470	-24.96%	2.598	-9.67%	4.867	-13.52%
PV	0.003	-21.15%	0.005	-19.97%	0.003	-18.54%	0.005	-20.33%
Guangdong Province	5.620	-26.85%	10.633	-24.50%	5.368	-27.08%	10.176	-24.61%
Coal-fired	5.615	-26.86%	10.624	-24.50%	5.363	-27.09%	10.167	-24.61%
PV	0.005	-14.96%	0.009	-15.37%	0.005	-14.70%	0.009	-15.59%
Guangxi	0.103	-22.28%	0.168	-0.78%	0.098	-22.59%	0.158	-2.67%
Combined Cycle	0.073	-44.89%	0.120	-28.83%	0.069	-45.58%	0.115	-29.30%
Wind-power	0.030	–	0.047	–	0.029	–	0.043	–
Yunnan Province	0.947	-40.87%	1.994	-22.50%	0.865	-41.45%	1.841	-22.52%
Coal-fired	0.798	-45.38%	1.588	-29.87%	0.721	-46.29%	1.446	-30.31%
Wind-power	0.141	1.20%	0.398	28.87%	0.136	0.91%	0.387	28.60%
Hydro-power*	0.008	–	0.008	–	0.008	–	0.008	–
Guizhou Province	0.046	-10.69%	0.142	28.33%	0.046	-11.11%	0.140	28.38%
Wind-power	0.046	-10.69%	0.142	28.33%	0.046	-11.11%	0.140	28.38%

Region	Power Generation				Electricity Sold			
	April to June 2019	Change	January to June 2019	Change	April to June 2019	Change	January to June 2019	Change
Hainan Province	3.826	9.43%	6.924	3.95%	3.539	9.03%	6.423	3.57%
Coal-fired	3.713	8.47%	6.751	3.75%	3.429	8.00%	6.253	3.36%
Combined Cycle	0.018	130.88%	0.021	-9.82%	0.018	142.32%	0.020	-10.10%
Wind-power	0.018	8.36%	0.046	0.41%	0.018	10.89%	0.045	-0.55%
Hydro-power	0.046	24.95%	0.055	-11.53%	0.046	25.72%	0.054	-12.24%
PV	0.030	150.95%	0.051	127.15%	0.029	151.59%	0.051	126.46%
Total	91.536	-11.86%	195.375	-6.15%	86.778	-11.52%	185.032	-5.78%

* The Company's wholly-owned Yunnan Diandong Yuwang Changdi Hydropower Station (16 MW) has been supplying power to internal power plants and began selling electricity in the second quarter of 2019.

For the second quarter of 2019, the power generation of Tuas Power Limited in Singapore, which is wholly-owned by the Company, accounted for a market share of 20.0% in Singapore, representing a decrease of 1.1 percentage point compared to the same period of last year. The accumulated power generation for the first half year accounted for a market share of 20.5%, representing a decrease of 0.3 percentage point compared to the same period of last year.

The consolidated net profit attributable to the equity holders of the Company for the first half of 2019 was RMB3.442 billion, representing an increase of 98.78% over RMB1.731 billion for the same period of last year. The net profit attributable to the equity holders of the Company from domestic operations was RMB3.547 billion, representing an increase of 87.21% over the same period of last year, which is mainly due to reduced fuel prices. The net loss attributable to the equity holders of the Company from its operations in Singapore was RMB200 million.

1. Operating revenue, taxes and levies

Operating revenue mainly represents revenue from electricity sold. For the first half of 2019, the consolidated operating revenue of the Company and its subsidiaries amounted to RMB83.603 billion, representing an increase of 1.45% over RMB82.405 billion for the same period of last year. The operating revenue from domestic operations of the Company decreased by RMB2.307 billion over the same period last year, of which operating revenue from newly operated generating units was RMB0.802 billion. The operating revenue from operations of the Company in Singapore increased by RMB987 million over the same period last year. The Company's power generation company in Pakistan was consolidated since December 2018, and its operating revenue in the first half of 2019 was RMB2.518 billion.

Tax and levies on operations mainly consist of City Construction Tax and Educational Surcharges, Property Tax, Land Use Tax, Environmental Protection Tax, Resource Tax, Stamp Tax, Vehicle and Vessel Use Tax etc. For the first half of 2019, the taxes and levies on operations of the Company were RMB924 million, representing an increase of RMB48 million from RMB876 million for the same period last year.

2. Operating expenses

For the first half of 2019, the consolidated operating expenses of the Company and its subsidiaries were RMB72.203 billion, representing a decrease of 2.19% over the same period last year. The operating expenses from domestic operations of the Company decreased by RMB4.489 billion, or 6.55%, over the same period of last year, which was mainly due to reduced fuel costs. The operating expenses of newly operated generating units amounted to RMB0.596 billion. The operating expenses from operations of the Company in Singapore increased by RMB1.082 billion, or 20.50%, over the same period last year.

2.1 Fuel costs

Fuel costs represent the largest portion of the operating expenses of the Company and its subsidiaries, which were RMB47.318 billion for the first half of 2019, representing a decrease of 8.30% over the same period last year. The fuel costs from domestic operations of the Company decreased by RMB4.880 billion over the same period last year, which was mainly due to reduced fuel costs. Fuel costs for newly operated generating units amounted to RMB0.244 billion. The operating expenses from the Company's operations in Singapore increased by RMB599 million over the same period last year.

2.2 Depreciation

Depreciation expenses of the Company and its subsidiaries for the first half of 2019 were RMB10.692 billion, which represents an increase of RMB569 million over the same period last year. The depreciation expenses for domestic operations of the Company increased by RMB555 million over the same period last year, of which the depreciation expenses for newly operated generating units were RMB0.269 billion. The depreciation expenses of its operations in Singapore increased by RMB14 million over the same period last year.

2.3 Labor

Labor costs include salaries payable to employees; housing funds, medical insurance, pension and unemployment insurance payable to relevant government authorities; and accrued training expenses. Labor costs of the Company and its subsidiaries amounted to RMB4.929 billion for the first half of 2019, representing an increase of RMB0.429 billion from RMB4.500 billion for the same period last year.

2.4 Maintenance

Maintenance expenses of the Company and its subsidiaries amounted to RMB1.695 billion for the first half of 2019, representing a decrease of RMB26 million from RMB1.721 billion for the same period last year. The maintenance expenses for domestic operations of the Company decreased by RMB9 million. The maintenance expenses for the Company's operations in Singapore decreased by RMB17 million.

2.5 Other operating expenses (including electricity purchase costs)

Other operating expenses (including electricity purchase costs) of the Company and its subsidiaries for the first half of 2019 amounted to RMB7.568 billion, representing an increase of RMB1.695 billion from RMB5.873 billion for the first half of 2018. Other operating expenses for domestic operations decreased by RMB0.554 billion over the same period last year, of which RMB0.027 billion is attributable to operation of newly operated generating units. Other operating expenses for operations of the Company in Singapore increased by RMB0.467 billion. The Company's power generation company in Pakistan was consolidated since December 2018 and its other operating expenses in the first half of 2019 was RMB1.782 billion.

3. *Financial expenses, net*

The consolidated net financial expenses of the Company and its subsidiaries for the first half of 2019 amounted to RMB5.623 billion, representing an increase of RMB0.416 billion from RMB5.207 billion for the same period last year, which is mainly due to that the Company's power generation company in Pakistan was consolidated since December 2018 and its financial expenses in the first half of 2019 was RMB0.489 billion. The financial expenses of domestic operations decreased by RMB0.071 billion. Thereinto, the application of IFRS 16 led to an increase of RMB0.066 billion. RMB0.065 billion is attributable to newly operated generating units. The financial expenses of the Company's operations in Singapore decreased by RMB2 million.

4. *Share of profits less losses of associates and joint ventures*

The share of profits less losses of associates and joint ventures of the Company and its subsidiaries for the first half of 2019 was RMB739 million, representing an increase of RMB354 million from RMB385 million for the same period last year. This was mainly attributable to increased profits of the associates and joint ventures of the Company, including Shenzhen Energy, Hainan Nuclear Power Co., Ltd., etc.

5. *Income tax expenses*

For the first half of 2019, the Company and its subsidiaries registered consolidated income tax expenses of RMB1.347 billion, representing an increase of RMB0.602 billion from RMB0.745 billion for the same period last year. The income tax expenses for the domestic operations increased by RMB0.609 billion over the same period last year mainly due to the increased profitability of domestic operations during the period.

6. *Profit/loss attributable to equity holders of the Company*

The net profit attributable to equity holders of the Company for the first half of 2019 amounted to RMB3.442 billion, representing an increase of 98.78% over RMB1.731 billion for the same period of last year. The net profit attributable to equity holders of the Company from its domestic operations was RMB3.547 billion, representing an increase of 87.21% over the same period last year. The increase is mainly due to reduced fuel costs. The net loss attributable to equity holders of the Company from its operations in Singapore was RMB200 million. The net profit attributable to equity holders of the Company from its operation in Pakistan was RMB0.095 billion.

7. *Comparison of financial positions*

As of 30 June 2019, consolidated total assets of the Company and its subsidiaries were RMB417.494 billion, representing a decrease of 0.57% from RMB419.903 billion as of 31 December 2018. Consolidated total liabilities of the Company and its subsidiaries were RMB298.394 billion, representing a decrease of 1.77% from RMB303.782 billion as of 31 December 2018. The asset-liability ratio was 71.47%.

8. *Major financial position ratios*

Calculation formula of the financial ratios:

Ratio of liabilities to shareholders' equity = balance of liabilities at the end of the period/balance of shareholders' equity (excluding non-controlling interests) at the end of the period

Current ratio = balance of the current assets at the end of the period/balance of current liabilities at the end of the period

Quick ratio = (balance of current assets at the end of the period – net amounts of inventories at the end of the period)/balance of current liabilities at the end of the period

Multiples of interest earned = (profit before tax + interest expenses)/interest expenditure (including capitalised interest)

Items	The Company and its subsidiaries	
	As of 30 June 2019	As of 31 December 2018
Ratio of liabilities to shareholders' equity	3.08	3.22
Current ratio	0.41	0.45
Quick ratio	0.34	0.38

Item	For the six months ended 30 June 2019	For the six months ended 30 June 2018
Multiples of interest earned	1.95	1.52

The ratio of liabilities to owner's equity decreased compared with the beginning of the year, mainly due to the increase in the company's owner's equity. The current ratio and the quick ratio decreased from the beginning of the year, mainly due to the increase in short-term interest-bearing debts of the company, which led to an increase in current liabilities. Multiples of interest earned has increased compared to the same period of last year, mainly due to the increase in profit before tax.

As of June 30, 2019, the Company and its subsidiaries had net current liabilities of RMB87.204 billion. Based on the successful financing history of the Company, the undrawn banking facilities available to the Company and its good credit rating, the Company believes it would be able to meet its liabilities as and when they fall due and secure the funds required for operations.

II. Liquidity and Cash Resources

1. Liquidity

	For the six months ended 30 June 2019 <i>(RMB in billion)</i>	For the six months ended 30 June 2018 <i>(RMB in billion)</i>	Change <i>(%)</i>
Net cash from operating activities	16.739	15.116	11
Net cash used in investing activities	(10.002)	(6.104)	64
Net cash used in financing activities	(9.153)	(2.095)	337
Effect of exchange rate fluctuations on cash held	(0.046)	(0.010)	363
Net (decrease)/increase in cash and cash equivalent	(2.462)	6.907	(136)
Cash and cash equivalent at beginning of the reporting period	15.418	9.282	66
Cash and cash equivalent at the end of the reporting period	12.956	16.189	(20)

The net cash provided by operating activities of the Company for the first half of 2019 was RMB16.739 billion, representing an increase of 11% over the same period last year. The increase was mainly due to decrease of fuel prices compared with the same period of the previous year, resulting in a decrease in cash paid for purchases.

Net cash used in investing activities of the Company was RMB10.002 billion, representing a increase of 64% from the same period last year, which was mainly due to increase in investment spending on clean energy projects.

The financing activities of the Company were principally debt financings. For the first half of 2019, the Company drew down new loans of RMB65.018 billion, issued super short-term notes of RMB13.000 billion and long-term bonds of RMB2.300 billion, and repaid loans of RMB69.685 billion, super short-term bonds of RMB12.500 billion and no long-term bonds was maturity.

As of 30 June 2019, cash and cash equivalents of the Company and its subsidiaries denominated in RMB and Singapore dollar, U.S. dollar, Pakistan Rupee and Japanese Yen, each of which is measured at RMB equivalent, were RMB11.563 billion, RMB0.984 billion, RMB0.389 billion, RMB20 million and RMB0.162 million, respectively.

2. *Capital expenditure and cash resources*

2.1 *Capital expenditure for infrastructure construction and renovation projects*

The capital expenditure for construction and renovation projects of the Company for the first half of 2019 was RMB7.434 billion, including RMB1.124 billion for Shanxi Integrated Power, RMB1.045 billion for Yancheng Dafeng Renewable, RMB803 million for Heilongjiang Power, RMB505 million for Shandong Power, RMB296 million for Dezhou Power, RMB263 million for Luoyuan Power, RMB222 million for Shengdong Rudong Offshore Wind Power, RMB195 million for Dongguan Turbine, RMB186 million for Mianchi Renewable, RMB184 million for Dalian Cogeneration, RMB184 million for ShangAn Power, RMB152 million for Guigang Renewable, RMB128 million for Diandong Yuwang Energy,

RMB123 million for Guanyun Renewable, RMB120 million for Jiangyin Turbine, RMB109 million for Pinghu Offshore Wind Power, RMB103 million for Jiuquan Wind Power, RMB90 million for Fujian Haigang, RMB86 million for Abaga Renewable, RMB81 million for Shantou Offshore Wind Power, RMB75 million for Diandong Energy, RMB67 million for Jiangxi Renewable, RMB66 million for Puyang Power, and RMB64 million for Yingcheng Cogeneration Power. Expenditure for other infrastructure construction and renovation projects was RMB1.166 billion.

The above capital expenditures are sourced mainly from internal capital, cash flows provided by operating activities, and debt financing. The Company expects to have significant capital expenditures in the next few years. During the course, the Company will make active efforts to improve project planning process on a commercially viable basis. The Company will also actively develop new projects to pave the way for its long-term growth. The Company expects to finance the above capital expenditures through internal capital, cash flows provided by operating activities, and debt and equity financing.

2.2 Cash resources and anticipated financing costs

The Company expects to finance its capital expenditure and acquisition costs primarily from internal capital, cash flows from operating activities, and debt and equity financings.

Good operating results and sound credit status provide the Company with strong financing capabilities. As of 30 June 2019, the undrawn banking facilities available to the Company and its subsidiaries amount to more than RMB137.6 billion from, among others, Bank of China, China Construction Bank and Industrial and Commercial Bank of China.

The Company issued five installments of unsecured super short-term bonds of RMB2 billion, RMB5 billion, RMB2 billion, RMB2 billion and RMB2 billion with coupon rate of 2.40%, 2.30%, 2.30%, 2.40%, and 2.40% on 15 March, 10 May, 24 May, 11 June, and 14 June, respectively. Each installment of super short-term bonds is issued at par value in RMB and matures in 90, 180, 90, 90 and 90 days after issuance, respectively.

As of 30 June 2019, the Company and its subsidiaries had outstanding short-term loans of RMB76.380 billion (RMB61.039 billion at the end of 2018), of which borrowings from banks were charged at annual interest rates ranging from 3.15% to 12.72% (3.300% to 11.51% at the end of 2018).

As of 30 June 2019, the Company and its subsidiaries had outstanding short-term bonds of RMB12.041 billion (RMB11.541 billion at the end of 2018).

As of 30 June 2019, the Company and its subsidiaries had outstanding long-term loans (including those maturing within a year) of RMB130.512 billion (RMB150.169 billion at the end of 2018), including RMB denominated loans of RMB107.391 billion (RMB126.844 billion at the end of 2018), U.S. dollar denominated loans of US\$253 million (US\$285 million at the end of 2018), Euro denominated loans of €18 million (€22 million at the end of 2018), Singapore dollar denominated loans of S\$2.463 billion (S\$2.472 billion at the end of 2018), and Japanese yen denominated loans of ¥2.427 billion (¥2.482 billion at the end of 2018). All loans denominated in US dollar and Singapore dollar were floating rate, and loans denominated in all other foreign currencies were fixed rate. As of 30 June 2019, the long-term loans of the Company and its subsidiaries from banks were charged at annual interest rates ranging from 0.75% to 7.1010% (0.75% to 7.292% at the end of 2018).

The Company will maintain close watch on fluctuations of exchange rate and interest rate markets, and prudently assess currency and interest rate risks.

In addition to meeting cash requirements from operations, constructions and acquisitions in its ordinary course, the Company, along with due consideration of overall development of power generation industry and growth of the Company, will make efforts to control financing costs and financial risks, establish an optimal capital structure for effective financial management activities, with the view to providing sustainable and stable returns to its shareholders.

2.3 Other financing requirements

The objective of the Company is to bring long-term, consistent and growing returns to its shareholders. In line with this objective, the Company follows a proactive, stable and balanced dividend policy. Upon the approval from the annual general meeting of the shareholders for the year 2018 held on 12 June 2019, the Company declared a cash dividend of RMB0.10 per ordinary share (inclusive of tax), with total dividends of approximately RMB1.570 billion. The Company has completed payment of the dividends of RMB1.100 billion by 30 June 2019, and the remaining dividends of RMB470 million have not been paid.

III. Performance and Prospects of Significant Investments

The Company acquired 25% equity interests in Shenzhen Energy Group (“Shenneng Group”) with payment of RMB2.390 billion on 22 April 2003. In 2011, Shenneng Group divided into a remainder company Shenneng Group and a new company Shenneng Energy Management Company, and the Company holds 25% equity interests in each of the two successors. The Company acquired 200 million shares from Shenzhen Energy Corporation (“Shenzhen Energy”), a subsidiary of Shenneng Group, in December 2007. Shenzhen Energy allotted shares with its capital surplus in 2011. In February 2013, Shenzhen Energy merged Shenzhen Energy Management Company through the combination of directional seasoned offering and cash payment to the shareholders of Shenzhen Energy Management Company. After the merger, the Company directly held 991,741,659 shares of Shenzhen Energy, representing 25.02% of its equity interests. These investments brought a net profit attributable to the equity holders of the Company of RMB335 million for the Company for the first half of 2019 under IFRS. This investment is expected to provide steady returns to the Company.

The Company held 60% direct equity interests in Sichuan Hydropower as of 31 December 2006. In January 2007, Huaneng Group increased its capital investment in Sichuan Hydropower by RMB615 million, thus reducing the Company’s equity interests in Sichuan Hydropower to 49% and making Huaneng Group the controlling shareholder of Sichuan Hydropower. This investment brought to the Company a net profit attributable to the equity holders of the Company of RMB87 million for the first half of 2019 under IFRS. This investment is expected to provide steady returns to the Company.

IV. Employee Benefits Policies

As of 30 June 2019, the Company and its subsidiaries had 57,220 employees. During this reporting period, there was no significant change regarding remuneration policies and training programs of the Company.

V. Guarantee for Loans and Restricted Assets

As of 30 June 2019, the Company's outstanding balance of guarantee to TPG, a wholly-owned subsidiary, was approximately RMB12.351 billion. The outstanding balance of guarantee of the Company's subsidiary Huaneng Heilongjiang Power Generation Co., Ltd. to Huaneng Daqing Thermal Power Co., Ltd. was approximately RMB0.450 billion. The outstanding balance of guarantee of Huaneng Heilongjiang Power Generation Co., Ltd. to its subsidiary Daqing Lvyuan Wind Power Co., Ltd. was approximately RMB1.002 billion, and to its subsidiary Huaneng Tongjiang Wind Power Co., Ltd. was RMB0.393 billion. Huaneng Daqing Thermal Power Co., Ltd., a subsidiary of the Company, has an outstanding guarantee balance of RMB0.208 billion to Huaneng Yichun Thermal Power Co., Ltd. The outstanding balance of guarantee of the Company's subsidiary Huaneng Shandong Power Generation Co., Ltd. to its subsidiary Huaneng Shandong Ruyi (Pakistan) Energy (Private) Co., Ltd. was approximately RMB0.687 billion. The outstanding balance of guarantee of the Company's subsidiary Huaneng Shandong Ruyi Coal Power Co., Ltd. to its subsidiary Huaneng Jiexiang Power Generation Co., Ltd. was approximately RMB0.03 billion.

As of 30 June 2019, the details of secured loans of the Company and its subsidiaries are as follows:

1. As of 30 June 2019, short-term loans of approximately RMB433 million (RMB461 million at the end of 2018) represented the notes receivable that were discounted with recourse. As these notes receivable had not yet matured, the proceeds received were recorded as short-term loans.
2. As of 30 June 2019, long-term loans of approximately RMB1.175 billion (RMB0.986 billion at the end of 2018) of the Company and its subsidiaries were secured by certain property, plant and equipment, with net book value of RMB2.216 billion.

3. As of 30 June 2019, long-term loans of approximately RMB8.337 billion (RMB8.938 billion at the end of 2018) were secured by future electricity revenue of the Company and its subsidiaries.

As of 30 June 2019, the restricted bank deposits of the Company and its subsidiaries were RMB777 million (RMB430 million at the end of 2018).

As of 30 June 2019, the properties, plants and equipment leased by the Company by financing have a book value of RMB1.769 billion (RMB1.774 billion at the end of 2018).

As of 30 June 2019, the discounted or endorsed notes receivable which were neither mature nor de-recognised have a book value of RMB1.531 billion (RMB2.372 billion at the end of 2018).

As of 30 June 2019, the Company and its subsidiaries had no material contingent liability.

VII. Risk Factors

1. *Electricity quantity risk*

As the power system reform has been comprehensively promoted, deepened and accelerated, the business power generation plan has been fully liberalised, the market transaction scale has been further expanded, and the market competition situation has become more intense. Meanwhile, the Company's thermal power installed capacity is relatively large, due to structural impact of the increase of hydropower and nuclear power generation, the Company's power generation space is squeezed. The Company will further implement various national policies, increase the amount of power generation; do in-depth research of market supply and demand situation, deepen the differentiated competitive advantages of unit energy conservation and environmental protection, network constraints, actively participate in power reform, share power reform dividends; strengthen marketing management, compliance the situation, strictly control of the power market risks.

2. *Electricity Price Risk*

With the full liberalisation of operating users' electricity plans and the launch

of the spot market, the power marketisation process will further accelerate. It is expected that the low-priced trading power will increase significantly in the coming period, and the company's average settlement price will fall. The company will closely track the progress of national policy and power market reform, strengthen communication with national and local price authorities, actively cooperate with the government to establish a reasonable, fair and standardised market environment, actively respond to market changes and adjust pricing strategies in a timely manner, and fully prevent and control electricity price risks.

3. *Coal market risk*

In the first half of 2019, though coal prices have gradually decreased, market risks still exist. First, due to safety production accidents, the safety inspection of the main producing areas continued to be conducted, so that the release of domestic coal production capacity and output was affected. Second, imported coal was affected by various factors such as policies, exchange rates and markets, which increased uncertainty. The third is that some coal chemical projects are put into production on the spot, the conversion level of production areas and coal source areas is increased, and the coal consumption is large, which has an increased impact on the coal consumption pattern, brings a certain degree of risk to the Company's fuel cost control. However, with the government's release of high quality production capacity, production increase, capacity increase, more long term contracts, minimum/maximum inventory, and other measures to ensure supply and price stabilization, the risk of guaranteed supply and control prices is controllable and under control. In the second half of 2019, the coal supply was stable and orderly and the volatility further narrowed. The company will closely follow the policy and changes in the domestic and international coal market, strengthen cooperation with competitive large mines, ensure strict contract performance of long-term contracts, and open up new coal supply channels, and carry out spot bidding procurement; strengthen inventory management and implement the strategy of storing in low season and consuming during peak season and take more measures to reduce fuel procurement costs.

4. *Environment Risk*

In China, environmental standards for power production are very well developed and strictly implement. The sewage permit system is implemented to thermal power enterprises. According to the environmental protection regulations and the EIA report, the emission sites, emission concentrations, annual emissions and other indicators of major pollutants generated by electric power production are regulated in the permit. The power company must discharge pollutants according to these regulations, otherwise it will bear legal responsibility.

The Central proposed to resolutely fight the battle against pollution. The State Council issued the “Three-Year Action Plan to Defence the Blue Sky”, which requiring three years or so to significantly reduce the total emissions of major air pollutants. More stringent requirements are imposed on emissions of pollutants from power company, such as polluted water and atmosphere.

Since this year, the government has issued the “Changjiang Conservation and Remediation Plan” to further strengthen the industrial pollution caused by the company located in coastal area of Changjiang.

On the basis of completing the ultra-low emission modification, the company is currently using new technologies and new processes to upgrade wastewater treatment facilities, while strengthening the operation and maintenance of existing facilities to ensure the best effect of wastewater treatment. The sealing and dust suppression conditions of coal storage sites are further improved in some key areas.

5. *Interest rate and exchange rate risk*

On the premise that the country emphasizes maintaining stable economic growth and preventing systemic financial risks, the People’s Bank of China continuing to implement prudent monetary policy and adjust slightly and advance to keep reasonable and adequate liquidity. Affected by the global trade slowdown, the most of major economies of the world have talk about interest rate reduction policy and a part of them have announced to reduce interest rate. We estimate it is unlikely that the debt cost of RMB and dollar will rise.

In the first half of 2019, the Pakistani rupee depreciated significantly. A Pakistani project Company which 50% owned by the Company's subsidiary, Shandong Power Generation Company through its wholly owned subsidiary, Huaneng Shandong (Hong Kong) Investment Co., Ltd., generated a foreign exchange differences on translation of foreign operations amounting to RMB403 million recognised to other comprehensive income.

SHARE CAPITAL STRUCTURE

As at 30 June 2019, total issued share capital of the Company amounted to 15,698,093,359 shares, of which 10,997,709,919 shares were domestic shares, representing 70.06% of the total issued share capital of the Company, and 4,700,383,440 shares were foreign shares, representing 29.94% of the total issued share capital of the Company. In respect of foreign shares, China Huaneng Group Co., Ltd. ("Huaneng Group") through its wholly-owned subsidiary China Hua Neng Group Hong Kong Limited held 472,000,000 shares, representing 3.01% of the total issued share capital of the Company. In respect of domestic shares, Huaneng International Power Development Corporation ("HIPDC") owned a total of 5,066,662,118 shares, representing 32.28% of the total issued share capital of the Company, while Huaneng Group held 1,555,124,549 shares, representing 9.91% of the total issued share capital of the Company. Through its controlling subsidiary China Huaneng Finance Corporation Limited, Huaneng Group held 71,007,568 shares, represents 0.45% of the total issued share capital of the Company. Other domestic shareholders held a total of 4,304,915,684 shares, representing 27.42% of the total issued share capital of the Company.

PURCHASE, SALE OR REDEMPTION OF SHARES

The Company and its subsidiaries did not sell any other types of its securities and did not purchase or redeem its own shares or other securities in the first half of 2019.

MAJOR SHAREHOLDING STRUCTURE

The following table summarises the shareholdings of the top ten shareholders of the Company as at 30 June 2019:

<u>Name of Shareholders</u>	<u>Total Shareholdings as at end of the reporting period</u>	<u>Percentage of shareholding in total issued shares (%)</u>
Huaneng International Power Development Corporation	5,066,662,118	32.28%
HKSCC Nominees Limited*	4,095,465,085	26.09%
China Huaneng Group Co., Ltd.	1,555,124,549	9.91%
Hebei Construction & Investment Group Co., Ltd.	527,548,946	3.36%
China Securities Finance Corporation Limited	492,186,504	3.14%
China Hua Neng Group Hong Kong Limited	472,000,000	3.01%
Jiangsu Provincial Investment & Management Limited Liability	416,500,000	2.65%
Fujian Investment Development (Group) Co., Ltd.	321,814,185	2.05%
Dalian Municipal Construction Investment Company Limited	301,500,000	1.92%
Liaoning Energy Investment (Group) Limited Liability Company	284,204,999	1.81%

Notes:

- * HKSCC Nominees Limited acts as nominee of holders of H shares of the Company and its shareholdings in the Company represent the total number of H shares held by it as nominee of H shareholders.

DIRECTORS' AND SUPERVISORS' RIGHT TO PURCHASE SHARES

The Company has adopted a code with the standard not lower than that of the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited ("Listing Rules"). Following enquiries made by the Company, all Directors and Supervisors confirmed that they have complied with the Code throughout the first half of 2019.

As at 30 June 2019, none of the directors, chief executive officer or supervisors of the Company had any interest or short position in the shares, underlying shares and/or debentures (as the case may be) of the Company or any of its associated corporations (within the definition of Part XV of the Securities and Futures Ordinance ("SFO") which was required to be notified to the Company and the Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange") pursuant to Divisions 7 and 8 of Part XV of the SFO (including interest and short position which any such Director, chief executive officer or Supervisor is taken or deemed to have under such provisions of the SFO) or which was required to be entered in the register required to be kept by the Company pursuant to Section 352 of the SFO or which was otherwise required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Companies as contained in Appendix 10 to the Listing Rules.

PUBLIC FLOAT

As at the date of this report, the Company has maintained the prescribed public float under the Listing Rules and as agreed with the Hong Kong Stock Exchange, based on the information that is publicly available to the Company and within the knowledge of the directors of the Company.

DIVIDENDS

It was resolved by the Board not to distribute dividends for the first half of 2019.

DISCLOSURE OF MATERIAL EVENTS

1. Resolution regarding the election of the Chairman of the Company

During the 17th meeting of the ninth session of the Board held on 30 January 2019, the resolution regarding the election of the Chairman of the Company was approved unanimously, agreeing to elect Mr. Shu Yinbiao as the Chairman of the ninth session of the Board of the Company.

Due to age reason, Mr. Cao Peixi ceased to act as the Chairman of the Company nor would he take up any director's responsibilities.

2. Status on change of senior management of the Company

Due to work changes, Mr. Song Zhiyi, the Vice President of the Company, submitted his resignation report to the board of directors of the Company in the first half of 2019, resigning from the position of the Vice President of the Company.

CORPORATE GOVERNANCE

The Company always places emphasis on corporate governance. After years of experience and practice, the Company has gradually formed a standardised and enhanced governance structure, thereby establishing a sound and effective system that is appropriate to the Company's own development requirements. The Company persists on maximising the benefits of the Company and its shareholders as a whole, treating all of its shareholders fairly and striving for the long-term, stable and increasing returns for shareholders of the Company.

During the reporting period, the Company has complied with the relevant provisions of Corporate Governance Code and Corporate Governance Report set out in Appendix 14 of the Listing Rules.

(a) Code of Corporate Governance

In recent years, the Company adopted the following measures in order to strengthen corporate governance and enhance the Company's operation quality:

(1) Enhancing and improving corporate governance

In addition to complying with the provisions of the applicable laws, as a public company listed in three markets both domestically and internationally, the Company is subject to the regulations of the securities regulatory authorities of the three listing places and the supervision of investors at-large. Accordingly, our fundamental principles are to adopt a corporate governance structure that balances and coordinates the decision-making powers, supervisory powers and operating powers, to act with honesty and integrity, and to operate in accordance with laws and regulations.

Over the years, the Board has formulated and implemented the Rules and Procedures of the General Meetings; Rules and Procedures of the Board of Directors Meetings; the Rules and Procedures of the Supervisory Committee Meetings; the Detailed Rules on the Work of the General Manager; the Detailed Rules on the Work of the Strategy Committee of the Board of Directors; the Detailed Rules on the Work of the Audit Committee of the Board of Directors; the Detailed Rules on the Work of the Nomination Committee of the Board of Directors; the Detailed Rules on the Work of the Remuneration and Appraisal Committee of the Board of Directors; the System on Work of Independent Directors, the System on Work of Independent Directors on the annual report and the Work Regulations on Annual Report for the Audit Committee, and amended relevant regulations and systems according to the applicable laws and the development needs of the Company.

The Board of Directors of the Company always regards the enhancement of corporate governance and the regulation of the three meetings as its own responsibility, continuously strengthens its own construction, and operates in compliance with laws and regulations, laying a solid foundation for the Company's sustained and healthy development. In 2019, the Board of Directors of the Company has continuously led the Company to adhere to strategic leadership, enhanced development planning, and accelerated the creation of a world-class listed power generation company with global competitiveness. At the same time, the Company will strictly abide by the "Guidelines for the Governance of Listed Companies", with the fundamental aim of maximising the interests of shareholders, treat all shareholders fairly, maintain a positive, balanced and stable dividend policy, and manage well the relationship between the its long-term development of the Company and the short-term benefits of its investors.

All members of the Board jointly perform the duty of corporate governance. During the reporting period, the Board has included the followings in its scope of duties and authority:

1. Establishing and reviewing the Company's corporate governance policies and codes, and making such amendments as it deems necessary to ensure the effectiveness of such policies and codes;
2. Reviewing and supervising the training and sustained professional development of the Company's directors and senior management;
3. Reviewing and supervising the Company's policies and codes regarding the observance of laws and regulatory requirements;
4. Formulating, reviewing and supervising the codes of conduct and compliance handbook applicable to directors and employees; and
5. Reviewing the Company's status on compliance with the Code on Corporate Governance Practices and the disclosures made in the Corporate Governance Report.

(2) Enhancing and improving the information disclosure system

The Company stresses on the importance of external information disclosure. The Company has established the Information Disclosure Committee which comprises the secretary to the Board of Directors, the chief accountant, managers of each functional department to be responsible for reviewing the Company's regular reports. The Company has implemented the system of holding regular information disclosure meetings every Monday chaired by the secretary to the Board of Directors who will report on the Company's important matters of the week, thereby ensuring the Company's performance of the relevant information disclosure obligations. The Company has successively formulated and implemented the relevant information disclosure system, and has made timely amendments thereto according to regulatory requirements. The current functioning systems include the Measures on Information Disclosure Management, the Measures on Related Transaction Management, Management Measures on Insiders, the Measures on Investor Relations Management, the Detailed Rules on the Work of the Information Disclosure Committee, Management Measures for Pursuing Responsibility regarding Material Errors in Information Disclosure of Annual Report, etc. The above measures and system ensure the regulated operation of the Company, strengthen the truthfulness, accuracy, completeness and the timely disclosure of information, and at the same time enhance the quality as well as transparency of the information disclosure.

Relevant departments of the Company compiled answers (and subsequent updates) to questions regarding the hot topics of market concerns, and the Company's production, operation and operating results in a timely manner. The replies shall become the basis of external communication upon the approval of the Company's management and the authorised representatives of the Information Disclosure Committee. Also, the Company engages professional personnel to conduct specialised training for the staff of the Company who are responsible for information disclosure on an irregular basis in order to continuously enhance their expertise.

(3) Regulating financial management system, strengthening internal control

In 2019, the Company adheres to its principle of good faith and fair treatment to its shareholders and makes a lot of detailed work in preparing the financial reports and connected practice standard and on aspect of internal controls. The credibility of a listed company, to a large extent, relates to the quality of the preparation of financial statements and a regulated operation of financial activities. In order to regulate its financial management, the Company has completed a large amount of specific and detailed work, including:

1. In order to strictly implement the accounting rules, accounting standards and accounting systems, to strengthen accounting and accounts supervision, and to truthfully and fairly reflect the financial position, operating results and cash flow, the Company has formulated the Measures on Accounting, the Basic Measures on Construction Accounting, the Measures on Fixed Assets Management, Lists of Fixed Assets and the Measures on Cost Management. The Company's Board, the Supervisory Committee and the Audit Committee have reviewed the Company's financial reports on a regular basis and the Company has fulfilled the requirements of making the Chairman, the President and the Chief Accountant responsible for the truthfulness and completeness of the financial reports.
2. In regard to fund management, the Company has formulated a number of management measures including the Measures on Financial Management, the Measures on the Management of the Income and Expenditure of the Funds, the Measures on the Assessment of Management of Receipt and Payment of Funds, the Measures on the Use and Management of Large Amount by Headquarter of the Company, the Measures on the Management of Bills of Exchange, the Measures on Management of Fund Raising, Rules on the Management of Transactions Involving Financial Derivatives, the Measures on the Management of Provision of Security to Third Parties and the Measures for Regulating Fund Transfers with the Related Parties. The Company's Articles of Association also set out provisions relating to loans, guarantees and investment. In the annual reports of the Company over the previous years, the Company has engaged certified accountants to conduct auditing on the use of funds by the controlling shareholders and other related parties, and issue specific statements according to the requirements of the China Securities Regulatory Commission ("China

Securities Regulatory Commission”) and the Shanghai Stock Exchange (“Shanghai Stock Exchange”) for confirmation that there has not been any violation of rules relating to the use of funds. Moreover, the Company also conducted quarterly checking and clearing with related parties in relation to the operational fund transfers in order to ensure the safety of funds.

3. The overall objective of internal control of the Company is to promote implementation of the corporate strategy. Specific goals are to maintain lawful operation and management of the Company, asset safety, and truthfulness and completeness of financial reports and related information, thus promoting the overall enhancement of operating efficiency and actual effect.

The Company has formulated a comprehensive system for five types of businesses including development and construction, production and operation, financial assets, integrated management and supervision and evaluation in order to achieve the institutionalisation of management. The Company has comprehensively sort out internal and external risks and various business processes, and completed the “Internal Control Manual”, the fifth version of which in use detailed 23 business processes and organisational structures including income, material procurement, fuel management and fund management, and 19 soft elements including human resources management, anti-fraud and risk management in terms of five areas including environment control, risk assessment, process control, information and communication, and monitoring, thereby comprehensively elaborating the Company’s guiding principles and policies, work procedures and job duties of various posts, regulating the standard procedures of various business processes and realising a streamlined system.

The Company has compiled the “Internal Control Evaluation Handbook” specifying the three-tier internal control evaluation management system, the internal control evaluation mode comprised of routine evaluation and supervision on key area, regulating the internal control evaluation procedures, evaluation methods, defect defining procedures and standards in order to realise standardisation of internal control evaluation. The Company conducts annual assessment on the applicability and effectiveness of the above system and regularly conducts revision and perfection in order to realise dynamic maintenance of the internal control system.

The Company has established 48 items of risks falling into 16 categories involving strategic management, production and operation, legal affairs, financial management, use of capital, safety protection, energy conservation and environment protection, fundamental construction and compliance observation, and has divided risk management at all levels of business departments. For the purpose of risk identification, the “Internal Control Manual” stipulates the corresponding control measures and defines key control points. Through the implementation of the “one post for one item system” at each control point, the control responsibility is divided to every post at various levels so that internal control and job responsibilities are combined and all members of staff can participate in the construction of internal control. The Company has implemented the internal control routine evaluation mechanism, set up the post of internal control evaluators in each department and subordinate unit respectively, conducted monthly internal control evaluation, and established a three-tier evaluation quality supervision mechanism respectively at the three levels of the Company, regional offices and basic level units by way of the internal control management system in order to conduct real-time tracking of the implementation of internal control. During the first half of the year, the Company has successfully completed a six-month internal control routine evaluation, and launched key inspection on high-risk units after combining the risk assessment results thus effectively protecting and promoting the sustained and healthy development of the businesses of the Company and realising the stable operation of the internal control system. The Company has combined the new requirements and new changes in business and management and constantly advanced experience and common issues, and launched comprehensive and multi-level internal control training each year, and widely publicised internal control concepts and knowledge, thus continuously optimising the internal control environment.

The internal control and management departments, internal audit department and external auditors regularly report the internal control work situation to the Audit Committee of the Board of Directors respectively, thus ensuring the continued and effective operation of the internal control system. The Company constantly improves the internal control review system, formulated the “Internal Control Review and Evaluation Management Regulations”, regularly conducts internal control target reviews and comprehensive evaluations, circulating notices within the Company after combining the assessment results, thus realising the review results in a timely manner, effectively guiding the units at all levels to focus on the quality of internal control work and practically realising of the deep level objective of management enhanced by internal control.

Upon full assessment, the management of the Company is of the opinion that the internal control system of the Company is sound and effective.

(b) Securities transactions by Directors

As the Company is listed in three jurisdictions, the Company has strictly complied with the relevant restrictive clauses on securities transactions by directors imposed by the regulatory authorities of the US, Hong Kong and China and we insist on the principle of complying with the strictest clause, that is, abiding by the strictest clause among three jurisdictions. We have adopted a set of standards not less exacting than the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules as the model code for securities dealings by directors of the Company, namely, Management Rules regarding the Company’s Securities Information and Trading. The Company has also formulated and implemented the Management Rules in respect of the Shares of the Company held by the Directors, Supervisors and Senior Management of Huaneng Power International, Inc. The model codes for the trading of securities by the Company’s directors include: trading the Company’s shares strictly in accordance with the Companies Law and relevant regulations, prohibiting those who are in possession of securities transaction inside information using inside information in securities trading; and setting out detailed rules for those who are in possession of inside information. Following a specific enquiry on all the directors and senior management of the Company, all the directors and senior management currently do not hold any shares of the Company and there is no material contract in which the directors and senior management directly or indirectly have material interests.

(c) Board of Directors

The Board of Directors of the Company comprises of 12 members. Of the members of the ninth session of the board of directors, Mr. Shu Yinbiao as the Chairman; Mr. Wang Yongxiang, Mr. Huang Jian, Mr. Mi Dabin, Mr. Guo Hongbo, Mr. Cheng Heng and Mr. Lin Chong as the Non-executive Directors; and Mr. Yue Heng, Mr. Xu Mengzhou, Mr. Liu Jizhen, Mr. Xu Haifeng and Mr. Zhang Xianzhi as the Independent Non-executive Directors.

The Board of Directors of the Company has held three meetings during the reporting period including regular meetings and ad hoc meetings. For details, please see the relevant announcements.

Details of the attendance of directors at the board meetings are as follows:

Name	Number of meetings to be attended	Number of meetings attended in person	Number of meetings attended by proxy	Rate of Attendance (%)
Executive Director				
Shu Yinbiao	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Non-executive Directors				
Huang Jian	3	3	0	100%
Wang Yongxiang	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Mi Dabin	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Guo Hongbo	3	1	2	33.33% (Attendance by proxy rate of 66.67%)
Cheng Heng	3	3	0	100%

Name	Number of meetings to be attended	Number of meetings attended in person	Number of meetings attended by proxy	Rate of Attendance (%)
Lin Chong	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Independent non-executive Directors				
Yue Heng	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Xu Mengzhou	3	3	0	100%
Liu Jizhen	3	1	2	33.33% (Attendance by proxy rate of 66.67%)
Xu Haifeng	3	3	0	100%
Zhang Xianzhi	3	2	1	66.67% (Attendance by proxy rate of 33.33%)
Directors who had resigned				
Cao Peixi	1	1	0	100%

As stated in the previous Corporate Governance Reports, the Company's Articles of Association set out in detail the duties and operational procedures of the Board (please refer to the Company's Articles of Association for details). The Board of the Company holds regular meetings to hear the reports on the Company's operating results and makes timely decisions. Material decisions on operation shall be discussed and approved by the Board. Ad hoc meetings may be held if necessary. Board meetings include regular meetings and ad hoc meetings. Regular meetings of the Board include: annual meetings, first quarterly meetings, half-yearly meetings and third quarterly meetings.

All arrangements for regular meetings have been notified to all directors at least 14 days prior to the meeting and the Company has ensured that each director thoroughly understood the agenda of the meeting and fully expressed his/her opinions, while all Independent Non-executive Directors expressed their independent directors' opinions on their respective duties. Minutes have been taken for all the meetings and filed at the Office of the Board.

Moreover, the Independent Non-executive Directors have submitted their independent non-executive director confirmation letters of 2018 according to the requirements of the Listing Rules.

The Directors considered that they have complied with the laws and regulations, and provisions of the Articles of Association, and have actively performed the duties faithfully and diligently. Apart from regular and ad hoc meetings, the Directors obtained information through the Chairman Office in a timely manner in order to monitor the objectives and strategies of the management, the Company's financial position and operating results and signing and performance of material agreements. The Directors reviewed the reports, data etc. of the Company regularly to understand the situation on production operation of the Company. Through on-site investigation, the independent non-executive Directors provided practical resolutions to the Company. All specialised committees under the Board actively carried out works and provided recommendations and policies which formed the basis of accurate policies for the Board.

During the period when the Board was not in session, the Chairman discharged part of the duties of the Board, including but not limited to (1) to examine and approve the proposals in respect of establishing or cancelling development and construction projects; (2) to examine and approve proposals of the in relation to the appointment, removal and transfer of managers of various departments of the Company and managers of external branches; (3) to examine and approve plans on the use of significant funds; (4) to examine and approve proposals on the establishment or cancellation of branch companies or branch organs; and (5) to examine and approve other major issues.

The Board has summarised the implementation and execution of work during the reporting period taking into consideration of opinions of the Supervisory Committee and the Senior Management of the Company. The Board is of the opinion that it has effectively fulfilled its duties to safeguard the interests of the Company and its shareholders.

Directors who attended the 2019 first extraordinary general meeting of the Company were Mr. Huang Jian (Non-executive Director) and Mr. Zhang Xianzhi (Independent non-executive Director and Chairman of the Remuneration and Appraisal Committee); Directors who attended the annual general meeting for 2018 of the Company were Mr. Huang Jian (Non-executive Director), Mr. Xu Mengzhou (Independent non-executive Director) and Mr. Zhang Xianzhi (Independent non-executive Director and Chairman of the Remuneration and Appraisal Committee).

(d) Chairman and President

The Company shall have a Chairman and a President who shall perform their duties respectively and separately according to the Articles of Association. During the reporting period, due to age reason, Mr. Cao Peixi resigned from the position as the Chairman of the Board of the Company. The Board resolved to appoint Mr. Shu Yinbiao to be the Chairman of the ninth session of the Board. The President of the Company is Mr. Zhao Keyu.

The division of duties of the Board and the senior management remained the same as disclosed in the previous Corporate Governance Reports.

(e) Non-executive Directors

According to the Articles of Association, the term of office of each member of the Board of the Company shall not exceed three years (inclusive) and the members may be eligible for re-election. However, the term of office of Independent Non-executive Directors shall not exceed six years (inclusive) according to the relevant regulations of the China Securities Regulatory Commission.

The respective terms of office of the Non-executive Directors are as follows:

<u>Name of Non-executive Directors</u>	<u>Term of office</u>
Huang Jian	13 June 2017-2020
Wang Yongxiang	13 June 2017-2020
Mi Dabin	13 June 2017-2020
Guo Hongbo	13 June 2017-2020
Cheng Heng	13 June 2017-2020
Lin Chong	13 June 2017-2020

(f) Directors' Remuneration

According to the relevant PRC laws and the Articles of Association, the Board has established the Remuneration and Appraisal Committee which operates in accordance with the Detailed Rules on the Work of the Remuneration and Appraisal Committee and is mainly responsible for studying the appraisal standards of the directors and senior management personnel of the Company, conducting appraisals and making proposals; responsible for studying and examining the remuneration policies and proposals of the directors and senior management personnel of the Company. The Remuneration and Appraisal Committee will review and submit annual total wages to the board of directors annually. Each of the Executive Directors has signed a director's service contract in accordance with the requirement of the Hong Kong Stock Exchange.

Members of the ninth session of the Remuneration and Appraisal Committee are Mr. Zhang Xianzhi, Mr. Guo Hongbo, Mr. Cheng Heng, Mr. Yue Heng, Mr. Liu Jizhen and Mr. Xu Haifeng, among whom Mr. Yue Heng, Mr. Liu Jizhen, Mr. Xu Haifeng and Mr. Zhang Xianzhi are Independent Non-executive Directors and Mr. Zhang Xianzhi is the chairman of the committee.

The Remuneration and Appraisal Committee under the Board operates in accordance with the Detailed Rules on the Work of the Remuneration and Appraisal Committee. The Remuneration and Appraisal Committee convened the first meeting in 2019 on 18 March 2019, at which the Report of Total Wage Expenses was reviewed and the Company's arrangement for the total wage in 2019 was approved. In the second half of 2019, the Remuneration and Appraisal Committee will carry out the work according to the actual situation and the above Detailed Rules at appropriate time.

During the reporting period, the attendance of meetings of the Remuneration and Appraisal Committee of the Company's Board was as follows:

<u>Name of meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First meeting of the Remuneration and Appraisal Committee of the Ninth Session of the Board in 2019	18 March 2019	Zhang Xianzhi, Guo Hongbo, Cheng Heng, Yue Heng, Liu Jizhen and Xu Haifeng	–

(g) Nomination of Directors

According to the relevant PRC laws and the relevant provisions of the Articles of Association, the Board has established the Nomination Committee. Governed by the Detailed Rules on the Works of the Nomination Committee, the Committee is mainly responsible for studying the selection standards and procedures for candidates for directors and senior management personnel of the Company according to the directors' qualifications requirements under the Companies Law and Securities Law and the needs of the operational management of the Company, and making proposals thereon to the Board; searching for qualified candidates for directors and suitable persons for senior management personnel on a wide basis; and examining the candidates for directors and suitable persons for senior management personnel and making proposals thereon. Currently, the nomination of the candidates for directors of the Company is mainly made by shareholders. The nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors. The President of the Company was appointed by the Board and the candidates for the Vice President and management were nominated by the President. Such nominations, after examination of the relevant qualification by the Nomination Committee, will be submitted to the Board of Directors.

Members of the ninth session of the Nomination Committee are Mr. Liu Jizhen, Mr. Mi Dabin, Mr. Lin Chong, Mr. Yue Heng, Mr. Xu Mengzhou and Mr. Zhang Xianzhi, among whom Mr. Liu Jizhen, Mr. Yue Heng, Mr. Zhang Xianzhi and Mr. Xu Mengzhou are Independent Non-executive Directors and Mr. Liu Jizhen is the chairman of the committee.

(h) Appointment of Auditors

Ernst & Young and Ernst & Young Hua Ming LLP are appointed as the Company's international and domestic auditors for 2019.

(i) Audit Committee

According to the requirements of the regulatory authorities of the jurisdictions where the Company is listed and the relevant provisions of the Articles of Association, the Board has established the Audit Committee. Governed by the Detailed Rules on the work of the Audit Committee, the Audit Committee is mainly responsible for assisting the Board in the supervision of:

- (1) the accuracy of the Company's financial statements;
- (2) the Company's compliance with laws and regulations;
- (3) the qualification and independence of the Company's independent auditors;
- (4) the performance of the Company's independent auditors and internal auditing departments of the Company; and
- (5) the control and management of the related party transactions of the Company.

The Company convenes four regular meetings of the Audit Committee of the Board of Directors each year, at least two of which will be conducted with the Company's external auditors to listen to reports on audit planning, work arrangement and audit works generally. The Board has formulated the Management Rules on Whistler Blowing through telephone or emails, and, pursuant to which the Audit Committee will be responsible for the management.

Members of the Audit Committee comprises of five directors. Members of the Audit Committee of the ninth session are, namely, Mr. Yue Heng, Mr. Xu Mengzhou, Mr. Liu Jizhen, Mr. Xu Haifeng, Mr. Zhang Xianzhi, among whom Mr. Yue Heng is the chairman of the committee.

During the reporting period, the Audit Committee has held four meetings. As per Audit Committee's duties, the Audit Committee has communicated separately and respectively with the Company's counsels, external auditors, management and the relevant functional departments of the Company. With the understandings on the applicable laws and regulations of those jurisdictions in which the shares of the Company are listed, the anti-fraud position in the Company, the recruitment of staff, the implementation and execution of internal control mechanisms, the audit work carried out by external auditors and the responsible officers of the audit department, the Audit Committee has rendered their views and suggestions.

During the reporting period, the attendance of meetings of members of the Audit Committee was as follows:

<u>Name of meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First meeting of the Audit Committee of the Ninth Session of the Board in 2019	28 February 2019	Yue Heng, Xu Mengzhou, Liu Jizhen, Xu Haifeng, Zhang Xianzhi	–
Second meeting of the Audit Committee of the Ninth Session of the Board in 2019	18 March 2019	Yue Heng, Xu Mengzhou, Xu Haifeng, Zhang Xianzhi	Liu Jizhen
Third meeting of the Audit Committee of the Ninth Session of the Board in 2019	24 April 2019	Yue Heng, Xu Mengzhou, Liu Jizhen, Xu Haifeng, Zhang Xianzhi	–
Fourth meeting of the Audit Committee of the Ninth Session of the Board in 2019	25 June 2019	Yue Heng, Xu Mengzhou, Liu Jizhen, Xu Haifeng, Zhang Xianzhi	–

(j) Responsibility statement by the Directors in relation to the financial statements

The Directors of the Company confirm that they shall assume the relevant responsibility in relation to the preparation of the financial statements of the Company, ensure that the preparation of the financial statements of the Company complies with the relevant laws and regulations and the applicable accounting standards and also warrant that the financial statements of the Company will be published in a timely manner.

(k) Shares held by senior management

None of the senior management of the Company holds shares of the Company.

(I) Strategy Committee

For compliance with the relevant requirements of the regulations in the jurisdictions where the shares of the Company are listed as well as the Articles of Association of the Company, the Board has established a Strategy Committee. Governed by the Detailed Rules on the Work of the Strategy Committee, the Strategy Committee is primarily responsible for:

- (1) reviewing and advising on the Company's long-term strategic development plan;
- (2) reviewing and advising on the major fund raising proposals that need to be approved by the Board;
- (3) reviewing and advising on the major production and operating projects that need to be approved by the Board;
- (4) studying and advising on the matters that would significantly affect the development of the Company;
- (5) examining the implementation of the above-mentioned matters;
- (6) comprehensive risk management of the Company to improve the Company's overall risk resistance; and
- (7) other matters as requested by the Board of Directors.

The ninth session of the Strategy Committee comprises of four directors, namely, Mr. Huang Jian, Mr. Wang Yongxiang, Mr. Liu Jizhen, Mr. Xu Haifeng, of whom Mr. Liu Jizhen and Mr. Xu Haifeng are Independent Non-executive Directors. Mr. Shu Yinbiao (Chairman) is the ad hoc chairman of the Strategy Committee.

On 20 May 2019, the Strategy Committee considered and approved the Enterprise Comprehensive Risk Management Report of Huaneng Power International, Inc. in 2019, and submitted the report to the Audit Committee of the Board of the Company on 30 July 2019 for review.

The risk management work of the Company has been conducted in an orderly manner, which effectively controlled each risk and successively strengthened and enhanced the Company's internal controls and risk management system.

During the reporting period, the attendance of meetings of the Strategy Committee was as follows:

<u>Name of meeting</u>	<u>Date of meeting</u>	<u>Members who attended the meeting in person</u>	<u>Members who attended the meeting by proxy</u>
First meeting of the Strategy Committee of the Ninth Session of the Board in 2019	20 May 2019	Shu Yinbiao, Huang Jian, Wang Yongxiang, Liu Jizhen, Xu Haifeng	–

(m) Directors' and senior management's training

The Company organises its Directors and Supervisors to attend the trainings provided by regulatory authorities every year. During the reporting period, the directors and supervisors of the Company attended training of directors and supervisors according to regulatory requirements. The secretary to the Board attended the 49th session enhanced professional development seminar for joint members provided by The Hong Kong Institute of Chartered Secretaries.

The Company conducts introduction by lawyers in places where the Company's shares are listed specifically to all Independent Non-executive Directors of the Audit Committee of the Company twice a year with respect to the updated regulatory laws, the application of relevant systems to the Company and the Company's performance of the rules and regulations in places where the Company's shares are listed.

The Company attaches importance to the training and continuing development of senior management. The Company organises members of senior management to participate the training courses provided by relevant State authorities, industrial managing authorities and industrial associations.

REVIEW BY THE AUDIT COMMITTEE

The interim results of 2019 have been reviewed by the Audit Committee of the Company.

LEGAL PROCEEDINGS

As at 30 June 2019, the Company and its subsidiaries were not involved in any material litigation or arbitration and no material litigation or claim of material importance was pending or threatened against or by the Company as far as the Company is aware.

DOCUMENTS FOR INSPECTION

The Company will also file the interim report in Form 6-K with the US Securities and Exchange Commission. Copies of the interim report for 2019 will be available at the following addresses and websites:

PRC

Huaneng Power International, Inc.
Huaneng Building
6 Fuxingmennei Street
Xicheng District
Beijing
The People's Republic of China

Telephone Number: (8610) 6322 6999
Fax Number: (8610) 6322 6888
Website: <http://www.hpi.com.cn>

Hong Kong

Wonderful Sky Financial Group Limited
9th Floor, Central Plaza,
99 Queen's Road Central,
Hong Kong

Tel: (852) 2851 1038
Fax: (852) 2851 1352

Websites of the Company

<http://www.hpi.com.cn>;
<http://www.hpi-ir.com.hk>

By Order of the Board
Huaneng Power International, Inc.
Shu Yinbiao
Chairman

As at the date of this announcement, the directors of the Company are:

Shu Yinbiao (*Executive Director*)

Huang Jian (*Non-executive Director*)

Wang Yongxiang (*Non-executive Director*)

Mi Dabin (*Non-executive Director*)

Guo Hongbo (*Non-executive Director*)

Cheng Heng (*Non-executive Director*)

Lin Chong (*Non-executive Director*)

Yue Heng (*Independent Non-executive Director*)

Xu Mengzhou (*Independent Non-executive Director*)

Liu Jizhen (*Independent Non-executive Director*)

Xu Haifeng (*Independent Non-executive Director*)

Zhang Xianzhi (*Independent Non-executive Director*)

Beijing, the PRC

31 July 2019

A. FINANCIAL INFORMATION EXTRACTED FROM CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS PREPARED UNDER IFRS

CONSOLIDATED INTERIM STATEMENT OF FINANCIAL POSITION (UNAUDITED)

AS AT 30 JUNE 2019

(Amounts expressed in thousands of RMB)

	<i>Notes</i>	As at 30 June 2019	As at 31 December 2018
			<i>(Note)</i>
ASSETS			
Non-current assets			
Property, plant and equipment		277,459,417	282,061,272
Right-of-use assets	2(b)	13,484,943	–
Investments in associates and joint ventures		20,523,892	19,553,964
Investment property		686,293	232,554
Other equity instrument investments		2,248,490	2,083,419
Land use rights		–	11,450,034
Power generation licenses		4,074,561	4,014,972
Mining rights		1,403,146	1,511,186
Deferred income tax assets		2,387,914	2,282,585
Derivative financial assets		23,810	5,970
Goodwill		15,732,935	15,572,227
Other non-current assets		19,322,563	19,336,059
Total non-current assets		<u>357,347,964</u>	<u>358,104,242</u>
Current assets			
Inventories		10,270,284	9,543,691
Other receivables and assets	4	7,343,763	6,455,911
Accounts receivables	5	28,061,785	29,278,938
Contract assets		8,330	11,058
Derivative financial assets		86,291	28,735
Bank balances and cash		13,721,543	15,832,788
Assets held for sale		654,367	647,948
Total current assets		<u>60,146,363</u>	<u>61,799,069</u>
Total assets		<u>417,494,327</u>	<u>419,903,311</u>

	As at 30 June 2019	As at 31 December 2018
<i>Notes</i>		<i>(Note)</i>

EQUITY AND LIABILITIES

Capital and reserves attributable to equity holders of the Company

Share capital	15,698,093	15,698,093
Other equity instruments	9,999,950	10,077,396
Capital surplus	27,175,894	26,194,931
Surplus reserves	8,140,030	8,140,030
Currency translation differences	(323,413)	(340,337)
Retained earnings	36,265,139	34,665,305

	96,955,693	94,435,418
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Non-controlling interests	22,144,987	21,686,252
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Total equity	119,100,680	116,121,670
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Non-current liabilities

Long-term loans	112,301,690	129,548,161
Long-term bonds	28,285,131	25,984,663
Lease liabilities	1,641,744	—
Deferred income tax liabilities	4,075,432	3,866,159
Derivative financial liabilities	106,727	231,308
Other non-current liabilities	4,632,287	5,945,136

Total non-current liabilities	151,043,011	165,575,427
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	As at 30 June 2019	As at 31 December 2018
<i>Notes</i>		<i>(Note)</i>

EQUITY AND LIABILITIES (CONTINUED)

Current liabilities

Accounts payable and other liabilities	8	32,433,232	35,138,680
Contract liabilities		522,873	1,976,647
Taxes payable		1,132,416	1,474,437
Dividends payable		1,749,788	1,267,833
Derivative financial liabilities		104,656	313,984
Short-term bonds	9	12,040,547	11,541,454
Short-term loans		76,380,002	61,038,772
Current portion of long-term loans		18,210,136	20,620,849
Current portion of long-term bonds	7	3,998,929	3,993,479
Current portion of lease liabilities		374,034	—
Current portion of other non-current liabilities		189,152	475,646
Liabilities held for sale		214,871	364,433
Total current liabilities		<u>147,350,636</u>	<u>138,206,214</u>
Total liabilities		<u>298,393,647</u>	<u>303,781,641</u>
Total equity and liabilities		<u>417,494,327</u>	<u>419,903,311</u>

Note: The Group initially applied IFRS 16 as at 1 January 2019. Under the transition method chosen, comparative information was not restated. See note 2(b).

**CONSOLIDATED INTERIM STATEMENT OF COMPREHENSIVE
INCOME (UNAUDITED)
FOR THE SIX MONTHS ENDED 30 JUNE 2019**

(Amounts expressed in thousands of RMB, except per share data)

		For the six months ended 30 June	
	<i>Notes</i>	2019	2018
			<i>(Note)</i>
Operating revenue	3	83,603,381	82,404,919
Tax and levies on operations		(923,939)	(876,085)
Operating expenses			
Fuel		(47,318,459)	(51,599,895)
Maintenance		(1,695,274)	(1,721,161)
Depreciation		(10,692,055)	(10,123,301)
Labor		(4,929,079)	(4,499,789)
Service fees on transmission and transformer facilities of HIPDC		(47,947)	(48,360)
Purchase of electricity		(2,333,351)	(2,197,348)
Others		(5,186,827)	(3,627,746)
Total operating expenses		(72,202,992)	(73,817,600)
Profit from operations		10,476,450	7,711,234
Interest income		120,404	107,974
Financial expenses, net			
Interest expense		(5,498,587)	(5,138,907)
Exchange loss and bank charges, net		(124,230)	(68,294)
Total financial expenses, net		(5,622,817)	(5,207,201)
Share of profits and losses of associates and joint ventures		739,458	385,030
Gain/(Loss) on fair value changes of financial assets/liabilities		17,610	(1,488)
Other investment income		10,784	11,010
Profit before income tax expense	11	5,741,889	3,006,559
Income tax expense	12	(1,346,516)	(744,586)
Net profit		4,395,373	2,261,973

		For the six months ended 30 June	
	Notes	2019	2018 (Note)
PROFIT FOR THE PERIOD		4,395,373	2,261,973
Other comprehensive income/(loss), net of tax			
<i>Items that will not be reclassified to profit or loss:</i>			
Share of other comprehensive income/(loss) of investees accounted for under the equity method		535,607	(46,047)
Fair value changes of other equity instrument investments		123,804	(538)
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Share of other comprehensive income/(loss) of investees accounted for under the equity method		229	(147,194)
Effective portion of cash flow hedges		325,171	225,362
Exchange differences on translation of foreign operations		(225,479)	(213,473)
Other comprehensive income/(loss), net of tax		759,332	(181,890)
Total comprehensive income		5,154,705	2,080,083
Net profit attributable to:			
– Equity holders of the Company		3,441,565	1,731,372
– Non-controlling interests		953,808	530,601
Total comprehensive income attributable to:			
– Equity holders of the Company		4,439,452	1,569,157
– Non-controlling interests		715,253	510,926
Earnings per share attributable to the ordinary shareholders of the Company (expressed in RMB per share)			
– Basic and diluted	13	0.20	0.11

Note: The Group initially applied IFRS 16 as at 1 January 2019. Under the transition method chosen, comparative information was not restated. See note 2(b).

**NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED INTERIM
FINANCIAL INFORMATION
FOR THE SIX MONTHS ENDED 30 JUNE 2019**

(Amounts expressed in thousands of RMB unless otherwise stated)

1. BASIS OF PREPARATION

This unaudited condensed consolidated interim financial information (“interim financial information”) of the Company and its subsidiaries (collectively, the “Group”) for the six months ended 30 June 2019 has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, including compliance with International Accounting Standard (“IAS”) 34 “Interim Financial Reporting”. This interim financial information should be read in conjunction with the annual financial statements for the year ended 31 December 2018, which have been prepared in accordance with International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (the “IASB”). This interim financial information was approved for issuance on 29 July 2019.

The accounting policies adopted in preparation of the interim condensed consolidated financial information are consistent with those applied in the preparation of the Group’s annual consolidated financial statements for the year ended 31 December 2018, except for the adoption of the new and revised International Financial Reporting Standards (“IFRSs”) effective as of 1 January 2019. Details of any changes in accounting policies are set out in note 2.

The preparation of an interim financial information in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial information contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Group since the 2018 annual financial statements. The condensed consolidated interim financial statements and notes thereon do not include all the information required for a full set of financial statements prepared in accordance with IFRSs.

The financial information relating to the financial year ended 31 December 2018 that is included in the interim financial information as comparative information does not constitute the Company's annual consolidated financial statements for that financial year but is derived from those financial statements. The annual consolidated financial statements for the year ended 31 December 2018 are available from the Company's registered office. The auditor has expressed an unqualified opinion on those financial statements in their report date 19 March 2019.

As at and for the six months ended 30 June 2019, a portion of the Group' funding requirements for capital expenditures was partially satisfied by short-term financing. Consequently, as at 30 June 2019, the Group has net current liabilities of approximately Renminbi Yuan ("RMB") 87,204 million. Taking into consideration of the expected operating cash flows of the Group and the undrawn available banking facilities of approximately RMB137,600 million as at 30 June 2019, the Group expects to refinance certain of its short-term loans and bonds and also considers alternative sources of financing, where applicable and when needed. Therefore, the directors of the Company are of the opinion that the Group will be able to meet its liabilities as they fall due within the next twelve months and accordingly, the interim financial information is prepared on a going concern basis.

2. PRINCIPAL ACCOUNTING POLICIES

(a) Overview

The accounting policies adopted in the preparation of the condensed consolidated interim financial statements are consistent with those applied in preparation of the Group's annual consolidated financial statements for the year ended 31 December 2018, except for the adoption of new and revised IFRSs effective as of 1 January 2019. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. Details of the changes in accounting policies are discussed in note 2(b) for IFRS 16.

Several other amendments and interpretation listed below apply for the first time in 2019, but they do not have any significant impact on the condensed consolidated interim financial statements of the Group:

- Amendments to IAS 28 *Long-term Interest in Associates and Joint Ventures*
- IFRIC interpretation 23 *Uncertainty over Income Tax Treatments*
- Amendments to IFRS 9 *Prepayment Features with Negative Compensation*
- Amendments to IAS 19 *Plan Amendment, Curtailment or Settlement*
- Annual IFRS Improvements:

IFRS 3 Business Combinations – *Previously held interest in a joint operation*

IFRS 11 Joint Arrangements – *Previously held interest in a joint operation*

IAS 12 Income Tax – *Income tax consequences of payments on financial instruments classified as equity*

IAS 23 Borrowing Costs – *Borrowing costs eligible for capitalisation*

(b) IFRS 16 Leases

IFRS 16 supersedes IAS 17 Leases, IFRIC 4 *Determining whether an Arrangement contains a Lease*, SIC-15 *Operating Leases-Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model. Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have any significant impact for leases where the Group is the lessor.

The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initial adoption as an adjustment to the opening balance of retained earnings at 1 January 2019, and the comparative information for 2018 was not restated and continues to be reported under IAS 17.

New definition of a lease

Under IFRS 16, a contract is, or contains a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to obtain substantially all of the economic benefits from use of the identified asset and the right to direct the use of the identified asset. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. Contracts that were not identified as leases under IAS 17 and IFRIC 4 were not reassessed. Therefore, the definition of a lease under IFRS 16 has been applied only to contracts entered into or changed on or after 1 January 2019.

At inception or on reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease and non-lease component on the basis of their standard-alone prices. A practical expedient is available to a lessee, which the Group has adopted, not to separate non-lease components and to account for the lease and the associated non-lease components (e.g., property management services for leases of properties) as a single lease component at the date of initial application.

As a lessee – Leases previously classified as operating leases

Nature of the effect of adoption of IFRS 16

The Group has lease contracts for various items of property, machinery, vehicles and other equipment. As a lessee, the Group previously classified leases as either finance leases or operating leases based on the assessment of whether the lease transferred substantially all rewards and risks of ownership of assets to the Group. Under IFRS 16, the Group applies a single approach to recognise and measure right-of-use assets and lease liabilities for all leases, except for two elective exemptions for leases of low value assets (elected on a lease by lease basis) and short-term leases (elected by class of underlying assets). The Group has elected not to recognise right-of-use assets and lease liabilities for (i) leases of low value assets; and (ii) leases, that at the commencement date, have a lease term of 12 months or less. Instead, the Group recognises the lease payments associated with those leases as an expense on a straight-line basis over the lease term.

Impacts on transition

Lease liabilities at 1 January 2019 were recognised based on the present value of the remaining lease payments discounted using the incremental borrowing rate at 1 January 2019 and included in non-current liabilities or current liabilities.

The right-of-use assets were measured at the amount of the lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to the lease recognised in the statement of financial position immediately before 1 January 2019. All these assets were assessed for any impairment based on IAS 36 on that date. The Group elected to present the right-of-use assets separately in the statement of financial position. This includes the lease assets recognised previously under finance leases of RMB1,617 million and prepayment on land use right of RMB11,450 million that were reclassified from property, plant and equipment and land use right, respectively.

The Group has used the following elective practical expedients when applying IFRS 16 at 1 January 2019:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics
- Applied the short-term leases exemptions to leases with lease term that ends within 12 months at the date of initial application
- Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application
- Used hindsight in determining the lease term where the contract contains options to extend or terminate the lease

The effect of adoption of IFRS 16 as at 1 January 2019 is as follows:

	Increase/ (Decrease)
	<i>RMB'000</i>
	(Unaudited)
Assets	
Increase in right-of-use assets	13,858,230
Decrease in property, plant and equipment	(1,616,551)
Decrease in land use rights	(11,450,034)
Decrease in other non-current assets	<u>(17,027)</u>
Increase in total assets	<u>774,618</u>
Liabilities	
Increase in non-current portion of lease liabilities	2,113,533
Increase in current portion of lease liabilities	103,259
Decrease in other non-current liabilities	<u>(1,442,174)</u>
Increase in total liabilities	<u>774,618</u>
Decrease in retained earnings	<u>—</u>

The lease liabilities as at 1 January 2019 are reconciled to the operating lease commitments as at 31 December 2018 as follows:

	<i>RMB'000</i> <u>(Unaudited)</u>
Operating lease commitments as at 31 December 2018	1,647,251
Less:	
Commitments relating to short-term leases and those leases with a remaining lease term ending on or before 31 December 2019	85,604
Adjustment related to variable rents	755,986
Add:	
Commitments relating to leases previously classified as finance leases as at 31 December 2018	<u>1,758,970</u>
 Total undiscounted lease liabilities as at 1 January 2019 for adoption of IFRS 16	 <u>2,564,631</u>
 Weighted average incremental borrowing rate as at 1 January 2019	 <u>4.75%</u>
 Lease liabilities as at 1 January 2019	 <u><u>2,216,792</u></u>

Summary of new accounting policies

Set out below are the new accounting policies of the Group upon adoption of IFRS 16, which have been applied from the date of initial application:

- *Right-of-use assets*

The Group recognised right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognised right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment.

- *Lease liabilities*

At the commencement date of the lease, the Group recognised lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in future lease payments arising from change in an index or rate, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

- *Short-term leases and leases of low-value assets*

The Group applies the short-term lease recognition exemption to its short-term leases of certain offices and apartments for employees (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). The Group also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below RMB30,000). Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

- *Significant judgement in determining the lease term of contracts with renewal options*

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

Amounts recognised in the statement of financial position and comprehensive income

Set out below, are the carrying amounts of the Group's right-of-use assets and lease liabilities and the movements during the period:

	Right-of-use assets						Lease liabilities
	Buildings and structures	Generators and related equipment	Motor vehicles	Land use rights	Furniture, fixtures and others	Total	
As at 1 January 2019	320,591	1,387,258	826	11,810,054	339,501	13,858,230	2,216,792
Additions/(decrease)	–	5,200	–	(27,789)	18,195	(4,394)	–
Depreciation charge	(10,546)	(119,587)	(138)	(210,932)	(1,574)	(342,777)	–
Currency translation differences	4,116	2,017	–	251	(32,500)	(26,116)	7,549
Interest expense	–	–	–	–	–	–	66,403
Payments	–	–	–	–	–	–	(274,966)
As at 30 June 2019	<u>314,161</u>	<u>1,274,888</u>	<u>688</u>	<u>11,571,584</u>	<u>323,622</u>	<u>13,484,943</u>	<u>2,015,778</u>

The Group recognised rent expense from short-term leases of RMB74 million for the six months ended 30 June 2019.

3. REVENUE AND SEGMENT INFORMATION

(a) Disaggregation of revenue

In the following table, revenue is disaggregated by major products and/or service lines of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments (Note 3(b)).

For the six months ended 30 June 2019	PRC power segment	Overseas power segment (Note i)	All other segments	Inter-segment revenue	Total
– Sales of power and heat	73,493,154	5,792,646	–	–	79,285,800
– Sales of coal and raw material	539,054	357,003	–	–	896,057
– Port service	–	–	249,862	(157,811)	92,051
– Transportation service	–	–	78,876	(7,699)	71,177
– Others	486,338	2,758,226	13,732	–	3,258,296
Total	<u>74,518,546</u>	<u>8,907,875</u>	<u>342,470</u>	<u>(165,510)</u>	<u>83,603,381</u>
For the six months ended 30 June 2018					
– Sales of power and heat	75,481,830	5,302,547	–	–	80,784,377
– Sales of coal and raw material	523,659	–	–	–	523,659
– Port service	–	–	227,303	(162,768)	64,535
– Transportation service	–	–	106,316	(82,318)	23,998
– Others	902,819	100,774	24,975	(20,218)	1,008,350
Total	<u>76,908,308</u>	<u>5,403,321</u>	<u>358,594</u>	<u>(265,304)</u>	<u>82,404,919</u>

Note i: Overseas segment mainly consists of the operation in Pakistan (consolidated since December 2018) and the operations in Singapore.

The revenue from sales of power and heat and sales of coal and raw materials is recognised at a point in time upon the transfer of products, whereas the revenue from port service and transportation service is recognised over time during the provision of service. The upfront fees of heating pipeline included in other revenue are recognised as revenue over the period of heat supply. Finance lease income included in other revenue is recognised over the lease term.

(b) Segment information

Directors and certain senior management of the Company perform the function as the chief operating decision maker (collectively referred to as the “senior management”). The senior management reviews the internal reporting of the Group in order to assess performance and allocate resources. The Company has determined the operating segments based on these reports. The reportable segments of the Company are the PRC power segment, overseas power segment and all other segments (mainly including port and transportation operations). No operating segments have been aggregated to form a reportable segment.

Senior management assesses the performance of the operating segments based on a measure of profit before income tax expense under China Accounting Standard for Business Enterprises (“PRC GAAP”) excluding dividend income received from other equity instrument investments and operating results of the centrally managed and resource allocation functions of headquarters (“Segment results”). Other information provided, except as noted below, to the senior management of the Company is measured under PRC GAAP.

Segment assets exclude prepaid income tax, deferred income tax assets, other equity instrument investments, investment in Huaneng Finance and assets related to the centrally managed and resource allocation functions of headquarters that are not attributable to any operating segment (“corporate assets”). Segment liabilities exclude current income tax liabilities, deferred income tax liabilities and liabilities related to the centrally managed and resource allocation functions of headquarters that are not attributable to any operating segment (“corporate liabilities”). These are part of the reconciliation to total assets and liabilities of statement of financial position.

(Under PRC GAAP)

	PRC power segment	Overseas power segment	All other segments	Total
For the six months ended				
30 June 2019				
Total revenue	74,518,546	8,721,868	342,470	83,582,884
Inter-segment revenue	—	—	(165,510)	(165,510)
Revenue from external customers	<u>74,518,546</u>	<u>8,721,868</u>	<u>176,960</u>	<u>83,417,374</u>
Segment results	<u>6,300,222</u>	<u>(2,712)</u>	<u>39,451</u>	<u>6,336,961</u>
Interest income	85,101	34,687	616	120,404
Interest expense	(4,757,432)	(647,064)	(46,752)	(5,451,248)
Impairment loss	(259,929)	15,697	—	(244,232)
Credit loss	1,079	170	—	1,249
Depreciation and amortisation	(9,618,356)	(391,165)	(179,471)	(10,188,992)
Net gain on disposal of non-current assets	14,768	23	—	14,791
Share of profits less losses of associates and joint ventures	504,438	—	103,976	608,414
Income tax expense	<u>(1,532,736)</u>	<u>36,869</u>	<u>(10,658)</u>	<u>(1,506,525)</u>
For the six months ended				
30 June 2018				
Total revenue	76,908,308	5,403,321	358,594	82,670,223
Inter-segment revenue	—	—	(265,304)	(265,304)
Revenue from external customers	<u>76,908,308</u>	<u>5,403,321</u>	<u>93,290</u>	<u>82,404,919</u>
Segment results	<u>3,785,293</u>	<u>(194,692)</u>	<u>170,866</u>	<u>3,761,467</u>
Interest income	72,253	34,393	1,328	107,974
Interest expense	(4,815,582)	(221,712)	(52,259)	(5,089,553)
Impairment loss	(16)	257	—	241
Credit loss	2,378	(4,155)	—	(1,777)
Depreciation and amortisation	(9,279,472)	(380,701)	(71,090)	(9,731,263)
Net gain/(loss) on disposal of non- current assets	3,806	(481)	(7)	3,318
Share of profits less losses of associates and joint ventures	189,222	—	104,434	293,656
Income tax expense	<u>(906,463)</u>	<u>29,854</u>	<u>(11,245)</u>	<u>(887,854)</u>

(Under PRC GAAP)

	PRC power segment	Overseas power segment	All other segments	Total
30 June 2019				
Segment assets	<u>342,500,866</u>	<u>41,529,214</u>	<u>10,144,067</u>	<u>394,174,147</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	19,089,045	138,645	281,941	19,509,631
Investments in associates	13,303,182	–	3,403,629	16,706,811
Investments in joint ventures	1,065,488	–	1,235,905	2,301,393
Segment liabilities	<u>(263,687,776)</u>	<u>(26,072,089)</u>	<u>(2,389,607)</u>	<u>(292,149,472)</u>
31 December 2018				
Segment assets	<u>345,057,426</u>	<u>40,886,478</u>	<u>10,406,648</u>	<u>396,350,552</u>
Including:				
Additions to non-current assets (excluding financial assets and deferred income tax assets)	18,467,651	581,225	492,585	19,541,461
Investments in associates	12,351,738	–	3,275,398	15,627,136
Investments in joint ventures	1,111,854	–	1,239,876	2,351,730
Segment liabilities	<u>(269,224,115)</u>	<u>(25,600,861)</u>	<u>(2,683,920)</u>	<u>(297,508,896)</u>

A reconciliation of segment results to profit before income tax expense is provided as follows:

	For the six months ended 30 June	
	2019	2018
Segment results (PRC GAAP)	6,336,961	3,761,467
Reconciling items:		
Loss related to the headquarters	(88,764)	(181,508)
Investment income from China Huaneng Finance Co., Ltd. (“Huaneng Finance”)	116,432	92,653
Dividend income of other equity instrument investments	–	612
Impact of IFRS adjustments*	(622,740)	(666,665)
Profit before income tax expense per unaudited consolidated interim statement of comprehensive income	<u>5,741,889</u>	<u>3,006,559</u>

Reportable segments' assets are reconciled to total assets as follows:

	As at 30 June 2019	As at 31 December 2018
Total segment assets (PRC GAAP)	394,174,147	396,350,552
Reconciling items:		
Investment in Huaneng Finance	1,340,373	1,391,431
Deferred income tax assets	2,916,799	3,143,465
Prepaid income tax	236,167	134,477
Other equity instrument investments	2,248,490	2,083,419
Corporate assets	377,087	338,113
Impact of other IFRS adjustments*	<u>16,201,264</u>	<u>16,461,854</u>
Total assets per unaudited condensed consolidated interim statement of financial position	<u>417,494,327</u>	<u>419,903,311</u>

Reportable segments' liabilities are reconciled to total liabilities as follows:

	As at 30 June 2019	As at 31 December 2018
Total segment liabilities (PRC GAAP)	(292,149,472)	(297,508,896)
Reconciling items:		
Current income tax liabilities	(422,035)	(231,299)
Deferred income tax liabilities	(1,087,613)	(1,050,326)
Corporate liabilities	(2,380,911)	(2,864,737)
Impact of other IFRS adjustments*	<u>(2,353,616)</u>	<u>(2,126,383)</u>
Total liabilities per unaudited consolidated interim statement of financial position	<u>(298,393,647)</u>	<u>(303,781,641)</u>

Other material items:

	Reportable Segment total	Headquarters	Investment income from Huaneng Finance	Impact of IFRS adjustments*	Total
For the six months ended					
30 June 2019					
Total revenue	83,417,374	–	–	186,007	83,603,381
Interest expense	(5,451,248)	(47,339)	–	–	(5,498,587)
Depreciation and amortisation	(10,188,992)	(4,111)	–	(533,388)	(10,726,491)
Impairment loss	(244,232)	–	–	–	(244,232)
Credit loss	1,249	–	–	53	1,302
Share of profits less losses of associates and joint ventures	608,414	–	116,432	14,612	739,458
Net gain on disposal of non- current assets	14,791	–	–	–	14,791
Income tax expense	<u>(1,506,525)</u>	<u>–</u>	<u>–</u>	<u>160,009</u>	<u>(1,346,516)</u>
For the six months ended					
30 June 2018					
Total revenue	82,404,919	–	–	–	82,404,919
Interest expense	(5,089,553)	(49,354)	–	–	(5,138,907)
Depreciation and amortisation	(9,731,263)	(14,604)	–	(604,215)	(10,350,082)
Impairment loss	241	–	–	–	241
Credit loss	(1,777)	–	–	–	(1,777)
Share of profits less losses of associates and joint ventures	293,656	–	92,653	(1,279)	385,030
Net gain on disposal of non- current assets	3,318	11	–	(139)	3,190
Income tax expense	<u>(887,854)</u>	<u>–</u>	<u>–</u>	<u>143,268</u>	<u>(744,586)</u>

* The GAAP adjustments above primarily represented adjustments related to business combination, borrowing cost capitalisation and classification adjustments. These GAAP adjustments will be gradually eliminated following subsequent depreciation and amortisation of related assets with corresponding deferred tax impact.

Geographical information (Under IFRS):

- (i) External revenue generated from the following countries:

	For the six months ended 30 June	
	2019	2018
PRC	74,695,506	77,001,598
Overseas	8,907,875	5,403,321
Total	<u>83,603,381</u>	<u>82,404,919</u>

The geographical location of customers is based on the location at which the electricity was transferred, goods were delivered and service provided.

- (ii) Non-current assets (excluding financial assets and deferred income tax assets) are located in the following countries:

	As at 30 June 2019	As at 31 December 2018
PRC	316,669,152	317,850,476
Overseas	23,932,959	23,302,942
Total	<u>340,602,111</u>	<u>341,153,418</u>

The information on sales to major customers of the Group at amount equal to or more than 10% of external revenue is as follows:

For the six months ended 30 June				
2019			2018	
<u>Amount</u>	<u>Proportion</u>		<u>Amount</u>	<u>Proportion</u>
State Grid Shandong				
Electric Power Company	14,274,939	17%	14,133,998	17%

For the six months ended 30 June 2019, the revenue from grid companies under common control of State Grid Corporation of China in total accounted for 78% of external revenue (for the six months ended 30 June 2018: 75%).

4. OTHER RECEIVABLES AND ASSETS

Other receivables and assets comprised the following:

	As at 30 June 2019	As at 31 December 2018
Prepayments for inventories	1,664,622	990,742
Prepaid income tax	236,167	134,477
Others	249,701	270,330
Subtotal prepayments	2,150,490	1,395,549
Less: loss allowances	7,507	4,638
Total prepayments, net	2,142,983	1,390,911
Dividends receivable	30,000	30,000
Receivables from sales of fuel	78,470	74,578
Others (<i>Note i</i>)	1,730,738	1,569,181
Subtotal other receivables	1,839,208	1,673,759
Less: loss allowances	38,531	38,531
Total other receivables, net	1,800,677	1,635,228
Profit compensation from Huaneng Group	440,551	550,832
VAT recoverable	1,702,165	1,927,638
Financial lease receivables	1,066,321	871,302
Designated loan to a joint venture	80,000	80,000
Transferred from non-current assets (<i>Note ii</i>)	111,066	—
Gross total	7,389,801	6,499,080
Net total	7,343,763	6,455,911

Note i: Included in others, there are advances amounting to RMB240 million as at 30 June 2019 (31 December 2018: RMB273 million) was due from Huangtai #8 Power Plant with indefinite repayment term. For the six months ended 30 June 2019, Huaneng Jinan Huangtai Power Limited Company (“Huangtai Power”), a subsidiary of the Company, received total accumulated repayments amounting to RMB33 million (for the year as at 31 December 2018: RMB60 million).

According to the property right transfer agreement signed in December 2008 between Huaneng Shandong Power Generation Co., Ltd. (“Shandong Power”) and Shandong Luneng Development Group (“Shandong Luneng”) and the corresponding approval from State-owned Assets Supervision and Administration Commission of the State Council in February 2009 (“State-owned Assets Right [2019] No.70”), Shandong Power acquired 30% of property right of Huangtai #8 Power Plant from Shandong Luneng at a cash consideration of RMB110 million. Huangtai #8 Power Plant is not a legal entity under PRC Company Law, though it has separate accounting books, therefore the Company recognised 30% property right as other non-current assets. Huangtai Power is in charge of daily operations of Huangtai #8 Power Plant on behalf of two property owners.

Note ii: On 31 May 2019, Luoyang Yangguang Co-generation Limited Liability Company (“Luoyang Yangguang”) filed for bankruptcy to Luoyang Intermediate People’s Court (“Luoyang Court”). In July 2019, Luoyang Court accepted the bankruptcy petition. In June 2019, impairment losses for the property, plant and equipment amounting to RMB230 million were recognised based on the expected recoverable amounts as at 30 June 2019. Furthermore, non-current assets of Luoyang Yangguang with total carrying amount of RMB111 million have been reclassified to other current assets.

5. ACCOUNTS RECEIVABLES

Accounts receivable comprised the following:

	As at 30 June 2019	As at 31 December 2018
Accounts receivable	23,437,237	24,804,671
Notes receivable	4,770,159	4,621,180
	28,207,396	29,425,851
Less: loss allowance	145,611	146,913
Total	<u>28,061,785</u>	<u>29,278,938</u>

The Group usually grants about one month's credit period to local power grid customers from the end of the month in which the sales are made, except for SinoSing Power which provides credit period that ranges from 5 to 60 days from the dates of billings. Certain accounts receivable of Singapore subsidiaries are backed by bankers' guarantees and/or deposits from customers. It is not practicable to determine the fair value of the collaterals that correspond to these accounts receivable.

Ageing analysis of accounts receivable and notes receivable was as follows:

	As at 30 June 2019	As at 31 December 2018
Within 1 year	26,648,862	28,379,742
Between 1 and 2 years	1,272,361	833,358
Between 2 and 3 years	117,239	29,517
Over 3 years	168,934	183,234
Total	<u>28,207,396</u>	<u>29,425,851</u>

As at 30 June 2019, the maturity period of the notes receivable ranged from 1 month to 12 months (31 December 2018: from 1 month to 12 months).

6. DIVIDENDS OF ORDINARY SHARES AND DISTRIBUTION OF PERPETUAL CORPORATE BONDS

(a) Dividends of ordinary shares

On 12 June 2019, upon the approval from the annual general meeting of the shareholders, the Company declared 2018 final dividend of RMB0.10 (2017 final: RMB0.10) per ordinary share, totalling approximately RMB1,570 million (2017 final: RMB1,520 million). As at 30 June 2019, the Company made dividend payments of RMB1,100 million and RMB470 million was to be paid (As at 30 June 2018: the Company made dividend payments of RMB1,086 million and RMB434 million was to be paid).

(b) Distribution of perpetual corporate bonds

In 2017, the Company issued perpetual corporate bonds with the aggregate net proceeds of approximate RMB5,000 million. The perpetual corporate bonds are issued at par value with initial distribution rate of 5.05% and 5.17%. The interests of the perpetual corporate bonds are recorded as distributions, which are paid annually in arrears in September in each year and may be deferred at the discretion of the Company unless compulsory distribution payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occurred.

The perpetual corporate bonds have no fixed maturity date and are callable at the Company's discretion in whole in August 2020 and 2022 respectively, the payment of the principal may be deferred for each renewal period as 3 and 5 years. The applicable distribution rate will be reset on first call date and each renewal period after first call date, to the sum of the applicable benchmark interest rate, the initial spread and 300 basis points per annum.

In 2018, the Company issued three tranches of Yingda Insurance Financing Plan (“the financing plan”) with the aggregate proceeds of RMB5,000 million. The financing plan has no fixed period with initial distribution rate of 5.79%. The interests of the financing plan are recorded as distributions, which are paid annually in arrears in June and December in each year and may be deferred at the discretion of the Company unless compulsory payment events (distributions to ordinary shareholders of the Company or reduction of the registered capital of the Company) occurred.

The financing plan has no fixed maturity date and is callable at the Company’s discretion in whole at each distribution date after 8th year of issuance, or the payment of the principal may be deferred at each distribution date aforementioned. The applicable distribution rate will be reset during the period from the 9th to the 11th year after the issuance, the period from the 11th to the 13th year after the issuance and the 13th year onwards after the issuance, to the higher of the initial distribution rate plus 300 basis points and the 10-year treasury bond yield in the 9th year after the issuance plus 600 basis points, the higher of the initial distribution rate plus 600 basis points and the 10-year treasury bond yield in the 11th year after the issuance plus 900 basis points and the higher of the initial distribution rate plus 900 basis points and the 10-year treasury bond yield in the 13th year after the issuance plus 1,200 basis points, respectively.

The perpetual corporate bonds were recorded as equity in the consolidated financial statements. For the six months ended 30 June 2019, net profit attributable to holders of perpetual corporate bonds, based on the applicable rate, was RMB272.3 million, and the cumulative distribution to be paid as at 30 June 2019 was RMB349.7 million.

7. LONG-TERM BONDS

The Company issued medium-term notes with maturity of 5 years in July 2014 with a face value of RMB4 billion bearing an annual interest rate of 5.30%. The actual proceeds received by the Company were approximately RMB3.988 billion. These notes are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 5.37%. Interest paid per annum during the tenure of the notes is RMB212 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB204.45 million (31 December 2018: RMB99.32 million).

The Company issued corporate bonds with maturity of 5 years and 10 years in June 2016 with face values of RMB3 billion and RMB1.2 billion bearing annual interest rates of 3.48% and 3.98%, respectively. The total actual proceeds received by the Company were approximately RMB4.2 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rates of those bonds are 3.48% and 3.98%, respectively. Interest paid per annum during the tenure of the bonds is RMB104.40 million and RMB47.76 million, respectively. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB5.13 million (31 December 2018: RMB57.78 million) and RMB2.35 million (31 December 2018: RMB26.43 million), respectively.

The Company issued medium-term notes with maturity of 5 years in July 2017 with a face value of RMB5 billion bearing an annual interest rate of 4.69%. The actual proceeds received by the Company were approximately RMB5 billion. These notes are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 4.69%. Interest paid per annum during the tenure of the notes is RMB234.50 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB227.43 million (31 December 2018: RMB111.15 million).

The Company issued debt financing instrument with maturity of 3 years in July 2017 with a face value of RMB500 million bearing an annual interest rate of 4.75%. The actual proceeds received by the Company were approximately RMB499 million. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 4.82%. Interest paid per annum during the tenure of the bonds is RMB23.75 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB22.96 million (31 December 2018: RMB11.02 million).

The Company issued corporate bonds with maturity of 3 years in November 2017 with a face values of RMB2.3 billion bearing an annual interest rate of 4.99%. The actual proceeds received by the Company were approximately RMB2.299 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 4.99%. Interest paid per annum during the tenure of the bonds is RMB114.77 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB74.52 million (31 December 2018: RMB17.61 million).

The Company issued corporate bonds with maturity of 3 years in April 2018 with a face values of RMB1.5 billion bearing an annual interest rate of 4.90%. The actual proceeds received by the Company were approximately RMB1.499 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 4.90%. Interest paid per annum during the tenure of the bonds is RMB73.50 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB17.67 million (31 December 2018: RMB54.77 million).

The Company issued medium-term notes with maturity of 3 years in May 2018 with a face value of RMB3 billion bearing an annual interest rate of 4.80%. The actual proceeds received by the Company were approximately RMB2.991 billion. These notes are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 4.91%. Interest paid per annum during the tenure of the notes is RMB144 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB23.61 million (31 December 2018: RMB96.26 million).

The Company issued medium-term notes with maturity of 3 years in July 2018 with a face value of RMB2 billion bearing an annual interest rate of 4.41%. The actual proceeds received by the Company were approximately RMB1.99 billion. These notes are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the notes fall due. The annual effective interest rate of these notes is 4.97%. Interest paid per annum during the tenure of the notes is RMB88.2 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB85.78 million (31 December 2018: RMB42.05 million).

The Company issued debt financing instrument with maturity of 3 years in July 2018 with a face value of RMB2.5 billion bearing an annual interest rate of 4.68%. The actual proceeds received by the Company were approximately RMB2.49 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 4.81%. Interest paid per annum during the tenure of the bonds is RMB117 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB113.79 million (31 December 2018: RMB55.78 million).

The Company issued corporate bonds with maturity of 10 years in September 2018 with a face value of RMB5 billion bearing an annual interest rate of 5.05%. The actual proceeds received by the Company were approximately RMB4.999 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 5.05%. Interest paid per annum during the tenure of the bonds is RMB252.50 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB203.38 million (31 December 2018: RMB78.17 million).

The Company issued corporate bonds with maturity of 10 years in April 2019 with a face value of RMB2.3 billion bearing an annual interest rate of 4.70%. The actual proceeds received by the Company were approximately RMB2.3 billion. These bonds are denominated in RMB and issued at par value. Interest is payable annually while principal will be paid when the bonds fall due. The annual effective interest rate of those bonds is 4.70%. Interest paid per annum during the tenure of the bonds is RMB180.10 million. As at 30 June 2019, interest payable for the bonds amounted to approximately RMB20.38 million.

8. ACCOUNTS PAYABLE AND OTHER LIABILITIES

Accounts payable and other liabilities comprised:

	As at 30 June 2019	As at 31 December 2018
Accounts and notes payable	14,510,296	14,683,707
Payables to contractors for construction	10,581,430	12,353,097
Retention payables to contractors	1,405,314	1,557,737
Accrued interests	1,618,471	1,152,767
Others	4,317,721	5,391,372
Total	<u>32,433,232</u>	<u>35,138,680</u>

Aging analysis of accounts and notes payable was as follows:

	As at 30 June 2019	As at 31 December 2018
Within 1 year	14,190,034	14,423,179
Between 1 to 2 years	188,875	143,514
Over 2 years	131,387	117,014
Total	<u>14,510,296</u>	<u>14,683,707</u>

9. SHORT-TERM BONDS

The Company issued unsecured super short-term bonds with face value of RMB2.5 billion, RMB2 billion, RMB2 billion, RMB2 billion and RMB2 billion bearing annual interest rates of 3.20%, 2.78%, 3.05%, 3.10% and 2.78% in October 2018, November 2018, November 2018, November 2018 and November 2018 respectively. Such bonds are denominated in RMB, issued at face value and matured in 180 days, 90 days, 180 days, 180 days and 90 days from the issuance date. The annual effective interest rates of these bonds are 3.23%, 2.83%, 3.13%, 3.13% and 2.83% respectively. The bonds had matured and were fully repaid in April 2019, February 2019, May 2019, May 2019, February 2019, respectively.

The Company issued unsecured super short-term bond with face values of RMB2 billion bearing annual interest rate of 2.40% in March 2019. Such bond is denominated in RMB, issued at face value and mature in 90 days from the issuance date. The annual effective interest rate of the bond is 2.43%. The bond was fully repaid in June 2019.

The Company issued unsecured super short-term bonds with face values of RMB1 billion, RMB5 billion, RMB2 billion, RMB2 billion and RMB2 billion bearing annual interest rates of 3.30%, 2.30%, 2.30%, 2.40%, and 2.40% in December 2018, May 2019, May 2019, June 2019 and June 2019 respectively. Such bonds are denominated in RMB, issued at face value and mature in 270 days, 180 days, 90 days, 90 days and 90 days from the issuance dates. The annual effective interest rates of these bonds are 3.34%, 2.41%, 2.51%, 2.61%, and 2.61%, respectively. As at 30 June 2019, interest payables for these bonds amounted to approximately RMB18.71 million, RMB16.34 million, RMB4.78 million, RMB2.62 million and RMB2.23 million respectively.

10. ADDITIONAL FINANCIAL INFORMATION ON UNAUDITED CONSOLIDATED INTERIM STATEMENT OF FINANCIAL POSITION

As at 30 June 2019, the net current liabilities of the Group amounted to approximately RMB87,204 million (31 December 2018: RMB76,407 million). On the same date, total assets less current liabilities were approximately RMB270,144 million (31 December 2018: RMB281,697 million).

11. PROFIT BEFORE INCOME TAX EXPENSE

Profit before income tax expense was determined after charging/(crediting) the following:

	For the six months ended 30 June	
	2019	2018
Total interest expense on borrowings	5,752,957	5,363,550
Including interest related to lease	66,403	—
Less: amounts capitalised in property, plant and equipment	254,370	224,643
Interest expense charged in unaudited consolidated interim statement of comprehensive income	5,498,587	5,138,907
Operating lease charge	—	188,227
Depreciation of property, plant and equipment (a)	10,349,278	10,123,301
Depreciation of right-of-use assets	342,777	—
Amortisation of land use rights (a)	—	172,638
Amortisation of other non-current assets	34,436	54,143
Impairment loss of property, plant and equipment	259,922	—
(Reversal)/recognition of loss allowances for receivables	(1,302)	1,777
Reversal of inventory obsolescence	(15,690)	(241)
Net gain on disposal of non-current assets	(14,791)	(3,190)
Government grants	(389,082)	(210,271)

Other operating expenses consist of substituted power arrangement expenses, insurance, government grants and other miscellaneous expenses.

- (a) Upon the adoption IFRS 16, depreciation of finance lease assets was reclassified from “property, plant and equipment” to “right-of-use assets”, and amortisation of land use rights were reclassified from “land use rights” to “right-of-use assets”.

12. INCOME TAX EXPENSE

	For the six months ended 30 June	
	2019	2018
Current income tax expense	1,361,752	876,800
Deferred income tax	(15,236)	(132,214)
Total	<u>1,346,516</u>	<u>744,586</u>

No Hong Kong profits tax has been provided as there were no estimated assessable profits in Hong Kong for the six months ended 30 June 2019 (for the six months ended 30 June 2018: nil).

The reconciliation of the effective income tax rate from the statutory income tax rate is as follows:

	For the six months ended 30 June	
	2019	2018
PRC statutory enterprise income tax rate	25.00%	25.00%
Effect of different tax rates of certain subsidiaries	(2.16%)	(0.02%)
Effect of tax losses not recognised	3.92%	8.14%
Effect of utilising temporary differences previously not recognised	(0.27%)	(0.51%)
Effect of non-taxable income	(3.15%)	(3.10%)
Effect of non-deductible expenses	0.51%	0.96%
Others	(0.40%)	(5.70%)
Effective tax rate	<u>23.45%</u>	<u>24.77%</u>

The Company and its PRC branches and subsidiaries are subject to income tax at 25%, except for certain PRC subsidiaries that are taxed at preferential tax rates ranging from 0% to 15%.

Pursuant to Guo Shui Han [2009] No. 33, starting from 1 January 2008, the Company and its PRC branches calculate and pay income tax on a consolidated basis according to relevant tax laws and regulations. The income tax of subsidiaries remains to be calculated individually based on their individual operating results.

For the six months ended 30 June 2019, the income tax rate applicable to Singapore subsidiary is 17% (for the six months ended 30 June 2018: 17%).

The Company's overseas subsidiary in Pakistan engaged in power generation business is entitled to an income tax exemption for a period of 30 years according to Pakistani 2015 Fiscal Act. For the six months ended 30 June 2019, another subsidiary engaged in maintenance service located in Pakistan is subject to income tax at the higher of 8% of its revenue and 31% of its profit.

13. EARNINGS PER SHARE

The basic earnings per share is calculated by dividing the consolidated net profit attributable to the ordinary shareholders of the Company by the weighted average number of the Company's outstanding ordinary shares during the period:

	For the six months ended 30 June	
	2019	2018
Consolidated net profit attributable to equity holders of the Company	3,441,565	1,731,372
Less: net profit attributable to holders of perpetual corporate bonds	272,254	126,700
Consolidated net profit attributable to ordinary shareholders of the Company	<u>3,169,311</u>	<u>1,604,672</u>
Weighted average number of the Company's outstanding ordinary shares ('000)	<u>15,698,093</u>	<u>15,200,383</u>
Basic and diluted earnings per share (RMB)	<u>0.20</u>	<u>0.11</u>

There was no dilutive effect on earnings per share since the Company had no dilutive potential ordinary shares for the six-month periods ended 30 June 2019 and 2018.

B. FINANCIAL INFORMATION EXTRACTED FROM CONSOLIDATED FINANCIAL STATEMENTS PREPARED UNDER PRC GAAP

(Amounts expressed in RMB Yuan unless otherwise stated)

1. FINANCIAL HIGHLIGHTS AND FINANCIAL RATIOS (UNAUDITED)

	Unit	As at 30 June 2019	As at 31 December 2018	Variance (%)
Total assets	Yuan	401,293,063,610	403,441,456,827	(0.53)
Total equity attributable to equity holders of the Company	Yuan	86,157,956,011	83,234,629,238	3.51
For the six months ended 30 June				
	Unit	2019	2018 (restated)	Variance (%)
Operating revenue	Yuan	83,417,373,675	82,685,702,627	0.88
Profit before taxation	Yuan	6,364,629,573	3,671,928,458	73.33
Net profit attributable to equity holders of the Company	Yuan	3,819,998,892	2,132,810,962	79.11
Net profit attributable to equity holders of the Company (excluding non-recurring items)	Yuan	3,464,799,413	1,926,602,007	79.84
Basic earnings per share	Yuan/per share	0.23	0.13	76.92
Basic earnings per share (excluding non-recurring items)	Yuan/per share	0.20	0.12	66.67
Diluted earnings per share	Yuan/per share	0.23	0.13	76.92
Return on net assets (weighted average)	%	4.48	2.80	60.00
Net cash flow from operating activities	Yuan	16,738,595,066	15,290,196,667	9.47
Net cash flow from operating activities per share	Yuan/per share	1.07	1.01	5.94

Note: Formula of key financial ratios:

Basic earnings per share = Net profit attributable to ordinary shareholders of the company for the period/Weighted average number of ordinary shares

Return on net assets (weighted average) = Net profit attributable to equity holders of the Company for the period/Weighted average equity attributable to equity holders of the Company (excluding non-controlling interests) x 100%

2. ITEMS AND AMOUNTS OF NON-RECURRING ITEMS

(Amounts Expressed in RMB Yuan)

**For the six
months ended
30 June 2019**

Non-recurring Items

Net gain from disposal of non-current assets	14,790,651
Government grants recognised through profit or loss	389,082,235
The investment income of derivative financial instruments and other equity instrument investments (excluding effective hedging instruments related to operating activities of the company)	26,636,077
Reversal of doubtful accounts receivable individually tested for impairments	1,078,900
Compensation received from loan guarantee	107,055,891
Non-operating income and expenses besides items above	9,583,704
Other items recorded in the profit and loss in accordance with the definition of non-recurring items	<u>(2,603,948)</u>
Sub total	<u>545,623,510</u>
Impact of income tax	(121,694,131)
Impact of non-controlling interests (net of tax)	<u>(68,729,900)</u>
Total	<u><u>355,199,479</u></u>

3. INCOME STATEMENTS FOR THE SIX MONTHS ENDED 30 JUNE 2019

	For the six months ended 30 June			
	2019	2018	2019	2018
	Consolidated	Consolidated (restated)	The Company	The Company
1. Operating revenue	83,417,373,675	82,685,702,627	22,823,317,556	25,389,640,493
Less: Operating cost	69,734,967,753	71,778,510,792	18,938,209,407	22,092,873,401
Taxes and surcharges	923,938,794	891,377,511	262,752,447	293,108,962
Selling expenses	48,411,586	13,652,967	9,444,463	12,223,249
General and administrative expenses	1,888,294,812	1,864,386,143	762,279,841	829,709,661
Research and development expenses	8,695,605	4,441,053	4,817,361	3,749,119
Financial expenses, net	5,502,413,644	5,148,374,229	1,921,460,903	2,103,994,559
Including: Interest expenses	5,498,587,270	5,189,067,878	1,948,905,561	2,106,224,700
Interest income	(120,403,874)	(109,038,695)	(27,626,365)	(20,738,088)
Impairment loss	(244,232,454)	249,240	–	(169,221)
Credit loss	1,249,072	(1,777,950)	–	–
Add: Other income	395,998,945	273,525,419	89,418,274	90,273,799
Investment income	735,631,457	397,318,987	2,233,131,194	1,047,484,426
Including: investment income from associates and joint ventures	724,846,241	386,308,749	688,285,323	300,463,032
Loss from changes in fair value	17,609,936	(1,487,562)	–	–
Gain on disposal of assets	5,481,307	1,920,905	3,781,012	–
2. Operating profit	6,222,389,744	3,654,708,971	3,250,683,614	1,191,570,546
Add: Non-operating income	161,731,684	55,681,026	7,233,193	12,954,837
Less: Non-operating expenses	19,491,855	38,461,539	6,047,985	6,006,310
3. Profit before taxation	6,364,629,573	3,671,928,458	3,251,868,822	1,198,519,073
Less: Income tax expense	1,506,525,051	891,701,098	433,908,110	144,537,937
4. Net profit	4,858,104,522	2,780,227,360	2,817,960,712	1,053,981,136

For the six months ended 30 June				
	2019	2018	2019	2018
	Consolidated	Consolidated (restated)	The Company	The Company
(1) Classification according to the continuity of operation				
– Continuous operating net profit	4,858,104,522	2,780,227,360	2,817,960,712	1,053,981,136
(2) Classification according to ownership				
Attributable to:				
– Equity holders of the Company	3,819,998,892	2,132,810,962	2,817,960,712	1,053,981,136
– Non-controlling interests	1,038,105,630	647,416,398	—	—
5. Earnings per share				
Basic earnings per share	0.23	0.13	—	—
Diluted earnings per share	0.23	0.13	—	—
6. Other comprehensive income/(loss), net of tax	759,332,241	(181,889,445)	659,854,034	(182,319,244)
Other comprehensive income/(loss), net of tax, attributable to shareholders of the company	997,887,742	(162,214,253)	659,854,034	(182,319,244)
(a) Items that will not be reclassified to profit or loss:				
Including:				
Fair value changes of other equity instrument investments	123,781,663	(521,643)	123,403,395	—
Share of other comprehensive income/(loss) of investees accounted for under the equity method (non-recycling)	535,607,504	(46,047,205)	535,607,504	(46,047,205)

For the six months ended 30 June				
	2019	2018	2019	2018
	Consolidated	Consolidated (restated)	The Company	The Company
(b) Items that may be reclassified subsequently to profit or loss:				
Including:				
Share of other comprehensive income/ (loss) of investees accounted for under the equity method (recycling)	229,587	(147,194,401)	229,587	(147,194,401)
Effective portion of cash flow hedges	321,345,046	225,362,450	613,548	10,922,362
Translation differences of the financial statements of foreign operations	16,923,942	(193,813,454)	–	–
Other comprehensive loss net of tax, attributable to non-controlling interests	(238,555,501)	(19,675,192)	–	–
7. Total comprehensive income	<u>5,617,436,763</u>	<u>2,598,337,915</u>	<u>3,477,814,746</u>	<u>871,661,892</u>
Attributable to				
– Equity holders of the Company	4,817,886,634	1,970,596,709	3,477,814,746	871,661,892
– Non-controlling interests	799,550,129	627,741,206	–	–

4. Financial Statements Reconciliation between PRC GAAP and IFRS

The financial statements, which are prepared by the Group in conformity with the Accounting Standards for Business Enterprises (“PRC GAAP”), differ in certain respects from that of IFRS. Major impact of adjustments for IFRS, on the consolidated net profit attributable to equity holders of the Company, is summarised as follows:

	Consolidated net profit attributable to equity holders of the Company For the six months ended 30 June	
	2019	2018
Consolidated net profit attributable to equity holders of the Company under PRC GAAP	3,819,999	2,132,811
Impact of IFRS adjustments:		
Differences in accounting treatment on business combinations under common control and depreciation and amortisation of assets acquired in business combinations under common control (A)	(627,516)	(653,324)
Difference on depreciation related to borrowing costs capitalised in previous years (B)	(13,508)	(13,508)
Others	17,810	5,309
Applicable deferred income tax impact of the GAAP differences above (C)	160,009	143,268
Profit attributable on non-controlling interest on the adjustments above	84,771	116,816
Consolidated net profit attributable to equity holders of the Company under IFRS	<u>3,441,565</u>	<u>1,731,372</u>

(A) Differences in accounting treatment on business combinations under common control and depreciation and amortisation under common control

Huaneng Group is the parent company of HIPDC, which in turn is also the ultimate parent of the Company. The Company carried out a series of acquisitions from Huaneng Group and HIPDC. As the acquired power companies and plants and the Company were under common control of Huaneng Group before and after the acquisitions, such acquisitions are regarded as business combinations under common control.

In accordance with PRC GAAP, for business combinations under common control, the assets and liabilities acquired in business combinations are measured at the carrying amounts of the acquirees in the consolidated financial statements of the ultimate controlling party on the acquisition date. The difference between carrying amounts of the net assets acquired and the consideration paid is adjusted to equity account of the acquirer. The operating results for all periods presented are retrospectively restated as if the current structure and operations resulting from the acquisition had been in existence since the beginning of the earliest year presented, with financial data of previously separate entities consolidated. The cash consideration paid by the Company is treated as an equity transaction in the year of acquisition. The subsequent adjustment of contingent consideration after the acquisition date is also accounted for as an equity transaction.

For the business combination occurred prior to 1 January 2007, in accordance with Previous Accounting Standards and Accounting System (“Previous PRC GAAP”), when equity interests acquired is less than 100%, the assets and liabilities of the acquirees are measured at their carrying amounts. The excess of consideration over the proportionate share of the carrying amounts of the net assets acquired was recorded as equity investment difference and amortised on a straight-line basis for not more than 10 years. When acquiring the entire equity, the entire assets and liabilities are accounted for using a method similar to purchase accounting. Goodwill arising from such transactions is amortised over the estimated useful lives on a straight-line basis. On 1 January 2007, in accordance with PRC GAAP, the unamortised equity investment differences and goodwill arising from business combinations under common control were written off against undistributed profits.

Under IFRS, the Group elected to adopt the purchase method to account for the business combinations under common control. The assets and liabilities acquired are recorded at fair values by the acquirer. The excess of acquisition cost over the proportionate share of fair values of net identifiable assets acquired is recorded as goodwill. Goodwill is not amortised but is tested annually for impairment and carries at cost less accumulated impairment losses. The operating results of the acquirees are consolidated in the operating results of the Group from the acquisition dates onwards. The contingent consideration not classified as equity is measured at fair value at each reporting date with the changes in fair value recognised in profit or loss, if such changes are not measurement-period adjustments.

As mentioned above, the differences in accounting treatment under PRC GAAP and IFRS on business combinations under common control affect both equity and profit. Meanwhile, due to different measurement basis of the assets acquired, depreciation and amortisation in the period subsequent to the acquisition will be affected which will also affect the equity and profit or loss upon subsequent disposals of such investments. Such differences will be gradually eliminated following subsequent depreciation, amortisation and disposal of related assets.

(B) Difference on depreciation on the capitalisation of borrowing costs in previous years

In previous years, under Previous PRC GAAP, the scope of capitalisation of borrowing costs was limited to specific borrowings, and thus, borrowing costs arising from general borrowings were not capitalised. In accordance with IFRS, the Group capitalised borrowing on general borrowing used for the purpose of obtaining qualifying assets in addition to the capitalisation of borrowing costs on specific borrowings. From 1 January 2007 onwards, the Group adopted PRC GAAP No.17 *Borrowing Cost* prospectively, the current adjustments represent the related depreciation on capitalised borrowing costs included in the cost of related assets under IFRS before 1 January 2007.

(C) Deferred income tax impact of GAAP differences

This represents related deferred income tax impact on the GAAP differences above where applicable.