

Industry Watch:

How do power companies
with tax incentives perform
on the environmental front?



Lvse Jiangnan Environment Concerned Centre
02/2022

Introduction

In 2020, China consumed 7.5 trillion kilowatt-hours of electricity, of which 71% came from fossil energy, renewable energy accounted for only 29.5% of the total. In order to build a new power system with more green energy, it is necessary to control the total consumption of fossil energy, improve the efficiency of energy utilization, and implement alternative renewable energy actions.

On June 28, 2021, the news that the first unit of Jinsha River Baihetan Hydropower Station were put into operation safely and on time attracted the attention of Lvse Jiangnan Public Environmental Concern Center (hereinafter referred to as Lvse Jiangnan). The completion of the Baihetan Hydropower Station is of great significance to the realization of China's carbon peaking and carbon neutrality goals.

Baihetan Hydropower Station is located on the Jinsha River at the junction of Sichuan Province and Yunnan Province. It was developed and constructed by China Three Gorges Corporation, with a total investment of 220 billion CNY, a total installed capacity of 16 million kilowatts, and a total of 16 hydro-generator units with the largest single-unit capacity in the world and one million kilowatts of power independently developed by China are installed. After the whole line of Baihetan Hydropower Station is put into operation, it can produce 16 million kWh of electricity per hour, with an average annual power generation of about 62.4 billion TWh, saving more than 19 million tons of standard coal and reducing carbon dioxide emissions by 51.6 million tons, sulphur dioxide 170,000 tons and oxynitride 150,000 tons.

As a major project of "West-to-East Power Transmission", Baihetan Hydropower Station is an important part of the "Clean Energy Corridor" of the Yangtze River. It is the largest and most technically difficult hydropower project under construction in the world. After the power station is completed and put into operation, it will become the second largest hydropower station in the world after the Three Gorges Project.

This 2,087-kilometer power transmission channel which starts from Baihetan Hydropower Station in Sichuan Province in the west and ends in Changshu City in Jiangsu Province in the east, is planned to be completed and put into operation in 2022. By then, more than 30 billion kWh of hydropower will be delivered to Jiangsu Province every year, which is equivalent to the electricity consumption of Nanjing for half a year.

Although the development of the power industry is gratifying, there is still a long way to go to achieve carbon peaking and carbon neutrality goals. Developed economies such as the European Union have already peaked in carbon dioxide emissions, and they have a transition period of 50 to 70 years from "carbon peaking" to "carbon neutrality". China's carbon dioxide emissions are huge, and as promised, China has planned only 30 years from carbon peak to carbon neutrality, such that the task of carbon neutrality for China is a lot more arduous than developed economies. Although the growth of carbon emissions has slowed down, the carbon emissions of electricity still account for about 40% of the carbon dioxide emissions of the whole society. As a basic energy industry related to the national movement and people's livelihood, the power industry has a very large energy demand. In 2019, China's total carbon dioxide emissions were about 10.2 billion tons. The carbon emissions from the power industry, transportation industry, construction and industry accounted for 41%, 28% and 31% respectively, and the total carbon dioxide emissions from thermal power generation were about 4.2 billion tons. At the same time, the high pollution caused by the power industry cannot be ignored. The total amount of dust, waste gas and waste water generated by the operation of power plants has caused a great burden on the environment.

In order to promote the realization of carbon peaking and carbon neutrality goals and realize the sustainable development of human beings, the state drives the upgrading and transformation of the power industry through the important economic means of fiscal and taxation policies, and low-carbon-led power supply has become the future development trend.

Therefore, under the guidance of relevant national policies and regulations, Lvse Jiangnan helps the tax department to identify the environmental performance of the enterprise, assist the tax department to standardize the green tax measures, promote the enterprise to improve the scope of disclosure, unremittingly save energy and reduce emissions, and promote the high-quality and healthy development of the enterprise.

In this report, according to the 2019 list of those who enjoy the comprehensive utilization of resources and value-added tax refunds in 2019 published on the official website of the State Taxation Administration, Lvse Jiangnan made full use of the big data of the blue map to impose environmental protection-related penalties on local power generation enterprises in 32 provinces, municipalities and autonomous regions across the country. After verification, it was finally determined that a total of 26 enterprises in 16 provinces and cities were suspected of illegally enjoying tax incentives.

As of the publication of this report, Lvse Jiangnan has received specific responses from 12 provincial and municipal tax bureaus. Among them, 3 power generation companies have already been asked to return taxes, 4 companies' environmental-related administrative penalties have been revoked by the ecology and environment department so it does not affect their continued enjoyment of tax incentives, and 2 companies were returned a total of 10 million CNY in taxes due to the letter from Lvse Jiangnan.

1. Overview of the Development of the Power Industry

1.1 Development Status of Electric Power Industry

According to the "World Energy Statistical Yearbook 2021", the global power generation in 2020 was about 26.82 trillion kWh, among which those generated by China was about 7.779 trillion kWh (29% of the global power generation), ranking world No. 1.

China continue to rely on thermal power as its main energy source, with gradual and steady development of hydraulic power, wind power, nuclear power, and solar power in recent years. According to the data of the National Bureau of Statistics, in 2020, the proportion of thermal power in China was 71.19%, the proportion of hydropower was 16.37%, nuclear power 4.94%, wind power 5.59%, and solar power 1.92%.

Power generation is mainly concentrated in East China and North China, accounting for about 47% of the country's power generation.

In 2020, Inner Mongolia ranks first in city power generation, thanks mainly to its reservoir in coal, and resources in wind power and solar power. As a major industrial province, Shandong Province ranks first in terms of electricity consumption in 2020. This is followed by Guangdong, Jiangsu, and Zhejiang provinces.

1.2 Development Trend of Power Industry

More than 80% of China's electricity comes from thermal power and hydropower, of which thermal power accounts for 71% and hydropower accounts for 16%. The generation and use of clean energy and renewable energy will increasingly steadily in the future.

Take hydropower as an example. As a clean energy, hydropower is renewable and pollution-free. Hydropower can greatly reduce the emission of SO₂, CO₂, air suspended particles, ash and other pollutants, and has less impact on the environment. After the Baihetan Hydropower Station project is completed and put into operation, it can generate an estimated 62.4 billion kWh per year, which can save about 19.68 million tons of standard coal and reduce carbon dioxide emissions by about 51.6 million tons each year.

2. The green tax system promotes power enterprises to develop "green power"

In order to accelerate the implementation of energy-saving and emission-reduction policies, and promote the development of green and circular development of electric power enterprises, the state grants electric power enterprises a series of preferential tax policies. Relevant taxes include environmental protection tax, corporate income tax, and value-added tax.

The environmental protection tax instigates a positive incentive mechanism of "more emissions, more payment; less emissions, less payment; no emissions, no payment". Article 13 stipulates that when the concentration of taxpayers' emissions of taxable air pollutants or water pollutants is lower than 30% of the national and local pollutant discharge standards, the environmental protection tax shall be levied at a reduced rate of 75%. When the concentration of the taxpayer's discharge of taxable air pollutants or water pollutants is lower than the national 50% of the pollutant discharge standard stipulated by the local government, the environmental protection tax shall be levied at a reduced rate of 50%.

According to the Notice of the Ministry of Finance and the State Administration of Value-Added Tax Preferential Catalogues for Comprehensive Utilization of Resources and Labour Services (Cai Shui [2015] No. 78), enterprises relying on coal gangue, coal slime, stone coal, kerogen shale, etc. for electricity and heat production could apply for a 50% tax rebate. However, the notice also clearly stipulates that when Taxpayers who have enjoyed the refund of value-added tax as stipulated in this notice are punished (except for warnings or a single fine of less than 10,000 CNY) for violating laws and regulations on taxation and environmental protection, will not be allowed to enjoy VAT refund stipulated in the notice for the following 36 months."

According to No. 1580 [2016] of the National Development and Reform Commission, "If an enterprise commits illegal acts such as pollutant discharge standards or discharge of pollutants that exceed the total emission control indicators of key pollutants, in accordance with the relevant regulations of the Ministry of Finance and the State Administration of Taxation, the relevant enterprises shall be suspended from implementing the enterprise income tax preferential treatment for environmental protection projects that they have enjoyed." According to the "Notice of the Ministry of Finance, State Administration of Taxation, National Development and Reform Commission on Announcement of the Catalogue of Enterprise Income Tax Preferential Catalogues for Environmental Protection, Energy Saving and Water Saving Projects (Trial)" (Cai Shui [2009] No. 166), meeting the national and local pollutant discharge standards is one of the prerequisites for enterprises to enjoy the preferential treatment.

3. Feedback Analysis

3.1 The Implementation Process

Lvse Jiangnan conducts information retrieval based on the "2019 List of Refundable Value-Added Taxes for Comprehensive Utilization of Resources" published on the official websites of the taxation bureaus of various provinces, municipalities and autonomous regions across the country, combined with the Blue Map Environment Database developed by the Public Environment Research Center (IPE). Through comparative analysis, we found that some power companies that enjoy tax incentives have multiple environmental supervision records while enjoying tax incentives, which is not conducive to the healthy development of green taxation. Based on this, Lvse Jiangnan sent letters to local taxation department, hoping to further verify the statement.

Lvse Jiangnan sent reminder letters to 16 provincial and municipal tax bureaus across the country, including a total of 26 companies. So far, have received specific replies from a total of 12 provincial and municipal tax bureaus.

3.2 Analysis of Feedback from Tax Departments

3.2.1 As long as the environmental protection penalty is revoked, it will not affect the continued enjoyment of tax incentives

Take an example as Jiangsu Xukuang Comprehensive Utilization Power Generation Co., Ltd. In December 2018, Jiangsu Xukuang Comprehensive Utilization Power Generation Co., Ltd. was inspected by Xuzhou Ecological Environment Bureau on site and found that no. 2 1025T/H circulating fluidized bed boiler and a 300MW generator set supporting construction were in operation, no. 1 coal yard was not fully closed, no. 2 coal yard was not fully closed, and no wind and dust suppression network was built on the east side. The coal belts in the no.1 and no.2 yards are semi-sealed by colored steel tiles, but not completely sealed. This violated "Jiangsu Province air pollution prevention and control regulations" article 88 item 1, was punished and fined more than 10,000 CNY.

In accordance with the requirements of the Caishui [2015] No. 78 document, the competent tax authority stopped the enterprise from enjoying the comprehensive utilization of resources in January 2019. In the same month, the enterprise submitted an administrative reconsideration to the Xuzhou Municipal People's Government. On July 22, 2019, the Xuzhou Municipal People's Government made a ruling to revoke the penalty, so the enterprise re-applied for tax refund in November 2019.

In addition, the Sichuan Provincial Taxation Bureau also informed a similar situation. On December 15, 2016, when the law enforcement officers of Bazhong City Environmental Supervision and Law Enforcement Detachment inspected Bazhong Weiao Environmental Protection Power Generation Co., Ltd., they found that during the production process of the comprehensive slag utilization production line of the company, more than 400 square meters of slag were not taken to prevent pollution. Scattering, anti-loss, and anti-leakage measures resulted in the loss of slag and polluted the environment; violating the first paragraph of Article 17 of the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes" was fined 20,000 CNY.

On September 3, 2021, the Sichuan Provincial Taxation Bureau called Lvse Jiangnan, after verification by the taxation department, it was found that the enterprise had been revoked the environmental related administrative penalty by the ecology and environment department in 2019.

Enterprises subject to environmental-related penalties, if they refuse to accept the penalty decision, may file a lawsuit with the local people's court within six months from the date of receipt of the penalty decision. It is also possible to apply to the local people's government or the ecological environment department for administrative reconsideration within 60 days from the date of receipt of the penalty decision. The revocation of environmental protection penalties will not affect the continued enjoyment of tax incentives by enterprises.

3.2.2 Tax recovered from enterprises that were enjoying tax incentives, but were in violation of regulations

Anhui Huaibei City Taxation Bureau, Guizhou Provincial Taxation Bureau, and Hebei Provincial Taxation Bureau informed Lvse Jiangnan that the enterprises mentioned in the letter by Lvse Jiangnan did enjoy tax incentives in violation of regulations, but the tax has been recovered, and thanks Lvse Jiangnan for supporting to the tax work.

3.2.3 At least CNY 10 million of recovered tax were accumulatively collected from the 2 companies

1) Changde Zhonglian Environmental Protection Power Co., Ltd.

A 500,000 CNY environmental-related fine, and the company was chased for more than 7 million in taxes

By searching the IPE database, we found that the dioxin emission concentration in the exhaust gas of Changde Zhonglian Environmental Protection Power Co., Ltd. due to the 3# domestic waste incinerator was 0.943ng TEQ/m³, which exceeded the "Standard for Pollution Control of Domestic Waste Incineration" (GB18485-2014) in the limit standard specified in Table 4, the exceeding multiple is 8.43 times. According to the "Hunan Province Environmental Protection Administrative Penalty Discretionary Benchmark", "If it exceeds the emission standard of air pollutants by more than three times or exceeds the total emission control target of key air pollutants by more than 30%, a fine of not less than 500,000 CNY and 110,000 CNY shall be imposed. In view of the fact that the company has actively taken rectification measures, the company will be fined 500,000 CNY if it conducts regular self-monitoring. (Changhuan Punishment Word [2019] No. 18)

On December 31, 2021, Lvse Jiangnan received the reply from the Hunan Provincial Taxation Bureau of the State Administration of Taxation on the verification of the tax preference of "Changde Zhonglian Environmental Protection Power Co., Ltd." as follows:

Corporate income tax: In 2019, the company did not enjoy the preferential corporate income tax policy for environmental protection projects.

Environmental protection tax: According to the "Environmental Protection Tax Law of the People's Republic of China", dioxin does not belong to the category of environmental protection tax.

Refund of VAT for comprehensive utilization of resources: According to the provisions of Article 4 of the "Notice of the Ministry of Finance and the State Administration of Taxation on Printing and Distributing the Catalogue of Value-Added Tax Preferential Catalogues for Comprehensive Utilization of Resources Products and Labor Services" (Cai Shui [2015] No. 78), " Taxpayers who have enjoyed the policy of immediate refund of value-added tax as stipulated in this notice are punished for violating laws and regulations on taxation and environmental protection (except for warnings or a single fine of less than 10,000 CNY), from the month following the issuance of the punishment decision Within 36 months, shall not enjoy the VAT refund policy stipulated in this notice." So Changde Zhonglian Environmental Protection Power Co., Ltd. shall not enjoy the VAT refund policy for comprehensive resource utilization products for 36 months from October 2019.

2) Kunshan Lucheng Waste-to-energy Co., Ltd.

Providing or entrusting hazardous waste to units without business licenses to engage in business activities, affects tax incentives

Article 80 of the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes" clearly stipulates that it is prohibited to provide or entrust hazardous wastes to unlicensed units or other producers and operators for collection, storage, utilization and disposal activities. Those who violate the regulations will be fined, and Kunshan Lucheng Waste-to-energy Co., Ltd. will be fined 120,000 CNY. At the same time, the company was suspended by the taxation department from accepting immediate levy and refund matters for the current period and subsequent periods due to the environmental penalty exceeding 10,000 CNY, And recovered the value-added tax of more than 2.6 million CNY through the current value-added tax return.

4. Development Suggestions

4.1 Thermal power generation enterprises should strengthen technological innovation and green production

Affected by factors such as energy structure and historical power installed capacity, China will still rely on thermal power for a long time to come. Thermal power still has many unique advantages at present and in the future, which are irreplaceable by other non-fossil energy sources for a long time.

However, in order to implement the Scientific Outlook on Development and achieve the goal of carbon peaking and carbon neutrality, China's thermal power generation needs to be gradually transformed into an efficient, clean and environmentally friendly power generation method. Facing increasingly strict requirements for green development, the thermal power generation industry must intensify technological innovation, improve green management level, and enhance the green competitiveness of the industry.

4.2 Vigorously develop renewable energy power generation and optimize energy structure

Renewable energy is a green and low-carbon energy source, and it is also an important part of China's multi-wheel drive energy supply system. It is of great significance for improving the energy structure, protecting the ecological environment, responding to climate change, and achieving sustainable economic and social development. To promote the realization of the "3060" goal means that new energy technologies will play a major role in the entire process of carbon peaking and carbon neutrality. During the "14th Five-Year Plan" period, it is necessary to reduce the dependence on fossil energy, further promote the large-scale development of wind and photovoltaic bases, conduct in-depth research on the development and utilization space of hydropower, steadily promote the completeness of the nuclear power industry chain, accelerate the construction of renewable energy as the mainstay, and let the new power system drives the power industry towards a zero-carbon path.

4.3 Strengthen the construction of environmental data sharing and promote green development

It is of great significance for the healthy and sustainable development of the ecological environment to improve the scope of corporate environmental disclosure and realize the exchange and sharing of environmental data. The construction of the ecological environment big data sharing system is to deeply integrate the innovative achievements of the Internet, cloud computing, big data, and the Internet of Things into the field of environmental protection. Give play to the innovative and leading role of big data in precise supervision, scientific decision-making and environmental management transformation. Through the effective application of the third-party blue map environmental big data platform, we can help the tax department to understand the environmental performance of the enterprise, and determine whether the enterprise can enjoy tax incentives according to whether the enterprise has significant environmental penalties, so as to ensure the fairness and justice of the tax policy. Enterprises monitor environmental information through the big data platform, and environmental data is shared among various departments within the enterprise to ensure that enterprises pay attention to environmental protection and enjoy tax dividends.

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