

IEEJ e-NEWSLETTER

No. 173

(Based on Japanese No. 194) **Published: November 20, 2019 The Institute of Energy Economics, Japan**



Contents

Summary

[Global Monitoring]

- 1. US: Massive Preemptive Power Shutoff Conducted in California
- 2. EU: European Commissioner-designate Hearings
- 3. China: National Energy Commission Sets Energy Development Strategy
- 4. Russia: Nord Stream 2 Issue and Middle East Cooperation

Summary

[Global Monitoring]

1. US: Massive Preemptive Power Shutoff Conducted in California

California power company PG&E conducted a massive scheduled power shutoff to prevent wildfires. The decision was based on lessons learned from past wildfires, but deserves attention in approaching the issue of supply responsibility in liberated electricity markets.

2. European Commissioner-designate Hearings

The hearing was held for the European Commissioner-designate in charge of energy, Kadri Simson. Ms. Simson made it clear that her priorities will be the energy-efficiency-first principle and the renovation of buildings.

3. China: National Energy Commission Sets Energy Development Strategy

The National Energy Commission was convened for the first time in three years and decided to continue to promote energy revolution and international cooperation as the country's energy development strategy. The US and China held the 13th ministerial trade talks and achieved substantial progress through a partial agreement.

4. Russia: Nord Stream 2 Issue and Middle East Cooperation

With the Ukraine gas transit agreement due to expire and three new international gas pipelines set to start operation at the end of 2019, Nord Stream 2 is yet to receive a construction license and its future remains uncertain.



1. US: Massive Preemptive Power Shutoff Conducted in California

Ayako Sugino, Senior Researcher Electric Power Group Electric Power Industry & New and Renewable Energy Unit

For three days between October 9 and 12, northern California power supplier PG&E conducted a scheduled power shutoff in its areas, affecting 800,000 customers or approximately 2.5 million people. The company initiated another major power shutoff on October 21 with a power cut also occurring in the areas for which SDG&E is responsible for supplying electricity in southern California. The series of outages was conducted preemptively to counter the risk of PG&E's power lines and equipment igniting devastating wildfires under extremely dry and windy conditions. PG&E's decision to conduct a public safety power shutoff (PSPS) was made after presenting data on wildfire risks to the California Public Utilities Commission (CPUC) and obtaining approval. Customers were given prior warning, and those particularly vulnerable to a power cut, such as health-care equipment users, were given advance instructions on necessary preparations. Nevertheless, at least one person reportedly died when their oxygen machine shut down. The governor of California has denounced the decision to launch a PSPS, and the mayor of San Jose is pushing to transform PG&E's corporate status into a customer-owned cooperative.

Behind PG&E's decision to conduct a major PSPS was the lessons learned from wildfires in 2017 and 2018. In the North Bay Fire, which lasted for 24 days in October 2017 and caused 44 deaths, damage to PG&E's power lines by strong winds, combined with the company's failure to observe the safety rules to clear vegetation around its power lines, was identified as one of the causes. The Camp Fire, which continued for 18 days in November 2018 and killed 85, was also caused partially by PG&E's power transmission equipment, which included power lines and a tower that had been identified in 2009 as requiring replacement due to aging, and for which an investment plan had been approved. Further, during the Camp Fire, PG&E continued to supply electricity even after informing its customers of a power shutoff in response to Cal Fire's wildfire alert, and a fire erupted immediately afterwards. PG&E was sued for 30 billion dollars for the fires, and filed for Chapter 11 bankruptcy (reorganization) in January 2019.

These fires were cases for which PG&E was actually responsible, but it is also true that California imposes heavier liability for damages on public utilities than other states. The state adheres to the principle that a public utility must be held responsible for any damage to private assets arising from equipment that it owns, irrespective of whether or not the utility was at fault or negligent. This principle, which applies only to government bodies, also applies to public utilities in California, and played a role in PG&E's decision to initiate the massive PSPS.

The above might suggest that a series of precautionary PSPSs is unlikely to take place anywhere but California, but in an increasingly deregulated electricity market, the supply responsibilities of power companies are inevitably changing as well. California's case, in which electricity was preemptively cut off to prevent disasters and most consumers accepted the power cut and made preparations to prevent accidents when the power came back up, as well as whether PG&E provided enough prior warning and the extent to which it can be held responsible for the deaths, and any future developments, will provide a useful reference for Japan in determining the line between the power companies' supply responsibility and consumers' own responsibility.



2. EU: European Commissioner-designate Hearings

Kei Shimogori, Senior Researcher Global Energy Group 1 Strategy Research Unit

On October 3, a hearing of the European Commissioner-designate in charge of energy, Kadri Simson (Estonia), was held in the European Parliament. In a mission letter to Ms. Simson, Ms. von der Leyen requested, first of all, to focus on the rapid implementation of energy-efficiency and renewable-energy legislation. Ms. Simson made it clear in the hearing that her priorities will be the energy-efficiency-first principle and the renovation of buildings.

The European Green Deal, a key initiative of the next European Commission, includes legislating the target to achieve climate-neutrality (net-zero emissions) by 2050. Ms. Simson expressed personal support for this 2050 target at the hearing. The Estonian government followed suit in expressing support, despite not having done so until the hearing. This leaves just Poland, Hungary, and the Czech Republic opposing the target. In response to a question from a member of parliament on the social and economic impacts on the energy department associated with enhancing the target, Ms. Simson promised to conduct a thorough impact assessment.

On October 1, the energy minister of Poland, which opposes the 2050 climate-neutrality goal, said that the target is not affordable and the idea is "fantasy." Those involved consider it may be possible to reach an agreement on 2050 climate-neutrality at the European Council meeting in December if climate-neutrality is to be achieved by 2050 for "the EU as a whole (and not by each member state)." This is because Northern European countries are heading to become carbon-negative before 2050, which could allow Poland to have a less challenging target if the goal is to be achieved by the EU as a whole.

To gain Poland's support, Ms. von der Leyen incorporated the Just Transition Fund into her political priorities. This fund is allocated to coal-dependent regions to prepare them for an energy transition (exiting from fossil fuels). Ms. Simson also said at the hearing that the Fund is an important tool in negotiating the target with member states. However, the scale of the fund is still under negotiation and is due to be published as part of the long-term budget for 2021-2027. A recent report from the environmental NGO WWF Europe estimates the cost for Poland to achieve climate-neutrality at 32 to 76 billion euros, but Poland claims that nearly 1 trillion euros would be necessary. It will be interesting to see whether the next European Council can come up with a wording for the target and the scale of the fund which would satisfy all member States, including Poland.

On October 17, the EU and the United Kingdom agreed to revise the withdrawal agreement, but the UK Parliament postponed its approval. Regarding the UK's Brexit extension request, the EU agreed to a three-month extension on October 28. The focus now is whether there will be a general election in the UK and its result.



3. China: National Energy Commission Sets Energy Development Strategy

Li Zhidong, Visiting Researcher Professor at Graduate School Nagaoka University of Technology

On October 11, the fourth meeting of the National Energy Commission was held, chaired by Premier Li Keqiang. The Commission was established in January 2010 as the top-level organization for deliberating energy issues and consists of the premier, who acts as chair, and the ministers concerned as commissioners. The purpose of the Commission is to draft an energy development strategy, deliberate energy security and other important issues, and coordinate important issues related to domestic development and international cooperation. The meeting was last held in November 2016 and formulated the 13th Five-Year Plan for Energy Development. At this meeting, the first in three years, the energy development strategy for the future was established.

Since its establishment in 2013, the Xi-Li leadership announced an energy development strategy that promotes energy revolution (in supply, consumption, technologies, and the management system including the regulatory framework) and international cooperation, with the goal of building a clean, low-carbon, safe and highly efficient modern energy system as part of the leadership's "focus on the quality and efficiency of growth." This time, the Commission decided to maintain the present strategy going forward, by positioning securing a stable supply of energy as a long-term strategic challenge.

By area, particular emphasis was placed on diversifying energy supply sources. The ratio of coal in primary energy consumption declined to 59% by 2018, but since coal is the most abundant fuel, a policy was made to achieve safe and green coal development and high-efficiency, low-pollution coal-fired thermal power, and to promote the use of coalbed methane. For oil and natural gas, as their overseas dependency has soared to 70% and 43%, respectively, efforts will be made to improve self-sufficiency by promoting domestic development, strengthen international cooperation in overseas procurement, and enhance stockpiling and emergency response capabilities. Regarding renewable energies, efforts will be made to develop hydropower, wind power, and solar PV, resolve output limitations, and expand consumption. Meanwhile, no mention was made of nuclear power. The current five-year plan has declared that "nuclear power should be developed in a safe and efficient manner" and set a capacity target of at least 88 GW (58 GW in operation, more than 30 GW under construction) by 2020. However, due to delays in schedule, declining costcompetitiveness, and growing safety concerns, the nuclear power capacity remains at 59.83 GW (48.73 GW in operation, 11.10 GW under construction) as of the end of October this year. The failure to set a strategic policy is rooted in the fact that the goal has become almost impossible to achieve.

Further, the heavy chemical industry, transportation, and buildings were selected as areas for intensive improvement in energy efficiency in light of their high energy conservation potential. Regarding technological revolution, the Commission will promote commercialization of the hydrogen industry, and for the revolution in the management system, encourage investment by various entities in different areas ranging from the exploration and development of oil and natural gas to the construction of pipelines and LNG terminals.

The 13th US-China trade ministerial talks were held on October 10-11. President Trump announced that the US and China had reached a phase one trade deal, in which the US will cancel the raising of tariffs on 250 billion dollars' worth of Chinese products from 25% to 30% scheduled for October 15 in exchange for an increase of China's purchases of US agricultural produce to a maximum of 50 billion dollars (from 16.2 billion dollars in 2018, China's statistics). China announced through Xinhua News Agency that "substantial progress" was made in agriculture, intellectual property rights, currency, financial services, trade expansion, technological transfer, and dispute settlement. The CPC's official newspaper, the People's Daily, praised the practicality and rationality of aiming for a final agreement by making many partial agreements, but also commented that uncertainties remain.



4. Russia: Nord Stream 2 Issue and Middle East Cooperation

Sanae Kurita, Senior Researcher Global Energy Group 2 Strategy Research Unit

The end of 2019 is approaching, which is a major milestone for Russia's gas export. First, the transit agreement with Ukraine for the gas pipeline passing through the country (which accounts for about 45% of Europe's pipeline gas imports from Russia) will expire at the end of the year. As attention turns to progress in Russia-Ukraine negotiations to renew the agreement, with Europe acting as an intermediary, European countries are starting to prepare for supply disruptions by filling up their underground storage facilities with gas.

By the end of the year, three gas pipelines for transporting Russian gas are scheduled to start operation (Power of Siberia to China, TurkStream to Turkey, and Nord Stream 2 to Europe). Construction of the first two is proceeding smoothly, but Nord Stream 2 may not be finished within this year as the Danish government is yet to issue a license for laying pipes in Danish waters. Meanwhile, the Baltic Pipe project of European countries to supply Norwegian gas to Poland received a construction approval for the land section from the Danish Environmental Protection Agency on July 12 and for the offshore section from the Danish Energy Agency on October 25, and is now waiting for municipal approval.

President Putin visited Saudi Arabia and the UAE for the first time in 12 years to strengthen ties with Middle Eastern countries. He held talks with Saudi Arabia's King Salman and Crown Prince Muhammad on October 14, and roughly 20 bilateral agreements worth several billion dollars were signed. In the energy area, the governments agreed to strengthen cooperation in OPEC Plus, a consultative body of the OPEC and 10 non-OPEC countries to adjust oil prices. Further, the Russian Direct Investment Fund (RDIF), the Saudi Basic Industries Corporation (SABIC), and the ESN Group agreed to invest in the design, construction, and operation of a methanol plant (production capacity of 2 million tonnes) in the Amur region in Far East Russia.

On October 16, the Russian Energy Agency, which is a federal state budgetary organization, and Abu Dhabi National Oil Company (ADNOC) agreed to explore the possibility of a joint venture in the oil and natural gas value chain, and signed a comprehensive strategic framework agreement. The two parties will pursue investment opportunities and collaboration in the exploration and development of oil and gas, oil refining, petrochemicals, trading, and LNG, among others. Previously, Russian private oil company Lukoil and ADNOC agreed on the assignment of a 5% interest in Abu Dhabi's Ghasha gas field, but this is the first time for a Russian energy company to participate in an oil development and production project of Abu Dhabi. Russia's state oil company Gazpromneft also signed a comprehensive framework agreement with ADNOC and will consider collaboration in exploration and production and in new technologies such as AI.

In early October, a mission including the IEEJ had an opportunity to visit the Kazakh capital of Nur-Sultan and exchange views on a wide range of topics with energy-related ministries and companies. The IEEJ explained that Kazakhstan's energy consumption, though currently not efficient with an energy intensity some six times higher than that of Japan (as of 2017), has much room for improvement, and that Japan's experience and technologies for energy conservation will help Kazakhstan achieve its goal of shifting to a "green economy," and the two parties exchanged opinions on possible cooperation. Kazakhstan's Vice Minister of Industry and Infrastructure Development proposed launching a joint project between Kazakhstan's Electric Power and Energy Saving Development Institute (EEDI) and the IEEJ to introduce Japan's highly efficient energy technologies. The two research institutes are set to discuss possible areas of cooperation going forward.



Past IEEJ Events

Energy and Economy Indicators of Japan

IEEJ Homepage Top

Back Numbers of IEEJ e-Newsletter

Back Numbers of IEEJ Newsletter (Original Japanese Version - Members Only)

IEEJ e-Newsletter Editor: Yukari Yamashita, Director IEEJ Newsletter Editor: Ken Koyama, Managing Director Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054 Tel: +81-3-5547-0211 Fax: +81-3-5547-0223

IEEJ : November 2019 ©IEEJ 2019