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The Institute of Energy Economics, Japan
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

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1. Recent Developments in the LNG Market

Hiroshi Hashimoto, Senior Analyst
Gas Group

In the United States the Federal Energy Regulatory Commission (FERC) granted its final construction approval to the Cameron LNG liquefaction project in Louisiana in June 2014, making it the second to complete the necessary regulatory approval process among those projects which have already been granted authorization to export LNG to countries without a free-trade agreement with the United States. The Freeport LNG project in Texas and Cove Point project in Maryland are also expected to receive FERC approvals in the near future.

The three projects, all of which involve Japanese companies and have secured lifting commitments from Japanese electric power and city gas companies, aim to start construction by the end of 2014 and expect commercial operation in 2018.

The Sabine Pass Liquefaction project, which received approvals more than two years earlier and is currently under construction, is expected to be fully onstream by 2016. Although no Japanese companies have long-term purchase contracts at the project, they may import some volumes from the project resold by the project's primary buyers.

Japan's LNG imports hit another record high of nearly 88 million tonnes for more than JPY 7 trillion in the fiscal year 2013 (April - March 2014). As the unit prices in Japanese yen have been at the historically highest level during the past six months, there is high expectation that LNG imports from the United States would provide relief and diversification of supply sources and pricing.

In the short-term market, spot LNG assessment prices (in USD/ million Btu) have been steadily declining since late February. As more than 90% of LNG is traded under long-term arrangements and spot transactions are not carried out every day, several industry newsletters have provided those assessment prices in recent years, with some of them increasingly successful in gaining popularity among market players. In the meantime, Japan's Ministry of Economy, Trade and Industry (METI) started publishing the average actual transaction and import prices of spot LNG imports into the nation in the preceding month in April 2014.

Bearish factors in the market include: softening gas demand in Asia and Europe reflecting weather and economic conditions; shifting back to contract purchases for part of incremental LNG demand that emerged after 2011; shifting away from gas to coal of some power generation demand; and spare producing capabilities at some existing LNG supply projects. Neither the Russo-Ukrainian saga nor fluid situations in the Middle East have a notable impact on the global natural gas market so far.

Papua New Guinea became the first new LNG exporting country in five years in the Pacific region in May, exporting its first cargo a few months ahead of many people's expectation. As delays and cost overruns have been taken for granted for LNG export projects in the region in recent years, the reliable implementation of this project represents a bright spot for both LNG sellers and consumers.

Global gas demand did not grow much in 2012 and 2013. Slow growth rates are expected to continue in the next couple of years depending on competitiveness of gas against other fuels. Shale gas production in North America and LNG demand in Asia are expected to continue being the fastest growing segments of global gas business. The two segments will be directly tied to each other in the future by LNG exported from North America to Asia.

2. A View on the Climate Change Summit based on the Joint Statement of the G7 Summit

Hiroki Kudo, Senior Research Fellow
Global Environment and Sustainable Development Unit

The joint statement released at the G7 Summit held from June 4 to 5 emphasized the strong determination of the G7 leaders to agree by 2015 on an international framework for climate change policies after 2020. The major countries are ramping up their efforts to reach an agreement: the US proposed a bill on June 2 for regulating the GHG emissions of existing thermal power plants, while simultaneously China hinted at possible changes to its future GHG emissions target setting. However, whether the countries can agree on a new framework in 2015 at the COP21 in Paris, and the specifics of the agreement, remain uncertain.

One of the main topics at the G7 Summit was the response of each country to energy security. The Russia-Ukraine crisis is a serious threat to the natural gas supply for Europe, and is attracting even more attention among countries than climate change issue. While the joint statement states that the member countries will promptly consider and promote measures to strengthen their energy security, it will not be easy to implement the measures due to the various problems concerning energy policy in each country.

In Germany, which has been promoting decarbonization of energy by shifting away from coal and nuclear to renewables, the role of coal is being re-evaluated in the course of reconsidering the renewable energy policy and responding to the risks in securing natural gas. The role of coal thermal power could similarly become important in Japan, where the prospects for restarting the nuclear power plants remain uncertain. Meanwhile, backed by the Shale Revolution, the US is strongly discouraging the use of coal both inside and outside the country, but it will take time to develop shale gas globally and to respond to the present risk of increasing the use of natural gas.

The joint statement pledges that the member countries will formulate specific policies, individually or jointly, for reducing GHG emissions and accelerating the shift to a low-carbon economy. In other words, the countries will approach GHG emissions reduction through measures such as energy saving and expanding the use of nuclear power, renewable energies and CCS technology, in addition to responding to the natural gas issue, in order to keep energy security compatible with climate change countermeasures depending on the situation of each country. Accordingly, Japan has restarted the discussions at the Energy Efficiency and Conservation Subcommittee of the Committee on Energy Efficiency and Renewable Energy (Advisory Committee for Natural Resources and Energy). Nevertheless, some countries are considering using energies that do not help reduce carbon, such as coal, to solve their energy policy problems. As such, the climate change countermeasures and action targets beyond 2020 due to be submitted by each country are likely to depend on the energy market and policy situation in the months ahead. It will be interesting to see the stance of each leader at the Climate Change Summit hosted by the UN Secretary General in September.

3. Last-Minute Applications for Solar PV Licenses Soar at Year End

Hisashi Hoshi, Board Member, Director
New and Renewable Energy & International Cooperation Unit

What is happening? The licensed capacity of solar PV facilities under the FIT system (fixed-price purchase system for renewable electricity) reached 65 GW in total as of the end of March. This was caused by the surge in last-minute licensing applications in February and March, which amounted to as much as 8 GW and 27 GW, respectively, of capacity submitted before the reduction in purchase price at the start of the new fiscal year. At the current pace of 0.6 GW/month, it would take seven years and eight months for all facilities for the pending 56 GW (65 GW minus the 9 GW already in operation) to enter operation.

How much are we supposed to introduce solar PV into our electricity system? The Basic Energy Plan approved by the Cabinet in April sets the target for new renewable energy capacity at "a level that exceeds the target of the old Plan (formulated in June 2010)". The target solar PV electricity in the old Plan is 28 GW in 2020 and 53 GW in 2030, so a level "that exceeds" this could presumably be around 70 GW.

If so, 71 GW, which is the sum of the 6 GW that was already in operation before the FIT system was introduced and the capacity of new applications for 65 GW (including the amount already in operation), not only far exceeds the target of the old Plan but is enough to meet the target of the new Plan ahead of time. The present situation appears to have run ahead of the future. If all of the capacity licensed as of the end of March is put into operation, it would cause a surcharge of 2.4 yen/kWh on average for the next 20 years, costing regular households over 700 yen/month.

Achieving the target ahead of time is not necessarily good. The excessive emphasis on introducing solar PV has already been criticized, and the exorbitant amount of licensed solar capacity now awaiting grid connection will intensify the competition between various renewable electricity sources for grid capacity. In particular, operators of wind power, which requires a long lead time, are alarmed. Furthermore, the fact that solar PV secured its share of the "surcharge", which may possibly reach a limit at some point, ahead of others is putting pressure on the operators of other renewable energies. This could affect investors' appetite for electricity sources other than solar PV.

How should Japan introduce renewable energies going forward? In mid-June, the government held the first meeting of the New and Renewable Energy Subcommittee of the Advisory Committee for Natural Resources and Energy. The meeting is a forum for discussing specific measures based on the recently finalized Basic Energy Plan. There are three main themes for discussion: (1) the principles for introducing renewable energies, (2) controlling the burden on consumers, and (3) helping to revitalize regional economies. Fortunately, as the Basic Energy Plan specifies a target level for introducing renewable energies as mentioned above but not for others, the Subcommittee should be able to hold concrete discussions.

However, although a target has been indicated, the vast amount of licensed solar PV capacity could hinder the discussions. One golden rule is that the conditions for a project should not be retroactively altered or limited once it has been licensed. The discussions could become difficult, with very few alternatives.

4. US Watching: Situation Becoming Increasingly Tough for the RPS System

Ayako Sugino, Senior Researcher
Coal & Gas Subunit
Fossil Fuels & Electric Power Industry Unit

In various parts of the US, the situation is becoming tough for the RPS system, which sets a quota for the ratio of renewable electricity to total electricity sales. On May 30, 2014, the Governor of Ohio signed a bill that imposes a two-year freeze on the system which requires power companies to raise the ratio of renewable electricity (renewable or nuclear electricity) to total electricity sales to 25% by 2025, while reducing in-state power consumption by 22% by 2025 by encouraging their customers to reduce power consumption. Containing a clause that requires 50% of renewable electricity to be produced in-state, the RPS of Ohio was expected to create new businesses and jobs in a state which depended on coal for 69% of its energy mix as of 2013, by attracting large-scale investment in wind power. Nevertheless, it was decided to abandon the system as renewable electricity is costly and increases the tariff burden on consumers.

In May 2014, Kansas voted on a bill to abandon the RPS Act that requires power companies to raise the ratio of renewable electricity to 20% by 2020. The bill was rejected by just three votes. Since being legalized in 2009, for three years there were frequent proposals to abandon the RPS system in Kansas. With good wind conditions, Kansas has successfully developed wind power, but industry was not happy that the RPS system banned the expansion of coal thermal power plants. Further, when the cost of coal thermal power increased due to the US EPA's restriction on mercury emissions from coal thermal plants, the cost of renewable electricity was much publicized as the cause of the hike in electricity tariffs.

In April 2013, a bill was proposed in North Carolina to abandon the RPS system to raise the ratio of renewable electricity, except hydropower, to 12.5% by 2021 (the bill was rejected). The bill was proposed because of the lack of renewable resources in the state, and because the target of the RPS system was too high. Furthermore, in April 2014, Oregon passed a bill that protects the RPS system, which aims at a renewable electricity ratio of 25% by 2025, from the risk of being abolished following a change of government in the future. The risk of abolition stems from the opposition by Oregon citizens who oppose the RPS system on the grounds of promoting investment in wind and solar/PV and damaging the landscape of a state which has abundant water resources.

All these moves indicate that, despite the federal government's emphasis on renewable energies, the situation differs from state to state. Meanwhile, an interesting ruling was delivered in April 2014 in Minnesota, which is attempting, in a move unrelated to RPS, to achieve clean energy by banning the construction of new coal thermal power plants and importing coal electricity from out of state. The federal district court approved a case filed by North Dakota and its power companies that claimed that the Minnesota state law of 2007 restricting coal-derived GHG emissions is unconstitutional as it limits the operation of out-of-state electricity producers.

A legal dispute has already arisen between the US and Canada concerning the US RPS for unjustly ruling out Canadian electricity producers. The US EPA's new state-by-state CO2 emission rules could trigger disputes between states and produce a result that is politically incompatible with the cooperative federalism advocated by the EPA.

5. EU Watching: Impact of Gas Cut-off to Ukraine on the EU

Wataru Fujisaki, Senior Researcher
Global Energy Group 1
Strategy Research Unit

On June 17, Russia's Gazprom cut off gas supplies to Ukraine for failing to pay the gas bills that were due on this date. Supplies were physically cut off by reducing Ukraine's share of the gas in the pipeline that passes through Ukraine; supplies for Europe will continue unless Ukraine takes the gas from the pipe. Russia also stated that from now, it will supply gas to Ukraine only if it receives advance payment.

Russia and Ukraine had been negotiating the price until the night before, but failed to reach an agreement. Russia lowered its offered price from the initial 485.50 dollars per 1,000 m^3 to 385 dollars, which is the average price for Western Europe, but Ukraine insisted on 268.5 dollars, which is the price before the raise. Both parties rejected the arbitration plan by the EU of 326 dollars plus a lump-sum repayment of 1.95 billion dollars of accumulated debt. Presumably, Gazprom decided not to accept the EU's arbitration price as it lacked grounds and was also too low compared to the average price for Europe and the estimated price for China. Having granted Ukraine privileges including a discount of 17 billion dollars from its natural gas bill in the five years between 2009 and 2014, Russia has presumably lost patience with Ukraine which showed no sign of compromising on price in the negotiations, or paying its outstanding gas bills and the 18.4 billion dollar minimum take-or-pay fine.

However, the cutting of gas to Ukraine should not result in immediate gas shortages in Europe. This is because Europe is entering the summer low-demand season, the cut-off is a supply reduction similar to that in the 2006 dispute rather than a complete stoppage, and Ukraine has announced that it will not take any gas from the pipes as there are sufficient reserves until December. It is also reassuring that Europe's underground gas storage facilities are already 70% full as of the end of June. Furthermore, compared to the last time when gas supplies were completely cut, only 55% of the gas for Europe from Russia now passes through Ukraine, thanks to the completion of Nord Stream 1 and 2 (total capacity of 55 billion m^3) as alternative supply routes for Europe.

The key point for the future is whether Ukraine and Russia will enter further negotiations. Ukraine's gas stores are only 40% full as of the end of June, and need to be replenished in the months ahead. If this does not go well, the risk of a complete shut-off of gas to Ukraine is likely to increase. Meanwhile, the impact of such a shut-off, even if it occurs, is likely to affect only Ukraine and a few countries in eastern Europe, and not the supply of gas to Europe this winter, as demand is likely to remain low and there is still margin for additional LNG imports. However, this would not be the case if the winter is colder than usual and gas demand soars, in which case natural gas prices could rise in Europe and supplies might be disrupted. The increase in LNG exports to Europe will also affect the global LNG market. We need to carefully to monitor the situation.

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