



No. 14 (Based on Japanese No. 116) Published: May 16, 2013

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

Contents

Summary

Energy Policy in Japan

- 1. Review of Energy Policies in the Second General Subcommittee Meeting
- Issues concerning the New Nuclear Regulatory Requirements and Restarting the Nuclear Power Plants

Our View of the Global Situation

- 3. European Parliament Rejects Revision to EUETS
- 4. Failure of Germany's Measures to Control Renewable Energy Surcharge
- 5. US, Australia and Russia as Potential New Suppliers of LNG for Japan
- 6. China Watching: Joint US-China Statement on Climate Change
- 7. ME Watching: Internal Conflicts Intensifying in the Middle East and North Africa
- 8. US Watching: US Clean Energy Diplomacy Goes into Action



Summary

1. Energy Policy: Review of Energy Policies in the Second General Subcommittee Meeting

The second meeting of the General Subcommittee of the Advisory Committee for Natural Resources and Energy held on April 23 discussed reducing the LNG procurement cost and promoting high-efficiency thermal power technologies to build a cheap and stable energy structure. The current situation of the nuclear policies on the decommissioning of the Fukushima Daiichi Nuclear Power Station, the nuclear backend, and safety improvement efforts was also introduced.

2. Issues concerning the New Nuclear Regulatory Requirements and Restarting the Nuclear Power Plants

The Nuclear Regulation Authority is expected to establish and implement new regulatory requirements that incorporate the lessons of the Fukushima Daiichi accident by July 17. The electric power companies are working to comply with the new draft requirements which are relatively tough even from an international viewpoint, but the power plants are unlikely to be restarted soon due to the shortage of qualified personnel in the Nuclear Regulation Authority.

3. European Parliament Rejects Revision to EUETS

The EUA prices reached an all-time low on April 16 as the European Parliament voted against the revision to EUETS. There are serious clashes of opinion regarding the EUETS market, and the future of the global warming countermeasures of the EU, including the role of EUETS, remains uncertain.

4. Failure of Germany's Measures to Control Renewable Energy Surcharge

Germany's measures to control its renewable energy surcharge failed after the proposal to retroactively lower the FIT tariff was rejected in the upper house, which tends to reflect the interests of the renewable energies industry. As a result, the surcharge could rise further. The meaning of paying the surcharge is being questioned as the solar power industry sheds jobs and the EUETS market remains sluggish.

5. US, Australia and Russia as Potential New Suppliers of LNG for Japan

Commitments by Japanese companies to purchase from LNG projects in the US have reached 14.7 MT/year in total. The issue with the new Australian LNG project is its high cost. Russia's new export plans being active, Japan should seriously consider importing not only LNG but also pipeline gas.

6. China Watching: Joint US-China Statement on Climate Change

On April 13, US Secretary of State John Kerry visited China, and the two governments issued the Joint US–China Statement on Climate Change. The fact that the world's two largest carbon-emitting countries will work together to tackle global warming is good news for solving the issue. There are high expectations for solid progress from this collaboration.

7. ME Watching: Internal Conflicts Intensifying in the Middle East and North Africa

Unrest is spreading in the Middle East and North Africa as sectarian differences and internal conflict accelerate. Concerns over terrorist attacks involving Syria and Iraq are rising, and Bahrain is containing any move that could "awaken" the Shi'ite residents. There has been no progress in the Middle East peace process or Iran's nuclear issue.

8. US Watching: US Clean Energy Diplomacy Goes into Action

There are signs of change in efforts to combat climate change in the US where GHG emissions are falling due to increased use of natural gas thanks to the growing production of shale gas. In strengthening Japan-US ties, Japan should consider that clean energy may increasingly become an important factor in energy diplomacy of the United States.



1. Review of Energy Policies in the Second General Subcommittee Meeting

Yuji Matsuo, Senior Economist Energy Demand Supply and Forecast Analysis Group

On April 23, the second meeting of the General Subcommittee of the Advisory Committee for Natural Resources and Energy for discussing the review of energy policy was held. The secretariat started the meeting by clarifying the issues focusing on the production and procurement of energy, and highlighted the importance of creating a cheap and stable energy structure as the key topic of the discussion. Then, policies such as reducing the cost of procuring natural gas including liquefied shale gas from the US and promoting high-efficiency thermal power generation by accelerating environmental assessments, developing more sophisticated technologies, and improving the efficiency and transparency of plant construction and replacement processes (by using bidding to select vendors, in principle).

In response, many members emphasized the seriousness of the current outflow of national wealth from Japan due to the increased consumption and rising prices of fossil fuels, exacerbated by the weak yen. Some members also pointed out that Japan should not be too optimistic about American LNG as it may not be as cheap as hoped, and that thermal power should be promoted in line with measures to reduce GHG emissions. It was also suggested that safety and cleanness should be highlighted, in addition to cheapness and stability.

Next, the secretariat explained the current situation of the nuclear policy. Regarding the decommissioning of the Fukushima Daiichi power plant, efforts such as revising the mid- to long-term roadmap are progressing. Regarding the backend issue, a new radioactive wastes panel will be established under the Nuclear Energy Subcommittee and will begin discussions in May. Regarding safety measures, improvements are being made under the new regulatory framework, using the American system as a reference.

In response to this explanation, many members highlighted the importance of retaining the personnel and technological platforms of the nuclear power industry, and emphasized that the government should establish a clear policy to create an environment where the younger generation feel proud to work. Regarding the backend, it was suggested that the parties concerned including the government, municipalities and relevant companies need to foster trust among themselves, and that the whole nation should make utmost effort to tackle this issue. The importance of municipalities in the entire nuclear power issue was also pointed out. For the panel discussion to be held in May, it was suggested that individuals with new viewpoints and opinions should participate in addition to the members who have been involved so far to broaden the scope of the discussion.

Lastly, the secretariat reported on the progress of the electric power system reforms and the Electricity Supply and Demand Verification Subcommittee. METI Minister Motegi, who joined halfway through the meeting, reemphasized the points presented by the secretariat earlier in the meeting, and expressed his intention to emerge from the present crisis stronger, just as Japan overcame the past two oil shocks and dramatically improved energy conservation in the process. The topics for the next meeting are energy conservation and renewable energy.



2. Issues concerning the New Nuclear Regulatory Requirements and Restarting the Nuclear Power Plants

Tomoko Murakami, Group Manager Nuclear Energy Group, Strategic Research Unit

On April 4, a study group of the Nuclear Regulation Authority (NRA) compiled the "Outline of the New Regulatory Standards Concerning Light-water Nuclear Power Reactors". On April 10, the NRA announced the draft provisions of the new regulatory requirements derived from this draft outline at its second regular meeting, and released them for public comment. The public comment period closed on May 10. The NRA will then review the comments together with the study team in charge of the requirements, and is expected to establish and implement the new regulatory requirements by the due date on July 17.

Meanwhile, at the third regular meeting on April 17, it was decided to review some of the nuclear plants for compliance with the new requirements prior to their official implementation. Accordingly, the "Review Meeting on the Status of Ohi Units 3 and 4" started on April 19 and 4 meetings have been held so far. The Review Meeting will reach a conclusion by late June or early July and if no serious problems are identified, Ohi Units 3 and 4 will be allowed to continue to operate until the next periodic inspection in early September.

There are two key points concerning the new regulatory requirements and restarting the plants: one is the engineering rationality of the new requirements, and the other is the timing of restarting. The framework of the new regulatory requirements is already fixed with no room for major changes, and the main work from now on will likely be making minor adjustments to the wording of the provisions. The opinion from the electric power companies and Japanese and overseas experts that the new requirements do not consider engineering judgments and are excessively pursuing zero risk was not incorporated in the draft outline, and thus is unlikely to be incorporated in the final version. The electric power companies will be required to comply with some of the toughest requirements even from an international standpoint, such as a broader definition of on-site active faults, in which any on-site crush zone that cannot be confirmed not to have moved in the last 120 to 130 thousand years must be checked up to 400 thousand years ago; the requirement to replace all cables with flame-resistant ones, and to install a filtered venting system for all boiling-water reactors similar to Fukushima Daiichi. Nevertheless, considering the situation of nuclear power and the importance of restarting, the parties concerned should make utmost efforts to define rational requirements until the last minute through detailed communication and transparent discussions.

Another major issue is securing the personnel who will be needed for evaluating compliance with the new requirements. Due to the shortage of experts in the relevant technologies, the NRA can evaluate only three cases at a time. There is no indication of how long it will take to review one plant, and thus it could take years to restart the plants after an electric power company completes the applications. To minimize the delay due to the shortage of qualified personnel, and for the reviews to be technically rational and to proceed smoothly in a limited amount of time, skilled personnel need to be added.



3. European Parliament Rejects Revision to EUETS

Hiroki Kudo, Assistant to Managing Director Global Environment and Sustainable Development Unit

At the plenary session held on April 16, the European Parliament voted against the draft revision to the EUETS auction rules (called "backloading") proposed by the European Commission with 334 votes in favor of an amendment rejecting the proposal, 315 against and 63 abstentions. Accordingly, the draft revision was returned to the Commission for modification.

The draft revision had been proposed by the European Commission as a short-term stimulus for correcting the EUA price drop which resulted from the excessive emissions allowances caused by the drop in demand due to the recession. With the rejection of the draft revision, however, the EUA price plunged to a record-low of 2.63 euros/tonne (CO₂-equivalent), down 43% from the day before. In response, Connie Hedegaard, EU Climate Change Commissioner, announced her intention to continue strengthening the EUETS system. However, the future remains uncertain, with some experts claiming that the plan is now politically dead following the rejection and that EUETS will be unable to play a major role in the EU's climate change countermeasures for the time being.

Regarding this draft revision, the views of companies on the energy supply side and those on the demand side have differed greatly. Prior to the vote in the plenary session, Shell took out a full-page newspaper advertisement urging that the revision be implemented. Industries such as electricity and energy believe that higher carbon prices will help accelerate the transition from coal to natural gas, and are thus strongly in favor of the draft revision. On the other hand, companies on the energy demand side such as those in energy-intensive industries are firmly opposed to the revision, fearing that it would make them less competitive against American companies that have access to cheap shale gas. BUSINESSEUROPE, an industrial association, commented that "we want an ETS, but without political interference". This is veiled criticism against market interference by regulatory authorities that do not consider international competition.

Germany's stance towards the draft revision was particularly noteworthy. Germany relies on revenues from the EUETS auction to help fund its global warming countermeasures, and the plunge in auction revenues resulting from the EUA price slump looks set to hit the budget allocation for the program. Meanwhile, there are strong views within the government that any impact of an increase in EUA prices on industry should be avoided, leaving the government divided on this issue. The stances of member states and industries affected by this draft revision clearly indicate the complex, conflicting ideas on how to balance global warming countermeasures with economic issues. At this point, the future path of global warming countermeasures (including emissions target-setting beyond 2020), including EUETS, remains uncertain.



4. Failure of Germany's Measures to Control Renewable Energy Surcharge

Hisashi Hoshi, Board Member, Director

New and Renewable Energy & International Cooperation Unit

Germany's measures to control its surging renewable energy surcharge failed. The surcharge is a fee paid by general electricity consumers to cover the cost of preferentially purchasing renewable electricity. The measures to control the surcharge had been proposed jointly by the Ministers of the Environment and Economics in mid-February in response to criticisms against the surcharge, which has gone up nearly 50% from last year. The proposed measures were intended to raise 1.9 billion euros (240 billion yen) by lowering the FIT (Feed in Tariff: preferential purchase price of renewables) rate and reviewing the surcharge reductions for electricity-intensive companies, curbing the rise in surcharge. If implemented, the measures would have kept next year's surcharge at the same level as this year, and the annual raise thereafter within 2.5%. The proposal, however, was rejected in the upper house (Bundesrat) of the German Federal Diet mid April.

The upper house consists of representatives of state governments, which tend to support their local renewable energy industry. It has strongly opposed the downward revision of the FIT rate each time it came up, and the fact that the Social Democratic Party and the Green Party are dominant in the upper house boosted opposition against the proposal.

Another reason for the rejection was that the reduction of the FIT would be applied retroactively to already registered generation facilities. The original proposal was to reduce the FIT for existing facilities by 1.5% only for 2014, reducing costs by 350 million euros (45 billion yen). The fact that the review of the surcharge reduction itself was supported by the opposition parties shows the intensity of opposition against retroactive reduction.

Retroactive tightening of purchase conditions would not only jeopardize the profitability of existing projects but could also strongly discourage investment in the target areas. In 2010, the Spanish government was severely criticized when it retroactively set an upper limit on the total quantity of electricity eligible for the FIT. In addition to applying a new 7% tax on all electricity generation including renewable energies last year, the Spanish government introduced a series of questionable policies this year including controlling the rise in FIT by removing components such as food and fuels from the consumer price index, based on which the FIT is adjusted. This has led to a series of lawsuits against the government by both domestic and foreign electricity producers. Adhering to the policy of mass introduction of renewable energies while taking measures that could discourage investment shows the difficulty of the situation and the deadlock currently faced by the Spanish and German governments.

With the rejection of the joint proposal by the upper house, effective measures are unlikely to be taken regarding the surcharge until the election in September. This is raising concerns over a larger rise in surcharge next year. In March, an independent power transmission company 50Hertz released a forecast of a 14% rise in surcharge.

According to the employment statistics for the renewable energy industry for 2012, jobs have decreased by 20% year-on-year over the entire solar power value chain. Combined with the historic price slump in the European emission allowances market, the meaning of the surcharge, of which 40% is spent on subsidizing solar power generation, is being questioned in Germany.



5. US, Australia and Russia as New Suppliers of Natural Gas for Japan

Tetsuo Morikawa, Manager Gas Group, Oil and Gas Unit

Last month's issue of the IEEJ Newsletter introduced Cameron, Freeport, and Cove Point LNG projects in the US in relation to LNG procurement by Japanese companies. The combined purchase commitment by Japanese companies to these three projects totals 14.7 MT/year (Cameron: 4.4 MT, Freeport: 8 MT, Cove Point: 2.3 MT).

Meanwhile, the Browse LNG project of Australia announced that the original development plan is not commercially viable due to high labor costs and the strong Australian dollar. Woodside, the project operator, is now looking into FLNG as the alternative development option. The high cost of Australian LNG projects has been an issue, and the progress of the new LNG project should be closely monitored.

Russian gas export projects to Asia are also active. For LNG, projects such as Gazprom's Vladivostok and Sakhalin-2, Rosneft's Sakhalin-1 and Novatek's Yamal are being planned. Russia's internal power struggle seems to increase the uncertainty in these projects especially in terms of feed gas sources and export entities..

Regarding pipeline gas supply, Russia is continuing to negotiate with China and some argue the possibility of reaching an agreement within this year. China is already importing pipeline gas from Central Asia, and will do so from Myanmar later this year. Despite the volatile situation in North Korea, South Korea is also keen to import pipeline gas from Russia. In Japan, the Ministry of Economy, Trade and Industry will conduct a research project this year on gas infrastructure development in Japan. This project will cover a feasibility study of both domestic and import pipelines.

To eliminate the Asia premium and to stabilize the supply of LNG, it is essential to diversify the supply sources. LNG from the US will contribute not only to supply but also to pricing diversifications. Australia is already the largest supplier of LNG to Japan, and thus Japan should consider whether to increase its dependency on Australia. LNG and pipeline gas from Russia would help diversify the supply sources as with the US, and the introduction of pipeline gas would have the additional advantage of boosting the construction of domestic gas infrastructure. Provided that economic rationality and supply stability can be ensured, it is time to seriously consider introducing pipeline gas from Russia.



6. China Watching: Joint US–China Statement on Climate Change

Li Zhidong, Visiting Researcher Professor at Nagaoka University of Technology

In mid-April, US Secretary of State John Kerry visited South Korea, China and Japan mainly to discuss how to deal with North Korea, and the countries agreed to jointly call for denuclearization of the Korean Peninsula. While this is a major achievement, the visit was even more important for the US and China as the official start of US–China diplomacy between the Xi Jinping – Li Keqiang leadership which was officially launched in mid-March and the second-term Obama administration. The most notable result was the Joint US–China Statement on Climate Change ("Joint Statement") issued by the two governments on April 13.

During the first term, the Obama administration launched the high-level U.S.–China Strategic and Economic Dialogue (S&ED) in July 2009, and issued the "US–China Joint Statement" with the then-President Hu Jintao in time for the President's visit to China in November. The Statement mentioned the strengthening of ties concerning climate change and energy as part of the effort to build a partnership of mutual respect and benefit. Subsequently, however, collaboration in those areas was affected by incidents such as the imposition of antidumping taxes and compensatory tariffs on Chinese solar cells and wind turbines by the US, although there was also progress such as the export of AP1000, a third-generation nuclear reactor by US Westinghouse, and nuclear fuel fabrication plants, and progress on bilateral collaboration in assessing shale gas resources. In the post-Kyoto framework negotiations for global warming prevention, the two countries have been at odds with each other, with the US claiming that they will not participate in the framework without the largest CO₂ emitter, China, and China arguing that the US, as a developed nation, should join the framework and set a high target.. Politically, the confrontation between the two countries intensified as "America's return to Asia" led by former Secretary of State Hillary Clinton appeared to China as "an alliance against China".

Under such circumstances, the Obama administration entered its second term and there was a change of leadership in China, and there are now stronger calls for rebuilding the bilateral relationship. Toward this important purpose, the two countries decided to strengthen ties in the fight against global warming, which could also contribute to energy security, economic promotion and prevention of air pollution of the two countries. This move was also intended for the framework negotiations beyond 2020 whose time frame is getting tighter.

The Joint Statement recognizes that the collaboration between the two countries amid the multilateral negotiations and specific actions for global warming prevention could reinforce the bilateral relationship, and indicates the need to expand the scale and scope of influence of the collaboration. Thus, a climate change working group (WG) was established under the leadership of Xie Zhenhua, Vice-minister of the National Development and Reform Commission, and Todd Stern, the United States Special Envoy for Climate Change. The WG will promptly establish a scheme for collaboration on energy conservation and alternative and renewable energy areas, together with a new joint action plan that could promote green and low-carbon growth, and report the progress to the representatives of the leaders at the S&ED planned for this summer.

A joint effort between the world's two largest carbon-emitting countries, which together account for more than 40% of global CO₂ emissions, to tackle global warming together is good news for solving the issue, and there are high expectations for solid progress from this collaboration.



7. ME Watching: Internal Conflicts Intensifying in the Middle East and North Africa

Koichiro Tanaka, Managing Director & Head of JIME Center

The recent acceleration of sectarianism and internal conflicts in the entire Middle East is making the future of each country more uncertain. More than two years after the withdrawal of US troops, provincial elections was held in Iraq as a prelude to the parliamentary election next year. This election could trigger further attempts both inside and outside the country to topple the Maliki administration.

In Egypt, where clashes between protesters and the authorities continue, "expectations" for a possible return of the military into politics, and efforts to prevent this, are spreading. Struggling with a weak economy and delays in reaching a financing agreement with the IMF, Egypt will be on the edge of default, had not been the influx of financial assistance from Qatar. Growing less and less popular, President Morsi and the Muslim Brotherhood are being criticized for using the retrial of former President Hosni Mubarak for political ends. Egyptians are following the trial closely, but the presiding judge has withdrawn, aggravating the confusion.

The "Al-Qaeda of Iraq" announced its integration with the "Al-Nusra Front" of Syria, confirming the close ties between Al-Qaeda and the Islamic militant forces seeking to topple the Assad administration. This will cause the US and Europe to have second thoughts about the extent of assistance and supplies to the rebel forces, and is likely to work in favor of President Assad who has branded the opposition forces as terrorists. Meanwhile, Israeli warplanes have bombarded a military facility in the outskirts of Damascus under the pretext of preempting significant arms transfer to the Lebanese Shi'ite organization Hezbollah who have admitted to supporting Assad. The turmoil in Syria is spreading into neighboring countries.

On April 10, the Bahraini government blacklisted the Hezbollah of Lebanon as a terrorist group. This unprecedented move is a clear departure from the common perception of Hezbollah as a resistance movement, which spread among the Arab nations during the 2006 Lebanon War. This move is an attempt by the ruling Al Khalifa family, which has been threatened by the growing anti-monarchy movement in the past two years, to curb the spreading influence of Iran and Hezbollah among the Shi'ite population.

The Middle East Peace Process shows no signs of resuming despite the back-to-back visits by US President Obama and Secretary of State John Kerry. The resignation of the Palestinian Prime Minister Salam Fayyad after a smoldering conflict with President Mahmoud Abbas is another example of the many difficulties facing the peace process: the falling-out of the negotiating parties.

The nuclear talks with Iran, which resumed in Almaty, Kazakhstan in early April, ended without any major achievement, and are likely to face a deadlock as happened around the same time last year. The June presidential election campaign has attracted higher attention after former president Rafsanjani came forward to register himself as a candidate, surprising the political speculators.



8. US Watching: US Clean Energy Diplomacy Goes into Action

Shoichi Itoh, Manager, Senior Analyst Global Energy Group 2, Strategy Research Unit

The Obama administration's fiscal management continues to walk a thin line, averting a debt default in February by passing a bill for temporarily raising the federal debt limit for three months, and executing 10-year forced federal spending cuts worth 1.2 trillion US dollars on March 1. Under such circumstances, in the Budget Message for FY2014 (October 2013 to September 2014) released on April 10 (3.77 trillion US dollars in total), President Obama proposed abolishing tax incentives for crude oil and gas exploration worth approximately 44 billion US dollars while spending 23 billion USD on promoting renewable energies.

In January, at the inauguration speech for his second term, President Obama renewed his emphasis on the need for the US to seriously address the climate change issue. According to the EIA, GHG emissions of the United States for 2012 were at its lowest level since 1994. This was achieved largely by the growth in shale gas production which lowered domestic gas prices and boosted gas-fired power, in turn pushing down the share of coal-fired power.

On April 9, Dr. Ernest Moniz, a professor of physics at the Massachusetts Institute of Technology who was appointed as the next DOE Secretary (Under-Secretary of Energy 1998–2001), attended a hearing at the Senate Committee on Energy and Natural Resources prior to official approval by the Senate. Dr. Moniz explained the need to boost production of shale gas as a means to curb GHG emissions until renewable energies are in widespread use, although environmental regulations against hydraulic fracking need to be toughened at the same time.

Dr. Moniz stated that he supports the export of LNG in principle, and pointed out the importance of promoting nuclear power for tackling climate change and in view of nuclear security. In the report "*The Future of Natural Gas* (2011)" which he co-authored, it was noted that "the energy security benefits of the US would be strongly affected by the concerns over energy supplies to its allies". Regarding this point, it is noteworthy that Dr. Moniz stated in a conversation with Senator John Barrasso (R: Wyoming) that the DOE, together with the Department of State and the Department of Defense, needs to take account of national security matters when deciding its policies.

Meanwhile, regarding the future, the discussions on linking the increase in production of shale gas with the spread of clean energy and on strengthening the US initiative in the climate change negotiations are likely to accelerate. During his visit to Japan and China in mid-April, Secretary of State John Kerry agreed with the foreign ministers of respective countries on strengthening both bilateral and multilateral cooperation in tackling climate change. While we tend to focus more on when America will start exporting LNG to Japan, we must not forget the importance of Japan-US cooperation in the area of clean energy.



More information on IEEJ can be found by clicking below.

IEEJ Calendar of Events

Energy Indicators of Japan

IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*