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## **Summary**

### **1. Developments in Energy Policies (Renewable Energies and Gas)**

The direction of the reforms of the gas system and estimating the amount of additional renewable energy capacity that can be introduced are essential policy issues of the Basic Energy Plan, as well as important energy industry policies. Developments must be closely monitored.

### **2. Developments in Nuclear Power**

While an assessment report has been approved for Sendai Units 1 and 2, certifying that they have cleared inspection, approval of the construction plan and security regulations are needed before the plant can be restarted, and it is not clear how long this will take. We must carefully monitor the progress of the reviews, also watching how the change of commissioners will affect this.

### **3. Key Points of the Discussions at the Second Meeting of Multilateral Joint Study Group on LNG**

On September 9, the second meeting of the Multilateral Joint Study Group on LNG was held in Tokyo. The members actively discussed topics such as the impact of LNG price level, issues with LNG pricing, and the challenges to be resolved to improve the efficiency of the LNG markets.

### **4. ME Watching: More Airstrikes Targeting ISIS by US-led Coalition**

Following its air-raids in Iraq, the US launched airstrikes on ISIS positions in Syria. Not only ISIS, which pledged to retaliate, but also other jihadist groups that support the organization are reacting violently to the airstrikes.

### **5. Russia Watching: Any Solution to the Worsening Situation in Ukraine?**

Localized shelling continues even as the talks for cease-fire continue between the Ukrainian government and the pro-Russian forces. The impact on the Russian economy continues to worsen with no end in sight, as the country grows increasingly isolated from the international community.

## **1. Developments in Energy Policies (Renewable Energies and Gas)**

**Junichi Ogasawara**, Senior Economics, Manager

Electric Power Group

Electric Power Industry & Smart Community Research Subunit

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The Gas Systems Reform Subcommittee generally approved the basic policy to fully liberalize the retail sector, in order to promote the shift to gas, as specified in the Basic Energy Plan, by expanding the use of co-generation and fuel cells, to lower the barriers to entry for new players, and to upgrade the system and the environment for accelerating the transformation of gas companies into comprehensive energy companies. The discussion, however, also revealed the differences in views between the players on security and the legal unbundling of the network department, and the direction of future discussions is unclear.

The reforms of the gas system were discussed following the reforms of the electric power system, but there are several differences between the industrial laws for these two energies, such as the provisions on supply stability. Also, reference to equipment is made only in the Gas Business Act. However, considering the Basic Energy Plan's policy to promote competition between energies, there must be a shared understanding behind the discussions that the industrial laws for the different energies should be changed to have a similar structure.

Meanwhile, the gas business differs from the electricity business in many ways, such as the almost complete dependence on imported LNG from overseas for supplies, and the existence of numerous small gas businesses that are not connected to the gas mains. The question is how to keep the system reforms compatible with the existing supply system for the gas business, specifically, how to ensure supply stability, and how to keep security compatible with technological development.

On September 10, the New and Renewable Energy Subcommittee indicated the procedure for estimating the amount of additional renewable energy capacity that can be introduced and the burden on the public, and announced plans to review the government target to raise the ratio of renewable energies in the energy mix to at least 21% (electricity output-based) by 2030. There is limited scientific knowledge anywhere in the world on the integration of renewable electricity into the electricity grid.

However, this review is meaningful heading toward COP21. In order to estimate the surcharge based on the current licensed capacity, the estimation takes into account the estimated costs for grid optimization such as (1) strengthening the grid infrastructure, (2) utilizing large-scale batteries, and (3) meeting the output limitation rule. Further, the estimation adopts an amount that is at least foreseeable and verifiable as the cost for adjustment power sources to make up for the drop in utilization rate of thermal power plants. Although it is not clear which costs (or measures) and/or benefits should be included, the process is an excellent starting point for the review.

The greater use of co-generation, fuel cells and renewable electricity is an important area that supports the Basic Energy Plan's goal of promoting the shift to gas and increasing the use of low-carbon electricity sources, thereby transforming the energy industry. To predict the feasibility and direction of these areas, the moves by the two committees must be closely monitored.

## 2. Developments in Nuclear Power

**Tomoko Murakami**, Manager  
Nuclear Energy Group, Strategy Research Unit

On September 10, the Nuclear Regulation Authority (NRA) approved the "assessment report" for Units 1 and 2 of Kyushu Electric's Sendai Nuclear Power Station. The document serves as a certificate that the reactors have cleared the inspection, and thus Sendai Units 1 and 2 became the first reactors to be recognized as complying with the new regulatory safety requirements. On October 8, Kyushu Electric submitted the construction plan and the security regulations to the NRA as mandatory steps for restarting the plants, and has also begun working on gaining the consent of the hosting community for the restart. In October 9, it held the 1<sup>st</sup> meeting to explain the details on the assessment report in five municipalities of Kagoshima Prefecture, in which the government should play an active part. Considering the time needed for each of these steps, it is still not clear when the plants will be restarted. The NRA's approval of the assessment report is a commitment by an individual regulator that the safety of Sendai Units 1 and 2 "meets the requirements", but how safe do the people feel? For the residents of the hosting community, it would be annoying that people irresponsibly comment when the plants will be restarted.

Aside from Sendai, there are 18 other plants undergoing compliance reviews. Parts of the assessment report for Sendai may be reused as a template for reactors of similar models, but the reviews for construction plan licensing and security regulations will be entirely plant-specific. On September 19, Kunihiro Shimazaki, deputy chairman of the NRA charged mainly with earthquake- and tsunami-related reviews, and Kenzo Oshima, an NRA commissioner in charge of nuclear security, were replaced by commissioners Akira Ishiwatari and Satoru Tanaka, respectively. At the press conference to mark their appointment, the two new commissioners clearly expressed their focus on "securing safety and making scientific decisions", without commenting on improving the efficiency of the reviews. The NRA continues to scrutinize each of the many issues by holding numerous hearings and review meetings. No one can predict how the approval of Sendai's assessment report and the appointment of new commissioners may affect the speed of the reviews.

The sixth Nuclear Energy Subcommittee held on September 16 discussed ways to solve the spent fuel issue and the nuclear fuel cycle policy. The discussion focused on how to operate in future the business of Japan Nuclear Fuel Limited, which is currently funded by the power companies, to deal with reprocessing and the disposal of low-level waste. Many commented that "reprocessing and the disposal of wastes are an important business, which should continue to be run by a private corporation based on a solid funding mechanism"; however, some expressed concern about continuing to operate as a private company, due to the lack of economic prospects and the risk of the national policy shifting from reprocessing to direct disposal, which is too costly for a private corporation to bear. The members, however, agreed on "the need for a comprehensive backup and monitoring system for the nuclear fuel cycle by the government". The government is expected to firmly clarify the direction of the nuclear fuel cycle business which is both desirable for Japan and can be explained clearly to the international community, as well as the scale of Japan's nuclear power generation in the future.

### **3. Key Points of the Discussions at the Second Meeting of the Multilateral Joint Study Group on LNG**

**Ichiro Kutani**, Manager  
Global Energy Group 1, Strategy Research Unit

On September 9, the second meeting of the Multilateral Joint Study Group on LNG was held in Tokyo. The Group was established following a proposal and approval at the Second LNG Producer-Consumer Conference held in September last year. The purpose of the Forum is to invite renowned experts from around the globe to discuss the various issues of the LNG market, and to suggest measures to achieve sound market's development. The key points of the discussions are summarized below.

First, LNG prices and their impact on demand were discussed. Particularly, regarding the loss of relative competitiveness against other energies, it was suggested that high prices might suppress the growth in demand, although opinions varied on the scale of the impact. Expectations for natural gas are growing in many countries due to its stable supply and relatively low environmental burden. High prices, however, could curb this demand, preventing these advantages of natural gas from being fully exploited. For exporting countries, this could reduce the full export potential of their countries' resources. While it is important to keep prices affordable for consumers in importing countries, prices must also be sufficient to attract the necessary investment in the supply chain.

Second, the rapid ongoing changes to the pricing system were highlighted. In Europe, some analysis mentioned that Hub-linked pricing has increased to account for more than half of all contracts, and Asia has also started to adopt or consider a hybrid pricing system that combines the oil-linked price with other pricing systems such as Henry Hub price. It was also interesting to see reference made to the advantage of Hub-linked pricing, which is the ease of explaining the price to market participants, consumers and shareholders, although Hub-linked pricing does not necessarily mean lower prices. Diversification of pricing helps reduce the price risks in LNG trading, and so the increasing availability of options is appreciated.

Third, the efficiency of the LNG market was discussed. The large price gaps in the current global LNG market are evidence of its inefficiency, and to change this, transactions must be more flexible. This can be approached mainly by enhancing the supply-demand adjustment capability by using spot and short-term contracts and swaps, and easing and abolishing the destination restriction on trading. In case of abolition of destination restriction, the buyer would have to bear the entire risk following the delivery of LNG, and so buyers will need to prepare themselves accordingly.

LNG is an important energy source in the energy mix of Japan; however, there are issues to be resolved if Japan is to continue using it. We hope that such discussions will help make LNG an even better source of energy.

#### **4. ME Watching: More Airstrikes Targeting ISIS by US-led Coalition**

**Koichiro Tanaka**, Managing Director &  
President of JIME Center

While the 69th Session of the UN General Assembly was in progress in New York, the US, which has been emphasizing the threat of ISIS that straddles Iraq and Syria, exercised its “inherent right of individual and collective self-defense” and launched airstrikes in Syria with the cooperation of several Gulf countries and Jordan. Concern is growing over the widening battle lines and spread of jihadism, and how they might impact the Middle East and the Gulf region.

In his address to the UN General Assembly on September 24, President Obama compared the brutality of the terrorists in Iraq and Syria with the threat of the Ebola virus, Russia's invasion in Ukraine and global warming, and emphasized the need for urgent multilateral action. In response to the President's declaration to "degrade and ultimately destroy ISIS" on a TV address delivered on the 10th, friends and allies of the US began preparations to join the coalition, with French military jets becoming the first to join the US in operations inside Iraq. Subsequently, on the 23rd, US airstrikes in Syria was joined by Saudi Arabia, Bahrain, Qatar, the UAE and Jordan.

The airstrikes targeted ISIS strongholds and controlled areas of Raqqa, al-Hasakah and Deir ez-Zor, as well as contingents of al-Nusra Front and the Khorasan Group, which are al-Qaeda affiliates that continue to fight the Assad forces. Syria has been warning against unilateral military action on its soil by the US or other forces. However, receiving prior notification via Iraq, Syria's reaction to the air strikes was muted compared to that of Russia and Iran, which have criticized the US for violating Syria's sovereign rights.

Having been struck in Iraq and now Syria, the ISIS press officer Abu Mohammed al-Adnani has called for the murder of citizens of Western countries and any country that collaborates with them, and so jihadist groups that are likely to respond to this call are being monitored. Nevertheless, a French national was beheaded in Algeria by Jund al-Khalifa or the Caliphate Soldiers that has vowed allegiance to ISIS, and a suicide bomber of al-Qaeda in the Arabian Peninsula (AQAP) struck the center city of the Shia sect Houthis.

Recognizing that multilateral action is essential to fully counter the threats of ISIS and other jihadist groups, President Obama chaired a special summit-level session on the 24th, a rare occasion in the history of the UN Security Council, and managed to unanimously adopt Resolution 2178, which requires UN member states to legally ban their nationals from traveling abroad to join extremist groups. Meanwhile, the sudden release of 49 Turkish Consulate members who had been captured by ISIS since the fall of Mosul in June have caused speculations to circle that it have been achieved not only through the mediation efforts of neighboring Sunna tribal forces, but also in return for Turkey's promise to not join the attacks against IS.

Meanwhile, the Public Security Office of the Tokyo Metropolitan Police has questioned a Japanese university student and several other acquaintances of him under the suspicion that the student was preparing to join ISIS forces in Syria. The news shocked the Japanese society as sort of a wakeup call.

## **5. Russia Watching: Any Solution to the Worsening Situation in Ukraine?**

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

According to UNHCR, the armed conflict between Ukrainian government forces and pro-Russian forces in the eastern part of the country has already claimed 3,000 lives, and over a million people have fled overseas or within the country to escape the war. The prospects for a truce may look good but then suddenly vanish; the future remains uncertain.

Since late August, pro-Russian militants have resumed attacks in the east. On September 5, the Ukrainian government and the pro-Russian forces signed a peace pact that consists of twelve items including an immediate cease-fire and withdrawal of illegal militant groups and mercenaries from Ukrainian territory. On the 10th, President Poroshenko reported to the cabinet that 70% of Russian military forces in the east have left the territory, and on the 16th, the Supreme Council of Ukraine (the equivalent of the parliament) passed a law that gives eastern Ukraine, which remains under the control of pro-Russian forces, a "special position" including greater autonomy, and a law that holds pro-Russian groups not liable for criminal responsibility. Further, on the 20th, the Ukrainian government and the pro-Russian forces met and agreed to set up a 30 km buffer zone between their respective areas of control. Despite the peace talks, the shelling has not ceased.

The West is strengthening its sanctions and other means of pressure on Russia. In late August, NATO estimated that the pro-Russian forces in the east include more than 1,000 Russian soldiers. At the summit meeting held on September 5 in Newport, UK, it agreed to form a new "spearhead force" ready to deploy inside and outside NATO areas within 72 hours. On September 12, the EU announced further sanctions against Russia including substantially limiting the financing within the EU by six Russian oil companies and defense businesses including Rosneft, Transneft and Gazprom Neft (expanding the scope of sanctions announced in late July). On the same day, the US also announced broader sanctions, including Gazprom and Sberbank, the largest bank in Russia.

The impact on the Russian economy is worsening. On September 17, the Russian ruble marked a record low of 38 rubles to the dollar, down 15% from the end of 2013, accelerating inflation in the country. According to Alexei Kudrin, former Russian Finance Minister, 11 billion dollars of capital may have fled the country in 2014 alone.

As shown by the ratification of the Ukraine-European Union Association Agreement on September 16, which includes a free trade agreement, Ukraine is leaning further toward the EU. The pro-Russian group that supported former president Yanukovich is expected to lose many of its seats in the parliamentary election on October 26. The world is closely watching whether Russia will strengthen its support for the pro-Russian forces and make a comeback, and if so, how.

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