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Contents

Summary

【Energy Market and Policy Trends】

- 1. Discussions on the Review of the Energy Policies**
- 2. Developments in Nuclear Power**
- 3. Promotion of Japanese Marine Energies Starting in the Demonstration Fields**

【Global Watch】

- 4. ME Watching: Division and Tension Increasing in the Middle East**
- 5. Russia Watching: Deepening International Isolation due to the Ukraine Issue**

Summary

【Energy Market and Policy Trends】

1. Discussions on the Review of the Energy Policies

Cabinet approval of the Basic Energy Plan was postponed till April, due allegedly to the prolonged discussions within the ruling party. Approval of the Plan following productive discussions is awaited.

2. Developments in Nuclear Power

Despite the decision to review Sendai Units 1 and 2 ahead of others, the prospects for restarting, including winning the approval of local communities, remain uncertain. The actions of the NRA, including handling the on-site fracture zone issue, must be closely monitored.

3. Promotion of Japanese Marine Energies Starting in the Demonstration Fields

All entries for public selection of marine energy demonstration fields have been filed. Having fulfilled stringent requirements, the entries show the possibility of preparing renewable energy environments under municipal initiatives. There are high hopes for the use of marine energies.

【Global Watch】

4. ME Watching: Division and Tension Increasing in the Middle East

Several Gulf countries have openly expressed their dissatisfaction over Qatar's regional policy. In Turkey, the ruling AKP marked a victory in local elections. Despite continued negotiations, the gap between Iran and the West remains unbridged. Libyan PM Zeidan has been removed from office.

5. Russia Watching: Deepening International Isolation due to the Ukraine Issue

The international community is tightening its sanctions on Russia in protest against the forceful annexation of Crimea by the country. Japan needs to reconsider its strategy toward Russia based on an accurate understanding of the changing international situation.

1. Discussions on the Review of the Energy Policies

Akira Yanagisawa, Senior Economist, Manager
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Cabinet approval of the Basic Energy Plan was postponed till April, due reportedly to the prolonged discussions within the ruling party concerning the Plan.

At a joint meeting of the LDP's Research Commission on Natural Resources and Energy Strategy and the Basic Energy Policy Subcommittee, the Draft Proposal and Suggestions on Renewable Energies was submitted by the Secretariat of the Council on Distributed Energies for Revitalization of Local Communities. The key message of the document is that the surcharge can be kept at 2.1 trillion yen per year, which equals 2.60 yen per kWh or 623 yen per month per regular household, even if the ratio of renewable energies in the power generation mix increases to 35% in 2030, by: (1) cutting the purchase prices of renewable electricity by 20% after 2020, (2) shifting from solar PV to wind power, and (3) reducing total electricity consumption by 20%.

Further, the document concludes that:

1. The current Basic Energy Plan, the third, was approved by the Cabinet based on a target renewable energy ratio of 21% by 2030. Thus, there is no reason not to set a numerical target, and it would also be difficult to persuade the public without one.
2. It is realistic to set the renewable energies target to 35% by 2030 with minimal public burden, by running the Feed-in-Tariff system in an appropriate manner, achieving an optimum mix by taking full advantage of the strengths of each region, and promoting energy conservation.
3. The government must accelerate the construction of regional transmission networks and the strengthening of inter-area connection lines, such as the HVDC Hokkaido-Honshu, and the East-West frequency adjustment facilities, for completion in time for the 2020 Olympics, to further promote renewable energies.
4. Japan should aim to become the world leader in the development of renewable energies and energy-saving equipment, including storage cells and smart meters for stabilizing the fluctuations in solar PV and wind electricity output, and make it a growth strategy of Japan.

Whether a surcharge of 623 yen per month per household is indeed a "minimal public burden" is debatable (for reference, a poll conducted by the Nikkei Shimbun in September 2013 on the acceptable monthly burden from the consumer's viewpoint was 50 yen at 43%, 120 yen (equivalent to the FY 2013 level) at 19%, and 200 yen at 16%. 90% of the answers were lower than the 623 yen mentioned in the Recommendations).

Another concern is that in order to shift from more profitable solar PV to wind power without changing the purchase prices, it might be unavoidable to set a cap on the volume of solar PV power purchase. Yet another concern is that the "public burden" mentioned in the Recommendations apparently means surcharge only. The document also fails to mention the costs and means necessary for reducing electricity consumption by 20%, which might require greater promotion of electricity conservation beyond the scope of economic rationality.

We should look again at one sentence in particular in the draft Basic Energy Plan, and the post-disaster discussions: "Finding a solution for optimizing the supply-demand structure of Japan is not easy, and can be achieved only through detailed studies on the current situation and realistic efforts for solving the strategic challenges." We hope that the Basic Energy Plan will be approved by the Cabinet following productive discussions within the ruling party.

2. Developments in Nuclear Power

Tomoko Murakami, Manager
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At the regular meeting on March 13, the Nuclear Regulation Authority (NRA) discussed the progress of the reviews for compliance with the new regulatory requirements, and announced that it will start preparing a draft review report for Sendai Units 1 and 2, the first among the 17 units of eight electric power companies currently under review. The difference between Sendai Units 1 and 2 and other plants is whether the reference ground motion, which is the basis for the seismic review of the plant, has been fixed or not. The NRA appreciated that Sendai Units 1 and 2 decided to raise the peak ground motion from the initially-declared 540 Gal to 620 Gal, as requested by the NRA, while other plants are still discussing the figure with the NRA in the review meetings.

Following this decision, some media are already predicting that the plants will be restarted "around summer after gaining approval of the local communities". However, the NRA emphasizes that it has merely approved the postulated reference ground motion, and has not yet commented on the prospects for restarting, stating that the evaluation of seismicity and the review of ground stability and volcanic impact of the site have not yet been completed. Judging from the review process so far, new issues may arise while drafting the review report. The electric utilities and industries need to remember there is still great uncertainty concerning when the review will end and the plants will be restarted.

While the meetings for reviewing the nuclear power plants continue to gather attention, five sites (Tsuruga, Mihama, Shika, Higashidori of Tohoku Electric, and Monju) other than Ohi Power Station are still being reviewed for possible activity of the fracture zones within the premises, a task which the NRA took over from the former regulatory authority when it was launched. Those plants cannot apply for compliance review until the issue of on-site fracture zones is solved. Rapid progress is strongly desired, but a decision is unlikely to be reached soon judging from the current situation where new issues are raised each time a review meeting is held. As with the case of regulatory requirement reviews, no one can predict when the reviews of the fracture zones will end.

Overseas, innovative reactors are being developed which differ in characteristics from LWRs, and the related fuel cycle technology. In collaboration with a US government project, China is building a 200 MW high-temperature gas-cooled reactor in Shandong Province, due to be launched around 2015. In the US, R&D on SMRs (small modular reactor) is continuing, despite the declining cost-competitiveness of building new reactors due to the Shale Revolution. South Korea, which is banned from reprocessing its spent fuel under the nuclear non-proliferation policy, has expressed its intention to introduce dry reprocessing technology, which is more robust against proliferation, from the US, in order to reduce its nuclear waste. Sweden, where the site for a final repository for high-level wastes has been selected, is studying alternatives to geological disposal in parallel with designing the final repository. It is important to note that Japan could make major contributions to these R&D efforts, based on its long-term experience in the use and development of nuclear power.

3. Promotion of Japanese Marine Energies Starting in the Demonstration Fields

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

Acceptance of entries for public selection of marine energy demonstration fields, which began in February last year, has closed. At the end of February, seven prefectures, including Iwate, Wakayama and Saga, filed a total of eleven candidate sites to the Headquarters for Ocean Policy. There are five target electricity generation technologies, namely floating wind turbines, wave power, tidal power, sea temperature difference and ocean current, and one site will be selected for each technology by summer.

While the development of Japan's marine renewable energies is known for its slow progress, the revision of the Basic Marine Plan (April 2013) has paved the way to promote it. The public selection of the demonstration fields is modeled after European examples staying ahead in this area, such as the "European Marine Energy Centre" on the Orkney Islands off the Scottish coast.

The applicants had to meet stringent requirements. First, of course, is the climate and oceanographic conditions which are the sources of energy. For example, a floating off-shore wind power site must have a monthly average wind speed of 7 m/s at a height of 80 meters for at least three months per year; a tidal power site must have a maximum flow rate of 1.5 m/s. Next, the sites need to have gained the approval of fishery operators and other users of the waters, as well as local stakeholders. Further, the sites are required to avoid natural reserves and have no impact on rare species. The possibility of connection to the power grid and availability of space to moor and store power generation devices are also important factors in the selection. Permission for ten-year occupancy of the waters was surely a high hurdle in gaining the approval of stakeholders. Finding sites that meet all these requirements in an application period of just one year cannot have been easy.

It is impressive that these hurdles were cleared by the municipalities (prefectures) themselves. To date, the development of renewable energies has involved, aside from developing the energy itself, battling restrictions such as environmental protection and negotiating with local communities. In many cases, such battles had to be fought individually by the power companies, increasing the cost and lead time and making it difficult to enter the business. The recent experience concerning the demonstration fields show that coordination by local municipalities can actually work very well, which is a major achievement also for the possible establishment of "special renewable energies zones".

While solar and wind power are attracting attention due to the Feed-in-Tariff system, Japan must make use of the oceans to expand the use of renewable energies, since it has limited available land area. Water is 800 times denser than air; be it waves, tides or sea currents, the kinetic energy of water is far higher, as is evidenced by the exceptional progress of hydraulic power among the various renewable energies. Surrounded by oceans, it would be a waste for Japan not to use the power of water.

Other than seabed offshore wind turbines, marine renewable energy has only just reached practical use. Japan must now catch up after such a slow start.

4. ME Watching: Division and Tension Increasing in the Middle East

Koichiro Tanaka, Managing Director &
President of JIME Center

There is a serious division in the Gulf Cooperation Council (GCC). On March 5, in protest against Qatar's "meddling in others' internal policy", the UAE, Saudi Arabia and Bahrain recalled all their ambassadors from Doha. The three countries showed that they will no longer tolerate Qatar's conciliatory stance toward the Muslim Brotherhood. The antagonism in the Arabian Peninsula flared up immediately when Qatar's Foreign Minister Khalid Al Attiyah refused to revise the country's long-criticized diplomatic policies. Despite reconciliatory efforts by Kuwait, the GCC chair and host of the Arab League Summit, the split-up signifies the de facto failure to unify the GCC. The summit talks between President Obama and King Abdullah of Saudi Arabia were unable to mend relations that had been strained by differences of opinion over Syria, Iran and other regional issues.

Iran's President Rouhani visited the friendly power Oman, and the countries agreed to construct an undersea pipeline for carrying Iranian gas to Oman. Meanwhile, at the nuclear talks which resumed on March 18 in Vienna, the standoff between the West and Russia over the Ukraine situation could negatively affect the talks. Iranian Foreign Minister Zarif, who visited Japan in early March, stated that the country will neither "give up" nuclear development nor "dismantle" the facilities, emphasizing the great difference between the positions of the US and Iran. As the commercial banks of the West remain reluctant to trade with Iran, the easing of sanctions is being delayed, threatening the ongoing negotiations.

In Turkey, anti-government rallies are intensifying yet again in large cities such as Istanbul. Facing corruption charges, Prime Minister Erdogan decided to deny access to Twitter and YouTube, making no attempt to hide his heavy-handed approach. These actions were criticized by President Gul, resulting in a split between the Justice and Development Party, and were subsequently overruled by the judiciary. Despite such criticism, the ruling AKP's overwhelming victory in the local elections is considered as a vote of confidence for Mr. Erdogan. Under attack for his Syrian policy, Mr. Erdogan also showed his resolute to carry on with his policy by justifying the shooting-down of a Syrian fighter aircraft which allegedly violated Turkey's air space. In Syria, the Assad government troops recaptured Yabroud, a town to the north of the capital Damascus, regaining control of the North-South corridor stretching from the Lebanese border to the Mediterranean.

In Libya where turmoil continues, a tanker flying the flag of North Korea illegally loaded crude oil at a port in the eastern town of Cyrenaica, currently under separatist rule. The tanker in question was seized by US special forces and handed over to the Libyan government, but the country's parliament sacked Prime Minister Ali Zeidan for failing to prevent the tanker from escaping, adding to the confusion. Following the bombing of the Golan Heights, Israel launched air strikes on Syria and the Hezbollah, while also carrying out bombings in retaliation for the rocket attacks from Gaza.

5. Russia Watching: Deepening International Isolation due to the Ukraine Issue

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

Due to the increasingly tense situation in Ukraine following the fall of President Yanukovich in late February, the relations between the West and Russia have deteriorated to the worst level since the Cold War. On March 16, amid severe criticisms by the international community, an illegal referendum on the status of Crimea in southern Ukraine. On the 17th, the next day, Russia endorsed the independence of Crimea as a nation, citing overwhelming support of the Russian residents, and on the 18th, President Putin and the president of the Republic of Crimea signed a treaty by which Russia annexed Crimea. Moscow sees Ukraine as Russia's "brother country" having its roots in the Principality of Kiev, the predecessor of the Russian Empire established at the end of the 10th century, and is ready to risk international isolation to defend its scope of influence at any cost.

From a broader perspective, there are eight factors that could determine the outcome. The first is the presidential election scheduled for May 25, which concerns Ukraine itself. The provisional government under Arseniy Yatsenyuk is not solid, and Ukraine's political situation could become more volatile depending on the moves of the extreme right. Second is the course taken by east Ukraine, which has many language and religious ties with Russia. Opinion is divided even among the Russian Ukrainians, and thus the eastern area is in a very delicate situation. Third is the trend of the Tatars, who constitute 12% of the Crimean population and historically harbor deep suspicion toward Russia.

Fourth, in an even broader context, the reaction of the Transnistria (30% Russian population, with Russian forces stationed), which currently is part of the Republic of Moldova, must be monitored closely. A referendum in 2006 showed that an overwhelming majority of Russian residents support independence from Moldova. Fifth is the independence movement by ethnic groups in North Caucasus. Moscow's emphasis on "self-determination of the people" concerning Crimea could fuel the independence movements of ethnic minorities such as in the Chechen Republic. Sixth is the impact on the Russian economy. The Russian stock price index, RTS, has dropped by up to 26%, together with the ruble, resulting in capital flight of 70 billion dollars from January to March. Although President Putin's popularity temporarily rose after boosting national prestige by expanding the country's territory, his support base could erode if the economic recession is prolonged. Seventh is China-Russia relations. In a delicate position with complex ethnic issues in its own country, China has expressed discomfort in response to President Putin's public appreciation of "China's support". Eighth is the important energy issue. Gas supply from Russia to Ukraine and other parts of Europe from April onwards, as well as the impact of economic sanctions on the energy sector, must be monitored closely.

In the wake of Russia's forced annexation of Crimea and disrespect for international law, the US and the EU quickly decided on a series of additional sanctions including freezing the assets of senior Russian government officials. On March 24, the G7 (the seven major countries including Japan, the US and the European countries) adopted the "Hague Declaration" which includes suspension of Russia from the G8. Japan needs to carefully reconsider its strategy toward Russia by accurately understanding new developments in the international situation.

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