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【Energy Market and Policy Trends】

1. Discussions on the Review of the Energy Policies

On April 11, the new Basic Energy Plan was approved by the Cabinet. This is the first revision in approximately four years since the Third Basic Energy Plan released in June 2010, and the first since the Great East Japan Earthquake.

2. Developments in Nuclear Power

Although nuclear power is positioned as a "fundamental baseload source of electricity" in the Basic Energy Plan, there are still various issues and uncertainties concerning restarting the power plants, including the timing.

【Global Watch】

3. A View on the Fifth Assessment Report of the IPCC

All three Working Groups have now published their Fifth Assessment Reports. The international community should now review the Reports in detail, and determine and implement a highly feasible framework.

4. Russia Watching: Tensions Rising in Ukraine as Presidential Election Approaches

As tensions rise in eastern Ukraine between the provisional government and the armed pro-Russian groups, international concern over the military intervention of Russia is increasing.

5. EU Watching: RWE Upstream Subsidiary Purchased by a Russian Investment Fund

Despite the Ukraine issue, Europe and Russia are likely to remain mutually dependent concerning energy.

1. Discussions on the Review of the Energy Policies

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On April 11, the new Basic Energy Plan was approved by the Cabinet. This is the first revision in approximately four years since the Third Basic Energy Plan released in June 2010, and the first since the Great East Japan Earthquake.

Principles for energy policy and viewpoints for reform

The importance of 3E+S, which is the basic stance of the energy policy, the international perspective, and the economic growth perspective must be confirmed. We must establish an energy supply-demand structure that can ensure a stable balance between supply and demand on a long-term basis. A "multi-layered, diversified and flexible supply-demand structure of energy" must be created.

Basic policy direction for each energy in the primary energy structure

Renewable energies: An "important low-carbon domestic energy source", which will continue to be actively introduced following three years of introduction at the maximum pace. The development of these energies must be kept compatible with economic efficiency, taking into account the new industries and jobs that they will create.

Nuclear: A "fundamental baseload source of electricity", which will be restarted if judged to comply with the toughest regulatory requirements in the world. The dependency on nuclear will be minimized, and the amount of nuclear to be secured will be determined considering supply stability, cost reduction, climate change, and the need to maintain the skills and human resources needed to ensure safety.

Coal: An "energy source which will continue to be used while reducing its environmental impact". The entire global community must strive to use coal while reducing its environmental burden, by introducing efficient technologies not only in Japan, but also in other countries.

Natural gas: An "important energy source with a growing role". It is important to avoid depending on it excessively as a power source, and to reduce its cost. As measures for climate change, we must steadily promote the shift to natural gas by diversifying its methods of utilization, and build a system that is more robust in an emergency.

Oil: An "important energy source which will continue to be used". It is essential to diversify its supply sources, cooperate with oil-producing countries, strengthen risk management such as by stockpiling, use crude oil more efficiently, diversify transportation fuels, and promote the use of oil-fired thermal power generation as an adjustment power source. In addition to strengthening the supply network, efforts must be made to reinforce the business base of the oil industry.

LP gas: A "clean, distributed-type gaseous energy source". Its supply system will be strengthened by steadily stockpiling it and strengthening the core filling stations. Its cost must be reduced to diversify its methods of utilization.

The new Plan may appear to be focused too heavily on power generation mix, but we frankly appreciate that in the process of formulating and implementing the policies, the emphasis on 3E+S in the future energy policy was reconfirmed. The key issue now is to set promptly quantitative targets for the energy mix based on the restart of the nuclear power plants, introduction of the FIT system, and the international discussions on climate change. The final step is then to take action.

2. Developments in Nuclear Power

Tomoko Murakami, Manager
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Despite the Cabinet approval of the Basic Energy Plan that positions nuclear power as a "fundamental baseload source of electricity", there are still no prospects for restarting the power plants. This includes Sendai Units 1 and 2, which were selected by the NRA as "prioritized review targets", having cleared most of the main issues.

In its electricity supply and demand outlook for this summer released on April 17, Kyushu Electric Power Company stated that "if the nuclear power plants remain shut down, and if Matsuura Thermal Plant Unit 2 (J-POWER) cannot resume generating electricity, the supply-demand situation of electricity is likely to become tighter than last summer". Even Sendai Units 1 and 2, which were selected for prioritized reviews and for which meetings are being held more often than other plants, cannot be counted on by the power company as a reliable power source, as they are taking longer than expected to apply for amendment, and it is not clear what kind of "homework" they will be given in the process of preparing the review documents. The prospects for completing the reviews are equally uncertain for Shikoku Electric's Ikata Unit 3 and Hokkaido Electric's Tomari Unit 3, which have gone through as many hearings as Sendai.

On May 15, the Japan Atomic Power Company commented that the municipalities consented to the compliance review application for Tokai Daini Nuclear Power Station. Meanwhile, Tohoku Electric is preparing to apply for a compliance review of Higashidori Unit 1, which is currently undergoing a review of its on-site fracture zones. To date, it had been vaguely assumed that the power plants would be restarted in the order of application and the frequency of review meetings. However, if additional factors such as the frequency and level of the NRA's requirements, the views of the municipalities and the decisions by their chiefs are to be considered, the order and timing of restarting the power plants, including those preparing for application, will become even more uncertain.

One other key point of the Basic Energy Plan concerning nuclear policy is the position of the nuclear fuel cycle. Stating that "recycling and the plutonium-thermal project will be promoted" while also mentioning that "flexibility must be ensured in the project in the medium to long term", the Plan has committed to promoting reprocessing and the plutonium-thermal project, at least for the time being. However, a clear long-term strategy has not yet been stated.

The Rokkasho Reprocessing Plant of Japan Nuclear Fuel Limited, which is a central player in the reprocessing policy, is only four months into the compliance review and cannot yet predict when it will be allowed to restart. Further, the fast breeder reactor Monju, which the Plan states will be used to reduce the amount and toxicity of radioactive waste, is still undergoing a review of its on-site fracture zones, while its operator, Japan Atomic Energy Agency, is undergoing an organizational restructuring, taking expert reviews. Merely stating "promotion" may not be a sufficiently clear policy both inside and outside Japan. The government should present, both within the country and abroad, the status and plans for the nuclear fuel cycle, including a concrete vision on the use of domestic fuel cycle facilities such as Rokkasho Reprocessing Plant and MOX Fuel Fabrication Plant, Mutsu Interim Storage Facility and Monju, and the progress of studies on technological alternatives to direct disposal and geological disposal.

3. A View on the Fifth Assessment Report of the IPCC

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On April 15, WG3 (on the limitation or prevention of greenhouse gas emissions and assessment of activities that mitigate climate change) of the IPCC (Intergovernmental Panel on Climate Change) published its Fifth Assessment Report, the last one to do so following WG1 (assessment of the physical scientific knowledge on the climate system and climate change) and WG2 (assessment of the vulnerability of socio-economic and natural systems to climate change, negative and positive impacts of climate change, and options for adapting to it). Hereafter, the work on releasing the Synthesis Report (SYR) scheduled in October will get underway.

It is difficult to understand the Assessment Reports of the three WGs in their entirety as they run to several thousand pages, but their key points can be gleaned from the Summary for Policymakers (SPM) published together with the Reports. In the process of assessment by the latest scientific analysis, the relationship between the progress of climate change and human activities is identified (WG1), the impact of climate change appearing in various areas and the concerns over their future aggravation are shared (WG2), and the measures and scenarios for mitigating or avoiding the impact of climate change are being assessed (WG3).

In particular, the WG3 Report has attracted much attention as it may influence the course of future international negotiations on climate change countermeasures. The "less than 2 degrees Celsius scenario", which is the focus of international efforts shared by the current international negotiations (Cancun Accord), aims to reduce global GHG emissions by 40–70% from 2010 levels by 2050, and further down to almost zero or negative by 2100. The scenario states that to achieve this, a drastic shift in energy systems and the progress in technological development are needed.

The role of the IPCC is to provide the physical scientific knowledge as a basis for formulating climate change policies, and it is now the responsibility of the international negotiations and policymakers to decide how to interpret and use this knowledge. However, many of the scenarios cited in the WG3 Report are based on the "less than 2 degrees Celsius scenario", whose feasibility contains many uncertainties such as technological progress and concerted efforts by the international community. It would be pointless to create even greater confrontation in the international negotiations by promoting a radical scenario, and equally pointless to water down the measures due to concern over its economic impact, thus hampering sustainable climate change countermeasures in both cases. The international community should review the Reports in detail, and determine and implement a highly feasible framework.

4. Russia Watching: Tensions Rising in Ukraine as Presidential Election Approaches

Shoichi Itoh, Manager, Senior Analyst
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As Ukraine threatens to descend into civil war, relationships between Russia and the international community have deteriorated. On April 17, the provisional Ukrainian government, Russia, the EU and the US met in Geneva and issued a joint statement that includes refraining from violence, intimidation or provocative actions, disarming illegal armed groups, and assistance by the OSCE (Organization for Security and Co-operation in Europe) Special Monitoring Mission in implementing these measures to defuse the situation. However, the joint statement has had almost no effect whatsoever.

Completely ignoring the provisional Ukrainian government's offer not to prosecute any rebels who disarm and surrender, pro-Russian groups continue to fly the Russian flag and occupy official buildings in the three main provinces of east Ukraine (Donetsk, Lugansk and Kharkiv). Meanwhile, Russia continues to mass 40,000 troops on its border with Ukraine, and shows no sign of listening to the criticisms by NATO and the West.

On April 18, at an annual live TV dialog with the public, President Putin clearly indicated the possibility of military intervention in Ukraine if the interests of Russia are threatened. Further, on 23 April, Foreign Minister Lavrov stated that "Russia will retaliate against any direct attack on its legal interests in Ukraine."

As Ukraine heads toward the presidential election on May 25, tensions are likely to rise further. One of the reasons is that the referendum on the state structure, which may be held concurrently with the presidential election, is not likely to result in a majority in favor of the federal system that Russia and the Russia-aided pro-Russian population in eastern Ukraine support, as Acting President Turchynov has suggested. There are two reasons: (1) Russian residents in Ukraine account for no more than 30%, even in the three main cities in eastern Ukraine, and (2) Pro-Russian residents do not have a single voice, and not everyone wants de facto annexation to Russia.

The Ukraine situation is having a growing negative impact on the Russian economy. On March 27, former Finance Minister Kudrin estimated that in 2014, as much as 160 billion dollars of Russian capital could flee the country (70 billion dollars already fled in Q1). On the same day, Economic Development Minister Ulyukaev estimated that GDP growth for 2014 could fall to 0.8% (ministerial announcement prior to the crisis was 2.5%), but the World Bank expects that it could drop to as low as minus 1.8% if the West imposes additional sanctions against Russia.

The Japan-US joint statement announced on April 25 during President Obama's visit to Japan emphasized that the two countries will take coordinated measures on the Ukraine issue. How will Japan position Russia in its vision for the Asia Pacific? Japan's strategy towards Russia is at a crucial point.

5. EU Watching: RWE Upstream Subsidiary Purchased by a Russian Investment Fund

Wataru Fujisaki, Senior Researcher
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In March 2014, German public utility RWE signed a basic agreement to sell its upstream unit subsidiary RWE Dea to Letter One Group, a Luxembourg-based investment fund, for 5.1 billion euros. Letter One Group is owned by the Russian oil and gas magnate Mikhail Friedman, who is purchasing RWE Dea with part of the funds obtained by selling off 50% of its stake in TNK-BP, a joint venture with BP, to Rosneft for 55 billion USD.

In an effort to lower its dependence on Russian gas, the EU had been seeking to import Central Asian gas through the Southern Gas Corridor by advocating the Nabucco Pipeline Project, and European companies too had been moving to acquire interests in Central Asia. RWE Dea had acquired an exploration license for the Turkmenistani waters of the Caspian Sea, and had been planning to bring Turkmenistani gas to Europe through the Southern Gas Corridor. However, the Nabucco Pipeline of the Southern Gas Corridor lost to its competitors, the TANAP and TAP Pipeline Projects of BP (UK) and SOCAR (Azerbaijan), and furthermore, with the sale of RWE Dea, the upstream interests in the Caspian Sea too have changed hands from European companies to Russian funds. Aside from the existing main pipelines through Ukraine and the Yamal Pipeline through Belarus, there are three routes for transporting gas to Europe: the Nord Stream across the North Sea seabed, the South Stream across the Black Sea, and the TANAP-TAP that carries Central Asian gas to Italy through Turkey. As for the gas fields producing the gas that feeds into these pipelines, with the sale of RWE Dea, all gas fields are now Russian except for one, the Shah Deniz Gas Field of TANAP-TAP in Azerbaijan. Thus, the EU is forced to depend heavily on Russia now and in the future for both transportation routes and feed gas; its long-term plans to have its own gas supply route appear to have been dashed.

Amid the intense confrontation between the West and Russia over the Ukraine situation, the West is not acting with a united front. The US speaks tough against Russia, but is reluctant to assist Ukraine directly. In Europe, the UK is following the US, France is standing on the sidelines, and Germany appears desperate to avoid a standoff with Russia, even though it has declared it will assist Ukraine, as reflected by the recent sale of RWE Dea to a Russian fund. Although the West will clearly react to the Ukraine situation, regarding energy, the West and Russia are unlikely to revert to Cold War-style confrontation. On the contrary, the EU might in the long term maintain and even deepen its ties with Russia through the energy trade, led by Germany. Thus, even though the West and Russia appear to be in conflict over Ukraine, we must note that Europe and Russia will remain mutually dependent.

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