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Summary

【Energy Market and Policy Trends】

1. Economic and Energy Outlook of Japan towards FY2015

The IEEJ released its outlook for the economy and the supply and demand for energy for the next two years. The progress in restarting the nuclear power plants will significantly affect Japan's 3E+M (economy). It is necessary to maintain both the strictness and speed of the assessment.

2. Developments in Nuclear Power

The draft review report for Sendai Units 1 and 2 was submitted. Though challenges remain to be solved, progress is expected to be made. The Nuclear Energy Subcommittee is continuing to discuss how the optimum generation mix should be set.

3. Outlook for the Oil, Gas and Coal Markets

The Brent price is expected to be \$110/bbl for the latter half of 2014, and \$105/bbl for the whole of 2015. The average LNG import price is estimated to be approximately \$16/MMBtu for 2014 and \$15/MMBtu for 2015. The spot price of general coal will rise to around \$80/ton from the winter demand season, and that of coking coal will rise to around \$130/ton toward 2015.

【Global Watch】

4. ME Watching: Fighting Continues throughout the Ramadan Fasting Month

The fighting in many parts of the Middle East did not stop throughout the month of Ramadan. The international community is failing to deal with the civil war in Iraq, where extremism and the "Islamic State" are spreading. The time period allocated for nuclear talks with Iran was extended.

5. Russia Watching: Is There a Way Out for Russia?

The international community is stepping up its criticism of Russia following the shooting down of a Malaysian aircraft by an anti-aircraft missile by pro-Russian militants. There are growing doubts about President Putin's ability to control pro-Russian forces in Ukraine.

1. Economic and Energy Outlook of Japan towards FY2015

Akira Yanagisawa, Senior Economist, Manager
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Energy Data and Modelling Center

Impacts of restarting nuclear power plants – big advantages are expected from a swift completion of the rigorous assessment

The IEEJ released its outlook for the economy and the supply and demand for energy for the next two years. Restarting the nuclear power plants will significantly affect the economy, environment and security. Restarting 19 units by the end of FY2015 (Nuclear Mid-level Case) would reduce the cost of fossil fuel imports by JPY1.5 trillion compared with if no plants are restarted. This would boost GDP by approximately 0.2%. Power generation costs would decrease by JPY1,700/MWh, reducing the risk of a further rise in electricity tariffs.

(See <http://eneken.ieej.or.jp/data/5578.pdf> for details.)

Macro economy and the supply and demand for energy

For FY2014, the Japanese economy will grow by 0.9% owing to strong private non-residential investments and an increase in exports, despite the impact of the consumption tax raise. The trade deficit will shrink to JPY12.1 trillion. For FY2015, the economy is expected to grow by 1.6%, faster than its potential growth rate, as private consumption picks up due to the improving labour environment, as well as exports and private non-residential investments.

The primary energy supply will slip slightly in FY2014 for the first time in two years due to the economy, energy conservation and climate factors. The supply will remain substantially almost flat in FY2015. The energy self-sufficiency rate will return to 13% when the nuclear power plants are restarted. All forms of fossil fuels will decrease, with oil falling below 200 Mtoe for the first time since FY1969.

Similarly, final energy consumption will also slip slightly in FY2014, and remain flat in FY2015. Consumption by industry will grow as production increases. Also, consumption will stop sliding in the buildings sector, after falling continuously for four years since the earthquake disaster. Regarding transportation, consumption will continue to decrease by just under 1% each year as fuel efficiency and transportation efficiency continue to improve.

Electricity sales (by electric utilities) will grow for the third consecutive year, driven by large industrial users in manufacturing sector. The sales for lighting contract (mainly for residential), which continued to fall after the earthquake disaster, will rise year-on-year from the third quarter of FY2015. City gas sales (general gas utilities) will post a record high for the fifth consecutive year. The structure in which industry drives total sales remains unchanged. Residential will continue to fall slowly in the long term, except for the rebound from the extreme heat last summer. Sales of fuel oil will clearly decline and could even fall below 180 GL in the next two years after almost half a century. Gasoline sales will be in the 53 GL level in

FY2015 for the first time since FY1996 when Act on Interim Measures concerning the Importation of Designated Petroleum Products was abolished.

Energy-related CO₂ will fall for the first time in five years to below 1,200 Mt due to the drop in oil and coal consumption in FY2014, although natural gas consumption will post a record high before decreasing by a greater amount in FY2015 as the nuclear power plants are restarted. However, while energy consumption will be lower than before the earthquake, CO₂ emissions will remain high.

Renewable electricity – Renewable power generation capacity to reach 55 GW; cumulative burden for authorized capacity to reach JPY44 trillion.

By the end of FY2015, the capacity of renewable power plants in operation, mainly megasolar plants, will reach 55 GW due the favorable purchase price. If the entire authorized capacity of 89 GW (of which 71 GW is solar PV) as of the end of March 2014 goes into operation, the burden on consumers for 20 years will reach a total of JPY44 trillion, which is equivalent to a rise of JPY2,500/MWh (10% and 14% for residential and for industrial, respectively).

2. Developments in Nuclear Power

Tomoko Murakami, Manager
Nuclear Energy Group, Strategy Research Unit

On July 16, the Nuclear Regulation Authority (NRA) submitted a draft review report on the result of the safety review of Kyushu Electric's Sendai Units 1 and 2, which was being performed ahead of others, and opened the report for technical opinions (public comment) until August 15. While we must monitor the opinions received and how the NRA responds to them, it would appear that the reviews may finally move ahead, which is a significant step.

However, it is still not clear when the nuclear power plants will be restarted as it depends largely on the progress of reviewing the detailed designs of equipments and operating regulations, approval by the host community and surrounding municipalities, and the formulation of an evacuation plan. The government must clearly indicate to the host community residents and the general public the significance of nuclear power and the plans for restarting them, and gain their understanding, but it is also important for the NRA, as the decision-maker on technical aspects, to finalize the review reports as soon as possible for the plants that follow Sendai. There are several plants other than Sendai Units 1 and 2 whose issues have been fully discussed at the hearings and review meetings so far. In drafting their review reports, the NRA must efficiently discuss matters and make decisions by focusing only on those matters that are essential for assessing the safety criteria of the power plants.

In parallel with the compliance reviews, the reviews of the on-site fracture zones are also progressing. On July 11 and 18, the second and ninth expert meetings on the investigation of on-site fracture zones were held for Shika and Higashi-dori Nuclear Power Plants, respectively. In both reviews, the operators again claimed that the fracture zones are not active, to which the experts once again pointed out the lack of evidence proving that they are not active. As it is a "probatio diabolica" to completely prove logically the absence of activity, the process of reviewing the fracture zones needs to be reconsidered based on whether it is scientifically rational to unilaterally require the operators to prove "inactivity".

The policy discussions for formulating the optimum generation mix for the future are also ongoing. On July 11 and 23, the second and third meetings of the Nuclear Energy Subcommittee were held. At the second meeting, two experts summarized the discussions so far on the direction of nuclear power in Japan. The third meeting discussed the challenges for decreasing the dependency on nuclear power.

As the challenges for decreasing the dependency on nuclear power, in addition to securing the technology, personnel and funds for decommissioning, the impact on the economy and employment in host communities, and the concerns over the delays in disposing of spent fuel, the following fundamental point was indicated: "The Strategic Energy Plan states that 'nuclear power is an important base load power source' but also that 'the dependency on nuclear power should be reduced'. It further states that supply stability, climate change countermeasures, and human resource development must also be promoted. The relationship between all these factors should be clarified". Further, a presentation by an American expert at the second meeting indicated that "it is important for Japan, which faces geopolitical uncertainties, to improve its self-sufficiency rate and develop an optimum generation mix that does not much depend on fossil fuels". Based on the lessons of Fukushima, it is necessary to reconsider the handling of nuclear dependency in Japan, which sets "3E" as the core policy.

3. Outlook for the Oil, Gas and Coal Markets

Yoshikazu Kobayashi, Manager, Oil Group, Fossil Fuels & Electric Power Industry Unit

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International oil prices are expected to be approximately \$110/bbl for Brent crude and \$108/bbl for Dubai crude in the latter half of 2014, and \$105/bbl and \$103/bbl respectively for the whole of 2015. The factor most likely to affect future prices is the situation in Iraq. Though near-term oil exports have not yet been directly affected, Iraq's governance as a nation is threatened, which could result in a major disruption to Middle East oil production if the situation in northwestern Iraq to eastern Syria worsens considerably and the unrest spreads to surrounding countries. On the other hand, the recovery of oil exports from Libya could put downward pressure on prices. Libyan oil is of high quality in the European market like Brent crude, and thus a rapid recovery of production would significantly lower the international oil price indexes.

In Japan, the eighth meeting of the Petroleum and Natural Gas Subcommittee was held on June 23 to finalize the interim report. The report included detailed plans for preparing an emergency response system based on the experience from the earthquake disaster, and called for collaboration throughout Asia, particularly for storage. The contents of the report will be examined in detail in the discussions on the energy mix which will start this autumn.

Regarding natural gas, the average LNG import price of Japan is expected to be approximately \$16/MMBtu for the whole of 2014, and approximately \$15/MMBtu for the whole of 2015. The spot LNG price is expected to be weaker than the oil-linked, long-term contract price as short-term supplies remain abundant worldwide. The restarting of Japan's nuclear power plants must be monitored, as it could greatly affect spot LNG prices in the future. The demand for LNG will continue to rise moderately worldwide due to the increase in Asia, particularly China, despite the continued sluggishness in Europe. The greatest uncertainty in terms of demand is competition with coal for power generation. On the supply side, the supply of LNG is likely to be sufficient to meet the demand despite supply disruptions and a great drop in exports in Egypt and Angola, as several new projects are due to start production in Indonesia and Australia.

Regarding coal, the spot price for steam coal is expected to rise before the winter demand season, and continue to rise in 2015 overall, despite seasonal fluctuations, to return to the \$80/ton range. The price of coking coal is likely to pick up in early 2015 as oversupply eases, and to return to the \$130/ton range. The demand for steam coal will continue to expand in Asia due to the growth in India and the ASEAN countries, despite slowing growth in China due to measures to prevent air pollution and improvement in efficiency. Regarding the demand for coking coal, the Asian market is not likely to continue to expand at the same pace despite the growth in India, as demand slows down in China. On the supply side, there will be enough supply to meet the demand although the closing of coal mines is accelerating, as new production capacity is being added. Due to the growth in demand, particularly in Asia, the oversupply is likely to cease eventually.

4. ME Watching: Fighting Continues throughout the Ramadan Fasting Month

Koichiro Tanaka, Managing Director &
President of JIME Center

The fighting that is causing uncertainty in many parts of the Middle East did not stop even throughout the Muslim fasting month of Ramadan. The conflicts will intensify and the situation will worsen from early August following the Eid al-Fitr festival celebrating the completion of fasting.

As feared, the Islamic State of Iraq and Levant (ISIL) is forcing radical policies based on a very narrow interpretation of its religion in cities such as Mosul, which the ISIL has put under the control of its “Islamic State (IS)” that encompasses Sunni areas of Iraq and Syria. The destruction of various historic remains associated with the rich history of Iraq and forcing non-Muslims to convert are only a part of the policies of the ISIL, which has declared its intention to purge the Shi’ites as apostates. The situation is worsening, with minorities who refuse to convert to Islam being forced to either pay a poll tax or flee to escape execution. The IS, launching military attacks also in northeastern Syria, is committing atrocities as cruel as those of the internationally-condemned Assad forces. While the international community as a whole is reluctant to intervene in the civil war in Iraq, which some Sunni states have intentionally mislabeled as a “sectarian conflict,” the U.S. has launched surgical airstrikes against IS positions that threaten the Yazidi minority as well as the Kurdish center city of Erbil.

To overcome the situation and political confusion, the Iraqi parliament convened on July 1 and has elected a Sunni as the new parliamentary speaker and a Kurd as the new president. However, with Prime Minister Maliki determined to stay in his current role while other factions go against him, the country has not yet established a new administration with sufficient force and legitimacy to counter the IS. Grand Ayatollah Sistani, the highest-ranking authority of the Shia branch of which Maliki is a member, is attempting to quickly normalize the situation by warning those who cling to power, but is yet to produce any results. The political power struggle is set to continue throughout the summer.

The armed conflict between Israel and Hamas triggered by the murder of three Jewish youths in the West Bank has claimed many civilian lives in Gaza. As Egypt and the US have long ceased to be effective mediators, and with Hamas, which denies involvement in the murder, setting conditions for a ceasefire, the air strikes and land invasion by the Israeli forces and the retaliatory rocket attacks by Hamas are caught in a vicious circle. The ruthless attacks on Gaza, including mass retaliation against its residents, are a serious violation of international law and are fueling anti-Israel sentiment not only in Gaza but also in the West Bank. Any short-lived ceasefire agreement may not bring normalcy to Palestine and Israel.

Iran and the West held intensive nuclear talks in order reach a comprehensive long-term agreement before the interim agreement expired, , but instead agreed on a four-month extension of the negotiations to November 24. Armed conflicts continue in Libya, where the battle over the capital Tripoli intensified and has forced the closure of Tripoli Airport.

5. Russia Watching: Is There a Way Out for Russia?

Shoichi Itoh, Manager, Senior Analyst
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On July 17, Malaysia Airlines MH17 heading for Kuala Lumpur from Amsterdam was shot down while flying over pro-Russian-ruled Donetsk in eastern Ukraine, killing all 298 passengers and staff on board. From the circumstantial evidence found so far, the plane appears to have been shot down by an anti-aircraft “BUK” that Russia had provided to the pro-Russian militants. President Putin initially held the Ukraine government responsible for failing to reach a ceasefire with the pro-Russian forces and hence causing the tragedy, but is now attracting severe international criticism and being forced to cooperate with the investigation into the cause.

On July 21, the UN Security Council emergency meeting on Ukraine unanimously adopted a resolution demanding that the pro-Russian militants allow the international investigation team unlimited access to the crash site. The pro-Russian militants had initially blocked the recovery of bodies and the activities of the team, but on the 22nd, finally agreed to allow the bodies to be sent to Holland and to hand over the black box of MH17 to the Malaysian government. However, the militants continue to obstruct the international investigation team led by Holland and to fight the Ukraine government forces. Western countries are demanding that President Putin exercise his influence over the pro-Russian forces and help fully investigate the disaster, but the Russian government is continuing to supply weapons to the forces while pretending to assist the international investigations.

The day before MH17 was shot down, the US had announced additional economic sanctions against Russia targeting four major energy companies, eight military companies, and the Bank of Foreign Economic Activity. Meanwhile, the EU had held an unofficial summit and agreed to tighten economic sanctions against Russia, which is reluctant to help stabilize the tense situation in eastern Ukraine. However, the EU countries are not united in their application of sanctions: France is determined to go ahead with the contract to sell its Mistral-class amphibious assault ship (1.2 billion euros) to Russia, and the flourishing financial markets of the UK owe much to Russian money. In general, however, President Putin’s initial goal to drive a wedge between the US and Europe is failing.

On July 22, at an interview with the national Information Telegraph Agency of Russia, Alexei Kudrin, former Russian Finance Minister and one of President Putin’s advisors, warned that Russia’s domestic industries will suffer serious damage if its relationship with the West continues to worsen and it once again becomes its “enemy”. There are also growing doubts as to whether President Putin can actually control the pro-Russian forces in eastern Ukraine. The Ukraine crisis is a serious problem for both Russia and the West, and the international community should urgently prepare multiple scenarios for a soft landing, including the worst case in which the situation becomes “uncontrollable for everyone”.

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