Session A: Conventional Energy Summaries of Report Contents

In this session, we took a topic centered on discussion of Japan-Russia cooperation relating to fossil fuels, oil and natural gas among them. Substantial amounts of oil, natural gas, and coal are already being imported into Japan from Russia. In Eastern Siberia and the Russian Far East, with large-scale resource development projects and transportation infrastructure installation projects underway, it is expected that Japan-Russia relations will deepen yet further in this area.

Dzambulat Tekiev, Vice Chairman of the Primorsky Territory Legislative Assembly, made an opening statement at the start of the session, followed by reports from seven persons from the Japanese side, and two persons from the Russian side. Below, I summarize the points from each of the respective reports.

Dzambulat TEKIEV, Vice Chairman, Primorsky Territory Legislative Assembly, Russia

Friendly cooperation between Primorsky Krai and Niigata Prefecture has a long history, from 1990 on. In Primorsky Krai, moves on the formation of a cluster involving hydrocarbon transportation and high-level processing are progressing. Transneft, Rosneft and Gazprom are each actively proceeding with large-scale projects. The "Special Sea Oil Port 'Kozmino' " (15 million tonnes annually) has already been operating stably for five years, and its transshipment capacity has doubled via the operation of the second phase facilities. In the current situation, initiatives like this conference to strengthen goodneighborly relations, trust, and mutual understanding between the peoples of our two countries have particularly great significance.

Alexey MASTEPANOV, Deputy Director, Oil and Gas Research Institute, Russian Academy of Sciences

In Russia there is the "Energy Strategy of Russia for the Period up to 2030", which received government approval in November 2009; the Government of the Russian Federation decided on the formulation of a revised version extending the target period to 2035 (hereinafter the "2035 Strategy"), and the revision work has been pursued. It is planned that the 2035 Strategy will reach final government approval by the end of 2014.

The 2035 Strategy differs from the existing strategy on at least two points. First, with the prospect of the medium-to-long-term low growth of the domestic economy continuing, the figures for the production volumes for energy resources have become considerably smaller than for the existing strategy. Second, it has been taken into account that the rate of growth for domestic and external energy consumption will be checked, owing to a variety of factors, such as the improvement of energy efficiency.

In the 2035 Strategy, the development of the oil and gas sector in the Far East and Eastern Siberia is emphasized. For example, the development of oil and gas

fields in the Sakha Republic (Yakutia) and the northern part of Irkutsk Oblast, and the construction of the "Power of Siberia" pipeline, etc., are incorporated within it. The pipeline is not only aimed at exports to China, but also at exporting to other countries including Japan via the Vladivostok LNG plant. However, the enabling of transport of natural gas to Vladivostok is for the second phase of the project onward.

Masumi MOTOMURA, Chief Researcher, Japan Oil, Gas and Metals National Corporation (JOGMEC)

Cooperation in the oil sector between Japan and Russia has a century-long history. Japan had been carrying out oil-field development on Sakhalin since before World War II. Currently "Sakhalin I" and "Sakhalin II" are in operation. The Japan National Oil Corporation (JNOC; now JOGMEC) undertook joint studies with the Russian side from 1995 to 2001 on the hydrocarbon resources of Eastern Siberia. Based on these, JOGMEC and the Irkutsk Oil Company (INK) jointly carried out survey work from 2008, and actual oil fields have been discovered. Furthermore, we are also conducting joint studies with Gazprom Neft.

Russia's share of Japan's oil imports will probably increase to a level of 10% in either 2014 or 2015. Consequently, we anticipate that the share of crude oil from the Middle East will decrease from 89% to the 81% level.

Nobuaki AOYAMA, Chairman, Natural Gas Infrastructure Development and Utilization Committee (NIDUC), Japan Project-Industry Council (JAPIC)

The import of the setting-up of NIDUC is the undertaking of examination of and proposals for measures aiming toward the stable supply of natural gas to Japan, the securing of a competitive price, and its efficient utilization. We are conducting investigation of how we should develop the infrastructure to that end and also how to make practical use of natural gas.

According to the joint research executed by research institutions in both Japan and Russia, the costs (excluding export tax) in the case of transporting natural gas via pipeline from Sakhalin to Japan are below those for other methods of procuring LNG, etc. With the construction of the pipeline, a win-win relationship is possible for Japan and Russia both. There are various challenges, but the pipeline is an option which should actively be given consideration.

Alexey LUKYANOV, Director, INK-Sever

The Irkutsk Oil Company (hereinafter "INK") was established in 2000. Currently, it holds the development rights for 19 blocks in Eastern Siberia and Yakutia. Japan-Russia joint-venture companies with JOGMEC (INK-Sever and INK-Zapad) are undertaking projects in three of those. They are proceeding with oil-field development in four localities in total for those three blocks. In 2013 Itochu and

INPEX Corporation participated in the INK-Zapad project. We anticipate that the cooperative relations between our company and our Japanese partners will expand and continue in the future too.

Kiyoshi YAMAZAKI, Deputy General Manager, Fuels Department, Thermal and Nuclear Power Division, Tohoku Electric Power Company Inc.

Our company's power supply configuration changed greatly between that to fiscal year 2010 and that since fiscal year 2011. We made up for the portion when nuclear power generation was halted with LNG and oil. We had been procuring approximately 3 million tonnes of LNG on a long-term contract basis before the earthquake disaster. For the increased volume after the earthquake disaster, we have been procuring LNG centered on short-term spot prices from Sakhalin II and other sources with which we have long-term contracts. The long-term contract with Sakhalin II is for a 20-year period from fiscal year 2010, but the quantity will increase successively, and grow to 420,000 tonnes from fiscal year 2016 on. We have been procuring approximately 200-300,000 tonnes of coal from Vostochny Port and the port of Vanino, with Russia's share in the volume of coal procured in fiscal 2013 standing at 3%.

As Russia is close to Japan and has abundant resource reserves, the potential to be able to combine stability, economy and flexibility can be anticipated. We consider Russia a country which can become an important supply source for resources for Japan.

Toshihisa SATO, Deputy Director, Joetsu Thermal Power Station, Chubu Electric Power Co., Inc.

The Joetsu Thermal Power Station is located on the Sea of Japan coast which is outside of our company's supply area. We constructed the power station here in order to strive for disaster countermeasures, including for earthquakes, the stabilization of power transmission lines, and the diversification of fuel supply routes. The power station is a combined cycle electricity-generating facility, and went into full operation in May 2014. To date we have been receiving LNG from four overseas routes, and the amount received from Sakhalin II among them has a cumulative total of 450,000 tonnes. We are planning the procurement of 2 million tonnes in total annually, from 2014 on. We would like to strive for the expansion of sales projects by way of tanker lorries, using it not just as an electricity generation project, but as an LNG shipment hub.

Satoru SAWADA (read on his behalf by Seita SHIMIZU), General Manager, Corporate Planning Department, Tokyo Gas Co., Ltd.

The Japan Gas Association would like to increase, by 2030, the volume of gas cogeneration to 30 million kW, and residential fuel cells to 5 million units. In addition, they would like to put into wider use large natural gas tankers for transportation between cities, and increase the number of vehicles in 2020 to just under three times that at present,

and more than 10-fold in 2030.

As for Tokyo Gas, we have set a goal of increasing the volume of gas sales from 14.7 billion cubic meters to 22.0 billion cubic meters by 2020. In order to realize this, the price is important. If the gas price is not reasonable, then the new technology won't proliferate. Within our company's procurement strategy, we have developed the three kinds of diversification of: "diversification of supply sources"; "diversification of contract conditions"; and, "globalization and diversification of the LNG network". We are procuring 10% of the total from Russia. Now procurement is as LNG, but we regard it necessary to continue considering an integrated portfolio, including via pipeline from Russia.

Masanori Suzuki, Director and Executive Officer, JGC Corporation

Worldwide today, LNG projects totaling 777 million tonnes have been planned, but it is widely held that only 134 million tonnes within that can actually be realized. This company is participating in the construction work for the LNG plant on the Yamal Peninsula in Russia. In the case of LNG projects, transportation distance is also an important factor, and the closeness of Sakhalin is an advantage in terms of transportation costs. Transportation to Japan via small-scale LNG tankers is conceivable, if from Sakhalin. There are also moves to make practical use of LNG as fuel for cars and ships, and we are coming to a time where we should investigate new business models.

Our company would like to continue furthering cooperation with Russia in sectors other than LNG too, including plans to establish a vegetable plant in Khabarovsk Krai

Kazumasa Miyazawa, General Manager, Natural Gas Division IV, Energy Business Unit II, Mitsui and Co., Ltd.

The Sakhalin II project is currently producing a daily volume of 115,000 barrels of crude oil, and 11 million tonnes of LNG annually (2013 results). As current destinations for sales, 80% goes to Japan and 20% to the ROK, and Northeast Asia occupies an extremely important position for the project. In addition, as Japan is importing approximately 10% of its LNG from Sakhalin, it is important from Japan's perspective as well. With the fact that more than a fifth of the global trade volume for natural gas is produced in Russia, it is no exaggeration to say that Russia holds an important key for the next generation global energy-supply balance.

At our company, we are engaged in the expanding business of Sakhalin II. Other than that, we will continue developing Sakhalin III, and further expanding frontier-region business in the Far East of Russia and Eastern Siberia, etc., including LNG in Vladivostok.

ARAI, Hirofumi Senior Research Fellow, Research Division, ERINA [Translated by ERINA]