

## Event Report on the 79th IEEJ Energy Seminar

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On 4 March 2015, a briefing session on " Russian Gas Export Policy - Asia, LNG, Europe: fundamental change post-2014?" was held at the Institute of Energy Economics, Japan (IEEJ). During the briefing session, the 100 or so participants who took part had the opportunity to listen to Professor Jonathan Stern, Chairman and Senior Research Fellow, Natural Gas Research Programme, OIES.

The main points covered were as follows:

One year ago Russia and Gazprom seemed to have significant number of gas export options although Shtokman had been shelved some time earlier. The last year changed everything. Sanctions against individuals close to Putin including CEOs of Novatek and Rosneft, banks and energy companies (Gazprom and Novatek have been sanctioned only by the United States but not by the European Union (EU)), and technology sanctions on the oil sector have had some spill-over effects on the gas sector.

Although no direct sanctions are imposed on the gas sector, Novatek's and Gazprom's ability to raise finance has been limited. No USD finance is available to Novatek's Yamal LNG and Gazprom's projects. Indirect impacts include EU's refusal to negotiate with Gazprom leading to cancellation of South Stream and Gazprom's major strategy change away from downstream investment in Europe.

Gazprom is optimistic on the relatively small Baltic LNG project near Saint Petersburg. But the 2018 target will not be realised. Rosneft has partnered with Alltech at Pechora LNG, although any immediate progress is not expected. As Baltic LNG may be cost competitive based on domestic gas supply, some attention should be paid.

The only possible new project is Yamal LNG - a three train, 16.5 million tonne per year project to be onstream by 2017 - with long-term sale contracts with Gas Natural, Gazprom, Total and CNPC (China National Petroleum Corporation). Financing of USD 27 billion remains the biggest problem, although significant work has been completed. USD 8 billion

has already been spent and another USD 8 billion is budgeted for 2015. Currency remains a big issue as USD financing is not available.

Although the Chinese had been heard to have agreed on providing funds, financing deals have not been heard of. Without progress on this matter, the project may slip by one year to 2018. Questions linger on the third train as the project has not ordered equipment for the facility.

There were two scenarios for Russian gas exports in Asia one year ago. Pipeline sales are considered to be more important as they generate more tax revenues.

Problems over the past year and sanctions have made all LNG export projects doubtful. The first to be postponed has been Vladivostok LNG as Alexei Miller suggested. To reverse the trend potential buyers would have to sign up volumes, which is unlikely under sanctions. The Power of Siberia may not extend beyond Blagoveshchensk.

A third train at Sakhalin 2 may be possible but who is going to purchase more gas from Gazprom on long-term basis under sanctions? While Gazprom's Sakhalin 3 may be the source of gas, the discovery of oil may be a problem, as oil has to be produced first. The company is also reluctant to offer equity other investors.

Rosneft's Far East LNG is impossible to proceed. Although MOUs have been signed with buyers, Rosneft cannot afford the project with ExxonMobil's participation blocked by sanctions. Rosneft is appealing for the pipeline access issue but it will take years.

While there have been strong Gazprom's interests to sell gas to China, lower oil prices have driven the strategy change back into pipeline focus. A major pipeline deal was finally struck along the planned Power of Siberia pipeline. 38 bcm per year supply is expected to start around 2019. The deal is a huge step forward after nearly 10 years of negotiations. Although prices are not unveiled, Miller was quoted as saying that total value was USD 400 billion, translated into a USD 10 - 11 / million Btu range at USD 100 / bbl oil prices.

Gazprom has already ordered the pipe and started building. Surprisingly shortly thereafter Gazprom was in talks with CNPC on the western route. The Russians had wanted the western route first but the Chinese insisted the eastern route. As negotiations are ongoing, a contract could be signed in 2015.

Difficult questions remain in economics of these pipelines calculated in Russian roubles as Gazprom is not intending to import pipes. While USD 60 / bbl oil prices may not make the project viable, at RUB 60 / USD the costs in USD should be much cheaper than those at

RUB 30/ USD. There may be revaluation of the Russian rouble in the future.

Under existing contracts with European customers, at least 100 bcm per year of gas will be sold to Europe until the middle of 2020s even at a take-or-pay level of 70%. 2014 saw a decline of European sales to similar levels between 2009 and 2012 due to price competitiveness.

Important developments were seen in 2014. Gazprom was failing to meet nominations from August to December to restrict reverse flows to Ukraine and support hub prices and eliminate gaming by buyers. But the policy was not successful and now has been abandoned, although still a Polish company is complaining about it.

Gazprom has prolonged renegotiations with nearly all customers. Base price reductions and rebates result in competitive prices. While in 2009 Gazprom's prices were 60% higher than NBP prices, the former were almost equivalent to the latter in 2013, which was a record year for Gazprom. Following the collapse of hub prices in 2014, Gazprom prices were 15% above NBP prices and the company lost its share again.

Among arbitration processes the one against E.ON, Gazprom's single largest customer, is the most important one, the outcome of which is waited for by other customers. The latest round of arbitration started in July 2014.

The DG COMP case against Gazprom in Baltic countries, Bulgaria and another country may officially find oil-linked prices anti-competitive. While this may be important to lawyers in gas companies, Gazprom is likely to appeal to the European Court of Justice (EU companies cannot appeal a DG COMP decision but non-EU companies can). It will take several years to settle the case at the court. By 2018, around the time the case may be settled, hub prices are expected to be established and the issue will not be relevant any longer.

Falling crude oil prices will bring long-term contract prices much closer to hub prices but it will not be until the third quarter of 2015.

The abandoned asset swap deal between Gazprom and Germany's BASF indicates Gazprom's intention to withdraw from European downstream. Nord Stream two-line expansion plans beyond the first two lines have been abandoned principally because of the EC's regulations on onshore extensions (NEL and OPAL).

In December 2014 Gazprom announced cancellation of the South Stream pipeline and the Turkish Stream plans to replace the former, which consist of four pipelines with 63 bcm per year capacity.

The first line of Turkish Stream is expected to supply the Istanbul area possibly by 2016. According to the announcement the other three lines will extend to the Greek border by 2020. It will be possible to lay the first line by 2017 after completing seabed surveys for the last leg to Turkey, although it is tough to do so in less than two years. It would not be surprising if the schedule slips.

The second line would reverse the Trans-Balkan flows. Problems lie in Lines 3 and 4. Why do they have to go to the Greek border? Line 3 could feed TAP line which is originally expected to be supplied by Shah Deniz Phase 2. In that case Gazprom may ask the TAP consortium to expand the capacity by 12 - 15 bcm per year. There may be two issues, not problems for this: TAP will not be ready until 2019 or 2021; and a lot of gas would reach Southern Italy instead of the North where demand is higher.

Some buyers may say no thank you to the Greek hub and prefer to take delivery on the Russian / Ukraine border. Some other key questions remain including how quickly Gazprom can agree and build how much Turkish Stream capacity. Nobody in Greece knows about the idea of Greek hub. Phasing out Ukraine transit by 2020 is not realistic.

Ironically sanctions has forced changes in Russian gas export policy, which is much more logical and much better: withdrawal from European downstream and focus on direct supply; focus on China / Asia as the most important expansion markets; focus on pipeline exports rather than LNG: Yamal LNG is the only new LNG project; and focus on its second most important market in Europe (Turkey). Where we are is very different from one year ago.

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