

TESTIMONY

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Before the
US Senate Committee on Foreign Relations
Subcommittee on International Economic Policy,
Export and Trade Promotion

Hearing: Energy Supplies in Eurasia and Implications for US Energy Security

September 27, 2005

Mr. Chairman, members of the Committee, I appreciate your invitation to address this hearing entitled “Energy Supplies in Eurasia and Implications for US Energy Security.” My name is Alastair Ferguson and I am the Deputy Executive Director for Gas Development at TNK-BP. TNK-BP is a company jointly owned by BP and Alfa-Access-Renova, and at more than \$10 billion represents the largest single foreign investment in Russian history. We are currently the second largest producer of oil in Russia; roughly the same worldwide level as Chevron and larger than ConocoPhillips.

In addition to presenting my oral testimony, I ask permission to submit a slide presentation on unlocking East Siberian Energy Resources into the record.

My testimony today will center on the hydrocarbon rich region of East Siberia and the role that it can play in helping to meet global energy demands over the coming decades – including, for the United States, to ensure that liquefied natural gas will be available for the West Coast from both Middle East and Asian-Pacific suppliers.

Before starting, let me state clearly that I am here representing a Russian company and that while the main focus of our activities is inside Russia, we also appreciate the importance of engaging with key external audiences that understand the significant role of Russia in global affairs – and that clearly includes this Committee. As part of Russia’s upcoming chairmanship of the G-8 next year, energy will be high on the agenda. My comments here today are in support of these efforts. What I am about to say I, and my senior colleagues, have said many times inside Russia.

Russia’s Resource Base

In today’s tight energy markets, every energy producer is important to global supply. Russia specifically is one of the most important members of that club. The country has the world’s largest proven resources of natural gas, the second largest coal reserves and the eighth largest proven oil reserves.

Yet there are challenges. While Russia remains the largest non-OPEC producer of oil, production rates have been largely stagnant for the past 12 months – and industry analysts expect that trend to continue. Therefore, increasing Russian production will be critical to meeting future global oil demand.

As for natural gas, Russia holds nearly twice the reserves (1694 tcf, 48 tcm) of the next largest country, Iran. In 2004, Russia was the world's largest natural gas producer (57 bcfd, 589 bcma) as well as the world's largest exporter (14.2 bcfd, 148 bcma).

According to the US Department of Energy, however, Russia's natural gas industry has not been as successful as its oil industry at increasing production. The DoE notes that "Russia's energy strategy calls for only modest natural gas production growth (about 1.3%) by 2010." In addition, Gazprom's Big Three major fields in Western Siberia which comprise more than 70% of Gazprom's total natural gas production are now in decline. Interestingly, Russian gas pipeline exports only flow west to Europe – not east to growing Asian markets. Russia has successfully built a sizeable European business supplying (150 bcma) about 27% of current European market demand.

Growing Demand in Asia

Asia has become a principal driver in world energy markets, largely due to China's remarkable consumption growth in recent years. The continuing surge in China's oil demand, which increased by 15%, or almost 1 million barrels per day in 2003 alone, has emerged as a major factor in influencing world oil prices.

As the gap between consumption and production levels in Asia expands, the region's economic powers appear to be concerned that tight supplies and consequent high prices may constrain economic growth. As China, Taiwan, South Korea, Japan and even the US West Coast scramble to meet their growing energy needs the largely undeveloped resources of East Siberia have become viewed as a potential important supply option. The Russian Energy Strategy to 2020 as outlined in 2003 set specific targets to deliver (10 bcfd, 106 bcma) Russian gas into key Asia Pacific markets and open up a new export corridor to the east. The real question is how best to meet this demand.

East Siberian Resources

As discussed above, Russia has significant, proven, energy reserves. Many of its untapped resources are geographically well positioned to supply the growing Asia-Pacific markets – including the United States. Perhaps the most significant undeveloped hydrocarbon region is East Siberia; an area analogous in terms of its energy riches with the Caspian Sea 15 years ago.

The parallels are striking - significant undeveloped resource base (both oil and gas), a need for technology and large-scale financial investment to establish new export

corridors, and a need for key strategic/geopolitical decisions from respective governments. A cursory look at the region indicates that it could, in fact, be much bigger.

First, its size. As you can see from this chart, East Siberia is a massive geographical area; 90-percent of the size of the continental United States. As Senator Hagel knows, Nebraska fits into this region 36 times.

As for its hydrocarbon resource potential, Russian and western geologists have found that the vast majority of the province has the potential to contain oil and gas in truly world-scale quantities. As you can see from this second chart, so far only 4.4-percent of oil producing zones have been explored and only 7-percent of the gas zones – but this has resulted in proven gas reserves of 198 tcf, (5,6 tcm) exceeding those of both the United States and the Gulf of Guinea. The resource base in one field alone, Kovykta (2 tcm) is more than the whole of China's gas resource base. As for oil at the bottom of this chart, 7 billion barrels have been proved but there is the potential for this figure to reach a level (75 billion barrels) equal to all US and Caspian proved reserves combined.

Having spent more than 26 years in the oil and gas industry – and seeing how the advances of technology have taken us to the extremes of our planet in search of resources – I can safely tell you that this is one of the largest remaining undeveloped hydrocarbon basins in the world.

Access to Markets

I believe the next key question, therefore, is how to develop these resources and get them to market.

The Russian government is currently considering options for construction of an oil pipeline to perhaps China and the country's eastern coastline to serve regional energy markets including Japan and the US West Coast.

A proposed gas pipeline, however, is more problematic. Some critics argue that Russia should develop either the Sakhalin gas fields offshore eastern Russia OR the East Siberian gas fields, including the massive Kovykta reserves. They maintain that the current market does not justify development of both fields. We feel strongly otherwise. Let me explain.

While current US West Coast un-contracted LNG demand is relatively small, the amount of expected demand by 2020 is significant (more than 20 billion cubic meters annually), and nearly $\frac{3}{4}$ of that expected supply has yet to be identified. China, on the other hand, is expected to consume nearly 200 billion cubic meters annually by 2020, and nearly 40 percent of that figure – or 5 times as much as US West Coast demand – will need to be imported and has yet to be contracted.

If one adds in the other Asia-Pacific countries, the region as a whole will require 200-250 bcma of gas imports by 2020 to be contracted over the next 15 years. This is double the

current level of LNG imports to the region today and will result in intense competition for resources.

As far as reserves are concerned, the amount of gas reserves in Sakhalin are smaller than Kovykta – and this is especially important when considering that those who favor a Sakhalin OR Kovykta approach see this gas supplying Chinese, Japanese and US West Coast markets. Second, the gas from Sakhalin is “associated gas” meaning that its production rates track that of the oil reserves where it is situated. This means that it rises and falls with oil production and is difficult to guarantee a steady supply of gas to markets.

Clearly, Sakhalin cannot provide for all of these demands alone – nor can Kovykta – but together they can make a major contribution to growing regional energy consumption and can significantly alter the Asia Pacific Region gas balance. In fact, the Asia-Pacific market is so significant that it justifies full-field development and construction of a 4,800 kilometer pipeline from East Siberia to China and onto South Korea – one that would stretch from this Committee hearing room in Washington to Anchorage, Alaska – at a cost of \$18 billion dollars.

Without Kovykta, however, the picture is very different. The fast growing economies of East Asia will act as a sink, pulling in a significant amount of gas production from the other regional producers including the Middle East, Indonesia and Australia. This will result in the US West Coast being severely limited in its supply options – and second, it will drive global prices for natural gas higher because the massive gas fields East Siberia, including Kovykta, will remain stranded.

Timing is another key issue here. China, Taiwan, South Korea and Japan all understand these dynamics extremely well. They are not only looking to the future, but also planning for it. China, for example, is studying options to construct as many as 11 LNG re-gasification facilities along its east and northeastern coasts to take Middle East, Indonesian and Australian liquefied natural gas in the event that the East Siberian gas fields transporting pipeline gas to China are not developed. Even with development of East Siberia, China will need some additional LNG, but without they will need to focus clearly on LNG from other markets.

At TNK-BP, we have spent the last two years studying these issues in detail and spending \$300 million in the process. We have analyzed the various transport options and project costs. We have engaged in extensive research and negotiations on market demand and we have assessed the impact of developing Kovykta and Sakhalin gas at the same time. We feel that we understand these issues well and it is our view that both projects can and should be developed at the same time. There is sufficient market demand in China, Taiwan, South Korea, Japan and the United States to develop Sakhalin and at the same time utilize the natural gas from Kovykta and East Siberia. Let me also add that Kovykta should be viewed as the anchor project around which East Siberia’s gas resources can be developed. East Siberian pipeline gas can supply Asian markets and indirectly free supplies of LNG to be exported to American markets.

In summary this is about getting **the right gas, to the right markets, at the right time.**

Furthermore, we believe that East Siberian energy can be developed in a way that fosters regional cooperation and energy security while maximizing market economic principles by providing China, the US and others, with the energy needed to meet future demand. East Siberian pipeline gas to Asia is also the most cost effective way to export Russian gas – while also providing for important regional development in Russia - and would in turn maximize revenues to Russia. In short, this is a true win-win scenario that will fundamentally change the energy relationship between Russia, China and South Korea, and provide greater energy security to the Asia-Pacific region.

Conclusion

Senator, in summary I would like to reiterate what I said at the start of my comments. I was invited here as the representative of a Russian company that understands the importance of engaging with key external audiences. As part of Russia's upcoming chairmanship of the G-8 next year, energy security will be high on the agenda and my comments here today are in support of these efforts. While East Siberia is a relatively unknown hydrocarbon region, I hope that I have demonstrated today how it has the potential over the coming years and decades to be an important source of supply to world markets if developed in a timely and efficient way.

Thank you for your time and attention.

***Alastair Ferguson**

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Alastair Ferguson joined BP in 1978 as a petroleum engineer and undertook a variety of Drilling and Petroleum Engineering roles in several locations in the UK as well as Egypt between 1978 and 1989. In 1991 he joined the Middle East Business Development Group based in London before being appointed Manager, Strategy and Planning for Asia-Pacific Region (1993–94). In 1994 he moved to Hanoi and over an eight-year period worked in Vietnam, Egypt and China in various Commercial Management and Business Development roles in both Exploration and Production and in Gas and Power with a focus on international gas business development. He moved to TNK-BP in August 2003 to take up the role of Vice President Gas Business Development with specific responsibility for the Company's East Siberian interests, including Kovykta. In June 2005 he became Deputy Executive Director of Gas Development in TNK BP. Education: B.Sc. Hons in Mining Engineering from Strathclyde University (1978), MBA from Warwick University (1990).