

Sakhalin

Sakhalin II emerged from a tumultuous 2006 with a new shareholder – Gazprom – in sight and an agreement in principle with the Russian Government on an amended development budget for Phase 2. These are important steps forward, helping position the project to finish construction, deliver its first LNG to customers in 2008, and meet its environmental commitments and create lasting community benefits.

Sakhalin II is typical of the projects needed to meet the energy challenge – large, complex and often in environmentally sensitive frontier locations. It will add 6% to the world's current LNG capacity, helping meet rapidly growing natural gas demand in Japan, Korea and North America. Completing it successfully will also help Russia demonstrate its continuing ability to host world-class energy projects with foreign partners. At an oil price of \$34 a barrel, federal and local governments will earn an estimated \$50 billion from Sakhalin II over its lifetime.

With the entry of Gazprom, which Shell welcomes, Sakhalin II is expected to continue to provide significant long-term value for our shareholders. Under the terms of the protocol, Sakhalin II will add nearly 100,000 barrels of oil equivalent a day (two-thirds of this natural gas) to Shell's production at its peak and create

the possibility of expanding activities with Gazprom in Sakhalin.

With construction approximately 80% complete, the first priority now is to get the project up and running – on time, safely, and responsibly. All shareholders are fully committed to delivering a world-class project in all respects, including environmental and social performance.

River crossings

A novel and transparent approach has been adopted to protect wild salmon during the construction of the project's onshore pipelines. The pipelines cross about 180 sensitive salmon spawning rivers. Sakhalin Energy requires contractors to use low-impact techniques for these crossings, including working in winter when the rivers are frozen or at low flow. When some contractors failed to do so during the winter of 2004/05, Sakhalin Energy stopped work, improved its controls and sought help from outside experts. Independent observers and environment agency representatives were invited to monitor, first-hand, how each sensitive crossing was made during the winters of 2005/06 and 2006/07. This was a first for the industry. The observers' findings are published on Sakhalin Energy's website.

Most of the sensitive crossings were done in the winter of 2005/06. In addition to the precautions taken during construction, temporary erosion controls were put in place

and grass replanted on steep river banks along the pipeline route to prevent sediment run-off into rivers during the spring thaw. A few rivers had more sedimentation than planned.

However, the likely impact on the salmon spawning grounds is limited and temporary, with the rivers expected to return to normal in two to three years. By the end of April 2007, all sensitive crossings had been completed.

Western gray whales

Most of what scientists know about the critically endangered western gray whales, which spend the summer months off Sakhalin Island, comes from the \$1 million a year research and monitoring programme that Sakhalin Energy and Exxon Neftegas Ltd have sponsored for many years.

Sakhalin Energy has taken advice from independent experts on protecting the whales during offshore construction. The project re-routed the offshore pipeline 20 km further away from the whales' feeding ground, and used advanced acoustics and strict speed limits on vessels to minimise disturbance. Impacts on the whales have been carefully monitored and their population has grown.

In 2006, a long-term western gray whale advisory panel was established. Convened by the World Conservation Union (IUCN), its scientific experts will study the whales' habits and monitor the project's impacts during final construction and operation.

WHAT IS IT?

- The largest and most complex oil and LNG project currently under construction.
- Phase 1 of Sakhalin II began producing oil from Russia's first offshore platform in 1999.
- The \$20 billion Phase 2 includes two more offshore platforms, more than 1,800 km of pipelines and Russia's first LNG plant.
- Construction was approximately 80% complete at end 2006. LNG production is due to start in 2008.
- A joint venture operated by Sakhalin Energy Investment Company Ltd (SEIC).
- Protocol was signed in December 2006 to sell 50% plus one share of Sakhalin II to Gazprom for \$7.45 billion. This will reduce Shell's share of SEIC from 55% to 27.5%, Mitsui's from 25% to 12.5% and Mitsubishi's from 20% to 10%.



Environmental permitting

In October 2006, the Russian environment agency threatened to suspend crucial licences, citing violations of environmental permits. These alleged violations would not have caused long-term environmental damage. Sakhalin Energy developed an Environmental Action Plan which, after further refinement, was re-submitted to the authorities in March 2007 for further review.

Sustainable benefits for local people

Sakhalin Energy is actively helping islanders benefit from oil and gas development. In addition to the \$100 million it contributed to the regional government's Sakhalin Development Fund, \$390 million is being spent upgrading and building new infrastructure on the Island.

By the end of 2006, 17,000 staff and contractors, nearly 7,000 of them local, were working on Sakhalin II. Once construction ends, employment and business activities from the project will be lower.

Nonetheless, Sakhalin II is expected to employ about 2,400 permanent staff and create work for approximately 7,000 local contractors and suppliers. Managing the transition is a priority for the Island and for Sakhalin Energy.

Indigenous people

Large-scale energy developments pose challenges for the Island's 3,500 indigenous people. Sakhalin Energy was the first company to support and work with the democratically elected Sakhalin Indigenous Minorities Council that was formed in 2005 to represent this group. In 2006, the Council, regional government and Sakhalin Energy launched the first five-year Indigenous Minorities Development Plan. Developed with advice from the World Bank, the plan identifies practical ways to mitigate impacts from oil and gas development on indigenous people and promote traditional livelihoods and sustainable businesses. Sakhalin Energy is providing the funding (\$1.5 million) and is a member of the supervisory groups charged with making sure the plan is carried out.

Project financing

Gazprom's entry and the change of shareholdings may alter the way the project is financed. As a result, the European Bank for Reconstruction and Development (EBRD) ended its review of the current funding proposal in early 2007.

[Editor: text finalised 2007, while the joint ventures' negotiations with Gazprom were still underway].

Additional web content:

 www.sakhalinenergy.com



“VOICES”

RIVER CROSSING OBSERVER

For the last two winters, I have worked as one of the independent observers for Sakhalin Energy's river crossing programme. We have monitored the pipeline construction where it crosses ecologically sensitive rivers, have publicly reported on construction practices, and have provided advice to the project's pipeline engineers. We have had unrestricted access to the crossings we are monitoring and freedom to report honestly on what we saw. In my opinion, Sakhalin Energy has taken the challenge of getting its contractors to comply with its standards seriously. Compliance has steadily improved, reducing environmental impacts.

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