

FACTS

NEWSLETTER ABOUT THE NATURAL GAS PIPELINE THROUGH THE BALTIC SEA

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Opening the valve (from left): French Prime Minister François Fillon, German Chancellor Angela Merkel, Dutch Prime Minister Mark Rutte, Russian President Dmitry Medvedev, EU Energy Commissioner Günther Oettinger, and Governor of German Federal State of Mecklenburg-Pomerania Erwin Sellering.

Chancellor Merkel and President Medvedev Among the Guests at the Line 1 Inauguration

The first of the twin pipelines was officially put into operation with a symbolic act last month

Line 1 of the Nord Stream Pipeline project was officially put into operation on November 8, 2011. This milestone was marked with a celebratory event. Approximately 450 high-ranking guests from political and business circles attended the opening ceremony, which was held on the grounds of the pipeline landfall facility in Lubmin, Germany. It is there that the twin 1,224-kilometre long offshore pipelines reach the European mainland.

The guests included Chancellor Angela Merkel, Russian President Dmitry Medvedev, French Prime Minister François Fillon, Dutch Prime Minister Mark Rutte, EU Energy Commissioner Günther Oettinger and top representatives from Nord Stream shareholders. Matthias Warnig, Managing Director of Nord Stream AG, welcomed the illustrious guests and in his speech underscored the important contribution the pipeline will make

toward providing Europe with a secure energy supply: "With the opening of the Nord Stream Pipeline comes a secure, modern and reliable route for the delivery of natural gas from Russia to the European Union."

An Exemplary Project

Chancellor Merkel referred to the Nord Stream Pipeline as "one of the largest energy infrastructure projects of our times." She said this strategic project is exemplary of a secure and resilient partnership between the European Union and Russia. Merkel called the completion of Line 1 a "remarkable achievement" especially considering the sometimes adverse weather conditions faced during its construction. According to Merkel, the project showed good cooperation between politics and business. She went on to say the Nord Stream example shows that "businesses are able to complete complex major projects responsibly in the 21st century."

Russia's President Dmitry Medvedev spoke of reaching a new stage in the partnership with Europe. He explained that although the project's implementation was preceded by a difficult period of negotiations, today it is clear that "this project's objectives are absolutely viable and economical." Medvedev also expressed his certainty that Russia and the EU will continue their partnership. "I am sure that our states, Russia and the EU, will have many new and wonderful, mutually beneficial projects in the energy sector and in other areas. We can tackle all the challenges together. We have a great future," he said.

Right on Time

EU Energy Commissioner Günther Oettinger said that Europe will be a reliable customer for Russia. He also announced that he wanted to tap other capacities in addition to Russian natural gas. He labelled the Nord Stream Pipeline as a key

step toward establishing a pan-European transport network. For Dutch Prime Minister Mark Rutte, the Baltic Sea pipeline comes at precisely the right time. He described its importance as a reliable supply of gas in the coming years for the growing region of Western Europe. French Prime Minister François Fillon called the Nord Stream Pipeline a new "artery". According to him, the pipeline is proof that Europe understands that it must look to the future, and that it is a pioneering achievement in the diversification of energy sources and supply routes. Following the speeches, the heads of state joined the top representatives of Nord Stream shareholders, and gathered around a symbolic valve, which they opened, releasing the first Siberian natural gas transported by Nord Stream into the European gas distribution grid. Line 2 of the pipeline project is currently under construction. It is expected to become operational in the fourth quarter of 2012.

Nord Stream Pipeline Operations and Maintenance

> As operator, Nord Stream AG provides gas transportation capacities via its twin pipelines, which run from Vyborg, Russia to Lubmin, Germany. The operation of the twin pipelines is overseen and coordinated from the company headquarters in Zug, Switzerland.

Up to 55 billion cubic metres of gas can be transported annually through Nord Stream's twin 1,224 kilometre pipelines. Line 1 became operational in November 2011, and Line 2 will be on stream by the last quarter of 2012. Nord Stream operates three pipeline facilities: landfalls in Russia and Germany where the offshore pipelines tie into the onshore connecting pipelines, and a Control Centre in Switzerland, from where the pipelines are monitored and operated. Equipment needed for the operation of the pipelines is located at the landfalls, including isolation and emergency

shut-down valves to separate the offshore and onshore pipelines, as well as a number of sensors to monitor parameters, such as pressure, temperature, gas quality and flow. Regular maintenance, inspection, and testing also take place at the landfalls. Offshore, the pipelines periodically undergo external and internal inspections. The operation of the pipelines is remotely monitored from the Control Centre 365 days a year, around the clock. The operators are in constant contact with the supplier of gas and the receivers to assess the flow of gas on a daily basis and to ensure that the pipelines are operating as planned.

Landfall Facility, Germany

Arriving from offshore in the Bay of Greifswald, Nord Stream's pipelines reach land in Lubmin. When gas arrives here, it is cleaned of potential impurities in special filters, and heated to prevent condensation. At the landfall, incoming and outgoing gas streams are also checked for quality, subjected to official measurement, and adjusted in terms of pressure and volume before being transported further through OPAL and NEL.

Cable Connection

A dedicated cable connection enables operators at the Control Centre to remotely monitor all parameters of gas flow through Nord Stream.

External and Internal Inspection

To guarantee the reliability and safety of the pipelines, they are inspected both externally and internally. These inspections will take place every few years. Soon after completion of Line 1, external and internal inspection took place to provide the baseline data necessary for subsequent inspections.

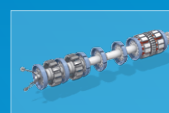


Survey Vessel

Visual external inspection of the pipelines is carried out by a survey vessel using a ROV.

1 ROV

A remotely operated vehicle (ROV) fitted with sensors and instruments including cameras transmits information from the seabed directly to the survey vessel.



2 PIG

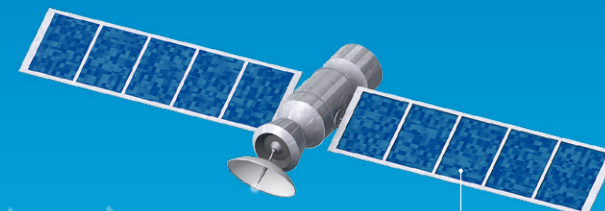
A pipeline inspection gauge (PIG) fitted with sensors is used to monitor the inside diameter of the pipelines. It can detect even minor irregularities.

Line 1 and Line 2

Line 1 of the Nord Stream Pipeline system has been operational since November 2011. Line 2 will be operational in the last quarter of 2012.

Pigging

Internal inspection of the pipelines is performed by PIGs. They are sent from the launcher at the Russian landfall and travel with the gas flow to the PIG receiver at the German landfall.



Satellite Uplink

A satellite uplink enables operators at the Control Centre to remotely monitor all parameters of gas flow through Nord Stream.

Gryazovets-Vyborg Pipeline

The natural gas that will flow into the Nord Stream Pipelines travels from Siberia through this 917-kilometre pipeline.

Nord Stream Twin Pipelines

Each of the pipelines has the capacity to transport 27.5 billion cubic metres of gas a year.

Landfall Facility, Russia

At the Russian landfall facility, in Portovaya Bay near Vyborg, the powerful Portovaya Compressor Station builds the pressure needed to transport gas through Nord Stream. It is managed and operated by Gazprom. The station enables the secure transmission of gas via Nord Stream all the way to Germany without interim compression.

Control Centre, Switzerland

The operation of the pipelines is overseen from the Control Centre at the Nord Stream headquarters in Zug. Operators are in constant contact with the supplier of the gas as well as the receivers to assess the flow of gas on a daily basis. The control system is linked via a dedicated cable and satellite connection to the sensors and valve controls at both landfalls, enabling the operators to monitor all parameters of gas flow.

The Control Centre is equipped with a large video wall display, as well as operator and engineering work stations. The operators not only monitor the gas flow from here, but can also open or shut the pipeline valves with the push of a button when necessary. The facility is manned 24 hours a day, 365 days a year.



IN BRIEF

SEASON'S GREETINGS

Dear FACTS Reader,

Nord Stream would like to thank you for your continued interest in the Nord Stream project and FACTS.

We have included a 2012 calendar in the mailing of this issue. This calendar depicts some of the project's highlights, including logistics, environmental monitoring and pipelaying from 2011. We hope you enjoy it.

The calendar, like all of our publications, has been printed on environmentally friendly paper that is Forest Stewardship Certified. This means the paper stems from well-managed forests.

Nord Stream sends you and your family Season's Greetings, and wishes you a happy and peaceful New Year.

Yours Sincerely,

Ulrich Lissek
Communications
Director



Above, a Pipeline Inspection Gauge (PIG) trap, houses the PIGs that have traveled through the pipeline from Russia.

Operating Safely and Efficiently

Testing and landfall facilities maintenance ensures secure operation

For the Nord Stream Pipeline transport system to function properly, all its components need to be up and running around the clock: the pipelines, the monitoring and control elements in the landfall areas, as well as the equipment in the Control Centre in Zug. Therefore constant monitoring and regular maintenance ensure safe operation of the pipelines during their lifetimes. Currently, Line 1 is in operation and Line 2 under construction. At the landfall facilities, maintenance work is regularly carried out. Inspections and tests are conducted on safety and communications systems, on the power supply system, the fire and gas detection system, as well as the double-gate and shut-down valves. The offshore portion of the pipeline is also periodically inspected, both

internally and externally. The external monitoring is conducted by survey ships equipped with remotely operated undersea vehicles. The internal checks of the pipeline are handled by intelligent Pipeline Inspection Gauges (PIGs). These inspections are conducted every few years, and include checks to measure corrosion, mechanical defects, and the geographical coordinates of the pipeline. The latter indicate any potential shifting of the pipeline on the seabed. The intelligent PIGs are introduced into the gas stream from the PIG launcher at the Russian landfall, and travel the length of the pipeline until reaching the PIG traps in Germany. Due to the high-quality materials used in its construction, and its conservative design, no repair work is expected to be required

over the pipeline's minimum operational lifespan of 50 years. Nord Stream has developed a repair plan in the unlikely event that a pipeline is damaged by any extraneous force. Nord Stream is a member of the Statoil organised Association for Pipeline Repair Work. Through this membership, Nord Stream has access to the requisite facilities and equipment, including the pipeline repair system (PRS) needed for underwater welding work. There are also plans for one of the main contractors to assume responsibility for maintenance during the initial operational phase. If a repair were to be necessary, a maintenance agreement of this type would cover all the required construction work and logistics in order to return to normal operations as quickly as possible.



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