

# Countdown to first gas

Deep Panuke closes in on production mode

By Dawn Chafe

**BY THE TIME** this article is published, the Deep Panuke Production Field Centre should have completed its two-month transatlantic crossing from the Middle East and arrived at the Mulgrave Marine Terminal in the Strait of Canso. Which means the PFC could be in place — 250 kilometres southeast of Halifax — and producing first gas by early October.

**IT'S BEEN A LONG TIME COMING.**

Deep Panuke PFC on heavy lift vessel ready for transport from the Middle East to Nova Scotia. Photo: Encana

## By the numbers

The Deep Panuke natural gas field is located on the Scotian Shelf, approximately 250 km southeast of Halifax, in 45 metres of water. Calgary-based Encana is the project operator of record.

An estimated 632 Bcf (billion cubic feet) of recoverable sales gas will be produced from the site over an eight- to 18-year period (for a mean field life of 13 years). The cost to develop Deep Panuke, not including expenses on a go-forward basis, is an estimated \$960 million. Gas is currently trading on the New York Mercantile Exchange at a rate of \$4.12 per Mcf (June 16, 2011).

The project's jack-up Production Field Centre (PFC) will be tied back to production wells with subsea

flowlines umbilicals. The project will have four producing wells and one injection well.

Approximately 175 km of pipeline will connect the PFC to Goldboro, N.S., where it interconnects with existing Maritimes & Northeast Pipeline facilities.

Repsol YPF, a global energy company headquartered in Madrid, has a contract with Encana to purchase all Deep Panuke gas. They plan to sell the gas to Canadian and U.S. customers. The contract is valid for the life of the project. The terms of that contract have not been made public.

Encana contracted Netherlands-based Single Buoy Moorings (SBM) to provide the PFC and operate it for eight years.

Calgary-based Encana Corporation announced its decision to develop Deep Panuke in 2007. The first public signs of delay came in February 2010 when the company said the natural gas project offshore Nova Scotia would not be operational by the end of the year. At the time, they predicted the field would be in production by the middle of 2011. They've since had to tack on another three months (assuming first gas appears in October).

The schedule is not the only thing that's expanded.

Capital costs, too, have grown – from \$760 million to \$960 million. Weather and construction delays have been blamed for the project's higher price tag. And there's been lots of blame going around.

As reported by allnovascotia.com on April 12, 2011, Single Buoy Moorings (SBM) — the Netherlands-based company contracted to provide and operate the PFC — is suing Encana for compensation related to increased costs caused by platform design changes. SBM had reportedly "designed the platform to reduce CO<sub>2</sub> content of reservoir gas from

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3.5 per cent to less than three per cent. SBM claims Encana later changed the CO<sub>2</sub> content to less than two per cent.”

Other contentious issues include delays related to SBM’s inability to have the PFC living quarters module built in Nova Scotia (SBM says Encana insisted on it until the only N.S. bidder withdrew its offer) and the allegedly untimely provision of geotechnical data.

SBM is not the only disgruntled supplier. Rowan Companies, which leased the Rowan Gorilla III jack-up rig to Encana for its drill program, alleges it is owed almost \$18 million in unpaid drilling fees. Encana denies the allegations.

Asked to comment on the latest developments in the SBM lawsuit, Encana spokesperson Lori Maclean declined to elaborate. “Both parties continue to work together. We are focused on getting this project producing. That’s what’s happening right now.”

Distracting though the lawsuits are, they haven’t changed the fact that industry views this as an exciting development for Nova Scotia. Deep Panuke is the province’s

second natural gas project; it’s been over 10 years since the Sable Offshore Energy Project started production.

Delays aside, project-related activity ramped up significantly in Nova Scotia over the past year and a half. In 2010 alone, Encana spent \$305 million on Deep Panuke, providing more than 1.1 million person-hours of work to Nova Scotians (provincial residents received 2.1 million person-hours of work over the total project thus far).

Perhaps the biggest excitement is that felt by Tim Gilfoy, CEO of the Strait of Canso Superport Corporation. Subsea 7, Tideway and SBM will all have significant operations in play at his port throughout the summer, and it’s his job to coordinate the activity. Subsea 7 has the contract for Deep Panuke’s infield piping connections while Tideway is installing rock to stabilize the infield flowlines and gas export pipeline.

An estimated 100 people will work on the PFC alone when it arrives from Abu Dhabi and goes through the final preparations for hook-up and installation.

“It’s good business,” asserts Gilfoy,



Encana leased the Rowan Gorilla III jack-up rig for the Deep Panuke drill program. Rowan Companies claims it is owed \$18 million in unpaid fees; Encana denies the allegations.

“and a good opportunity to prove ourselves. We’ve invested significantly in our Mulgrave Marine Terminal and designed it specifically to accommodate offshore petroleum activity.”

He has about three months to show what he and his port can do. All the preparatory work must be complete for when the PFC is in place and operational. That’s expected in Q4, this year. | NRM



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