

**Arctic Gas - Is The Permafrost Finally Melting?**

**February 15, 2007**

- This Facts is an update to our 5-page Facts of February 5<sup>th</sup>, 2007 called "Arctic Gas – Will this Project Grow in Spring?"
- The Mackenzie Delta and adjacent areas in Canada's Arctic possess an estimated 21.5 Tcf of natural gas reserves. The proposed Mackenzie Valley Gas Project (MGP) would involve the development of a 6 Tcf natural gas resource in the Mackenzie Delta, in addition to the construction of a 1,220 km pipeline, with an initial capacity of 1.2 Bcf. The pipeline would run along the Mackenzie Valley in the Northwest Territories, and would be longer than the distance between New York, NY to Chicago, IL (1,158km).
- The project is being proposed by Imperial Oil Resources Limited (34.2% pre-development working interest, and the owner responsible for building and operating the pipeline), ConocoPhillips Canada (16%), Shell Canada Limited (11.2%), ExxonMobil Canada (5.3%) and the Aboriginal Pipeline Group (APG – 33%).
- The total cost of the project has been estimated at \$7.7 billion, including all development wells, gas gathering and processing. Imperial Oil is expected to release a revised cost estimate in March 2007, which will likely see costs revised above \$9 billion.
- Construction of the pipeline can only commence once regulatory approvals have been met. The project requires approval from federal, territorial, provincial, and settlement area regulatory authorities. On February 5<sup>th</sup>, 2007, Canada's National Energy Board (NEB) released its proposed safety and design conditions for the Mackenzie Gas Project for public comment before any final decision is given. The Joint Review Panel may include further conditions that relate to environmental and socioeconomic impacts.
- There are other working interest owners in the region, which do not own a stake in the MGP. These owners, which call themselves the Mackenzie Explorer Group, control an approximate 175 Mmcf/d of production capacity, and want to be certain of their rights to pipeline capacity and the cost of transportation.
- The Mackenzie Explorer Group consists of Devon Canada, Chevron Canada, BP Canada Energy, Nytis Exploration, and EnCana Corporation. Other companies active in the Arctic include Apache Canada, which drilled three wells in the Colville Lake/Sahtu region of the Central Mackenzie Valley in 2005; Pogo

Producing Company, which drilled two wells in the Sah Cho region in 2005, just to the south of Colville Lake; Petro-Canada, which has discoveries at Tuk and Tweed Lake; and MGM Energy Corporation, which has interests in both the Mackenzie Delta and Colville Lake/Sahtu regions, with two discoveries in the latter region. MGM has two wells planned in the Mackenzie Delta in 2007. Husky Energy Inc. (with partners Pogo, EOG Resources, Pacific Rodera and International Frontier) has two discoveries at Summit Creek and Stewart in the Central Valley. All these companies would look to the MGP to provide delivery capacity for existing and new gas discoveries.

- With Alaska gas and LNG waiting in the wings, the fate of the Mackenzie Gas Project lies in the hands of the government. We would caution against excessive optimism until all parties, including native groups, have given their approval. That said, it appears that all parties concerned are at least moving in the direction of approving construction, which may begin in 2008, with the pipeline ready in 2011 or 2012. The partners can only wait until the snow melts, to see if the project can grow in spring.

**Proposed Pipelines in the Arctic**



Data Source: National Energy Board, TransCanada Corporation

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