8.1.1 SCOPE

The gathering system proposed by the proponents of the Mackenzie Gas Project will be designed, at a minimum, to accommodate the quantity of raw gas from the three anchor fields in the Mackenzie Delta.

The gathering system for the Mackenzie Gas Project will comprise:

- gathering pipelines (see Figure 8-1) to collect and transport natural gas and associated NGLs to a processing facility located near Inuvik (the Inuvik area facility)
- gas processing and NGL recovery facilities at the Inuvik area facility
- an NGL pipeline to transport NGLs south from the Inuvik area facility to Norman Wells, where it will tie into the existing Enbridge Pipelines (NW) Inc. pipeline

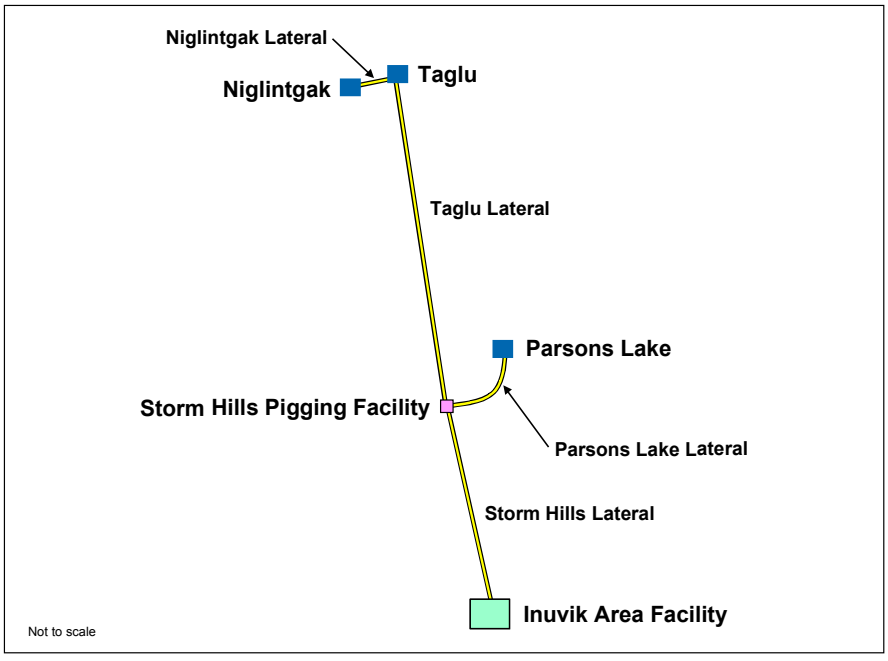

Figure 8-1: Gathering Pipelines

8.1.2 GATHERING SYSTEM COMPONENTS

8.1.2.1 Gathering Pipelines

The gathering pipelines will consist of about 176 km of buried NPS 16, 18, 26 and 30 pipelines. These include:

- a 15.7 km NPS 16 lateral, which will extend east from the Niglintgak field to the outlet of the Taglu field
- an 81.4 km NPS 26 lateral, which will extend south from the Taglu field to the Storm Hills junction
- a 26.5 km NPS 18 lateral, which will extend south from the Parsons Lake field to the Storm Hills junction, where it will connect with the Taglu lateral
- a 52.5 km NPS 30 lateral, which will extend south from the Storm Hills junction to the Inuvik area facility

Receipt meter stations for the gathering pipelines will be located at the production field facilities. Gas and NGLs will be metered separately, using allocation meters designed to the same standards as custody transfer meters.

8.1.2.2 Inuvik Area Facility

The Inuvik area facility, which will be located east of Inuvik, will separate NGLs from the incoming gas stream and process the liquids into a saleable NGL mix that meets the inlet specifications of the NGL pipeline. The natural gas is compressed and chilled to the required inlet conditions of the Mackenzie Valley pipeline.

The Inuvik facility will connect to the NGL pipeline via the Inuvik NGL meter station. Accounting meter stations will be located at the Inuvik area facility.

8.1.2.3 NGL Pipeline

The 475 km NGL pipeline from the Inuvik area facility to Norman Wells will use the same right-of-way on the east side of the Mackenzie River as the Mackenzie Valley pipeline.

At Norman Wells, the NGL pipeline will connect with the existing Enbridge pipeline to Alberta markets. The NGL pipeline will provide flexibility for future industry development, as it enables easier expansion of the natural gas pipeline and will provide capacity for significant NGL volumes if higher liquid content gas is developed in the Mackenzie Delta or Mackenzie Valley regions.

Joint studies with Enbridge are planned to define the interconnection requirements, including those required for metering, potential batching and facility ownership.

8.1.3 EXPANSION CAPABILITY

The gathering system can be expanded, if necessary, by installing additional compressors and pump stations, and by adding laterals and pigging facilities. Separate regulatory applications would be filed for expansions to the gathering system.

8.2.1 SCOPE

The Mackenzie Valley pipeline component of the Mackenzie Gas Project will deliver about 34 Mm^3/d (1.2 Bcf/d) of sales gas to Alberta from the outlet of the Inuvik area facility. Gas is expected to be delivered to Alberta before 2010.

8.2.2 PROPOSED PIPELINE ROUTE

The gas pipeline will follow portions of several potential routes from Inuvik to Norman Wells that were previously proposed by developers in the 1970s and 1980s. These potential routes all pass through the Gwich'in Settlement Area and the northern part of the Sahtu Settlement Area.

The proposed route for the gas pipeline from Norman Wells to Alberta is expected to run parallel to the Enbridge pipeline, as much as possible. The route will pass through the southern part of the Sahtu Settlement Area and the Deh Cho Region of the southern Northwest Territories.

The final route will be selected after additional technical work and consultation with:

- Aboriginal and other northern residents along the proposed pipeline route
- regulators
- other interested parties

8.2.3 GAS PIPELINE COMPONENTS

The gas pipeline will likely consist of:

- about 1,220 km of NPS 30 pipe, with a maximum operating pressure of 18 MPa
- four intermediate compressor stations
- a heater station
- a meter station at the Inuvik area facility

8.2.3 GAS PIPELINE COMPONENTS (cont'd)

- a meter station at the NGTL interconnect facility near the Northwest Territories–Alberta boundary

The Mackenzie Valley pipeline will interconnect with the NOVA Gas Transmission Ltd. (NGTL) system in Alberta near the boundary with the Northwest Territories. NGTL's existing Alberta system will be extended to the terminus of the Mackenzie Valley pipeline. NGTL will be responsible for designing and constructing the extension of the existing Alberta system.

8.2.4 COMPRESSOR STATIONS

The sales quality natural gas will be compressed at the Inuvik area facility before it enters the Mackenzie Valley pipeline system.

Four compressor stations will be located at about 225 km intervals along the pipeline near:

- Little Chicago
- Norman Wells
- Blackwater River
- Trail River

8.2.5 OTHER FACILITIES

Other facilities might include a heater station, to be located near the Trout Lake winter road, about 100 km north of the Northwest Territories–Alberta boundary.

An interconnect facility with measurement equipment and system isolation facilities will be located near the Northwest Territories–Alberta boundary. NGTL will seek approval for this under a separate regulatory application.