



Canadian LNG Import Projects: April 2006 Update

April 2006
Natural Gas Division
Petroleum Resources Branch
Energy Policy Sector



Natural Resources
Canada

Ressources naturelles
Canada

Canada

CANADIAN LNG IMPORT PROJECTS: APRIL 2006 UPDATE¹

INTRODUCTION

In North America, natural gas prices have risen, production from conventional sources is in decline, and demand continues to grow. This situation, in addition to the desire of natural gas producers around the world to monetize their reserves, has opened the door for increased imports of liquefied natural gas (LNG). Currently, there are more than sixty LNG import projects proposed in North America. This report provides an update on the LNG import terminals proposed for Canada.

CANADIAN LNG IMPORT PROJECTS

While Canada does not yet import LNG, there are eight proposals to construct LNG import facilities in Atlantic Canada, Quebec and British Columbia, many of which are currently involved in the environmental assessment (EA) / regulatory review process. The proposed LNG import facilities, from west to east, are:

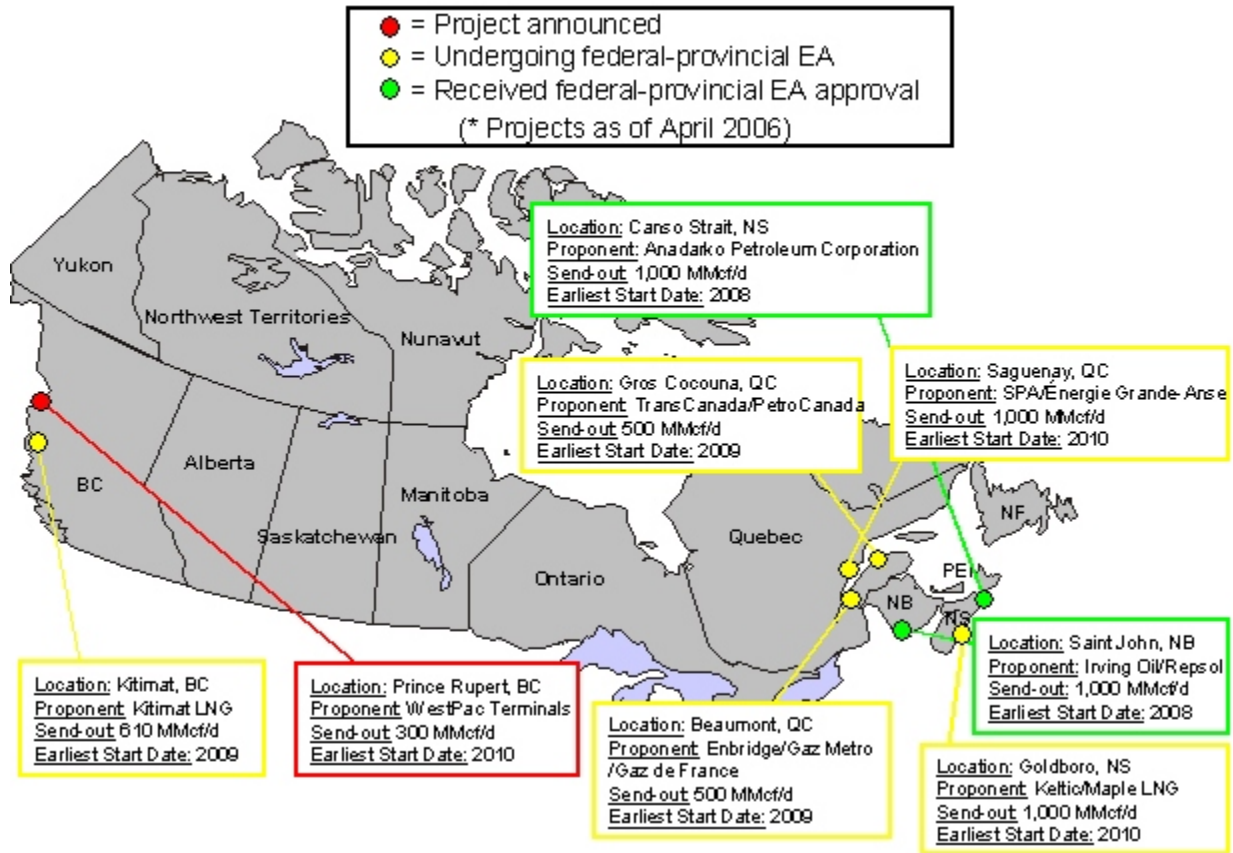
- WestPac Terminals Inc. (Prince Rupert, British Columbia);
- Kitimat LNG (Kitimat, British Columbia);
- Enbridge, Gaz Métro, and Gaz de France (Beaumont, Québec – Rabaska project);
- Énergie Grande-Anse (Saguenay, Quebec – Projet Grande-Anse);
- TransCanada and Petro-Canada (Gros Cacouna, Quebec – Cacouna Energy project);
- Irving Oil Limited and Repsol YPF (Saint John, New Brunswick – Canaport LNG project);
- Keltic Petrochemicals and Maple LNG (Goldboro, Nova Scotia); and,
- Anadarko Petroleum Corporation (Canso Strait, Nova Scotia – Bear Head LNG project).

Two LNG projects – located at Bear Head, Nova Scotia and Saint John, New Brunswick – have received most federal and provincial approvals required and have begun initial construction. These LNG facilities are expected to be in service by late 2008. Five other Canadian LNG projects are at various stages of the EA / regulatory review process and are expected to be in service in the 2009-2010 time frame. The final project – sponsored by WestPac Terminals in British Columbia – has not yet begun the EA / regulatory review process, but expects to do so by mid-2006.

¹Natural Resources Canada has prepared this report based on publicly-available information. Natural Resources Canada will strive to keep the information as up-to-date and accurate as possible but notes that this information may change pending further project developments.

The locations and details of these projects are shown in the map below.

Proposed Canadian LNG Import Terminals*



For Canada, LNG import facilities would involve approximately CDN \$500 million each in investment. These facilities would provide a new source of natural gas supply for Canadian consumers, direct economic benefits in the form of employment and taxes, and an opportunity for Canadian pipelines to expand.

The combined send-out capacity of all proposed Canadian LNG projects is about 6 billion cubic feet (Bcf) per day. Before the end of this decade, it appears likely that the North American natural gas supply picture could include several Canadian LNG import facilities.

British Columbia LNG Projects

There are two LNG import projects being proposed for British Columbia: Kitimat's LNG facility in Kitimat and WestPac Terminals' LNG facility in Prince Rupert. Kitimat's project is currently under regulatory review, while WestPac has yet to begin the regulatory review process. If built, these LNG facilities would have a combined initial send-out capacity of

0.91 Bcf per day. These LNG projects are regional in nature, largely intended to supply natural gas to consumers on Vancouver Island and in the Lower Mainland. These LNG facilities are expected to be in-service in 2009-2010 time frame.

Kitimat LNG Inc. (Kitimat, British Columbia)
(www.kitimatlng.com)

Project Description

Kitimat LNG Inc. (Kitimat), a Calgary-based company, is proposing to construct, own, and operate an LNG import terminal near the Port of Kitimat. Two sites in the Douglas Channel are currently being reviewed, Emsley Cove and Bish Cove. If the project receives regulatory approval, Kitimat's preferred site is Bish Cove.

Kitimat's LNG terminal will include marine offloading, LNG storage, natural gas liquids recovery, re-gasification and send-out facilities to deliver natural gas into the Pacific Northern Gas (PNG) pipeline and ultimately into the Duke Energy (Westcoast) transmission pipeline system. Initial natural gas send-out capacity will be 610 million cubic feet per day (MMcf/d) – 110 MMcf/d for local industrial loads and 500 MMcf/d to enter the Westcoast pipeline via the PNG pipeline.

Regulatory Overview

Kitimat's LNG project is subject to an EA under both the *Canadian Environmental Assessment Act (CEAA)* and the *British Columbia Environmental Assessment Act (BCEAA)*. The project also requires a 'Project Approval Certificate' under the *BCEAA*.

On June 6, 2005, Kitimat submitted its formal EA application to the British Columbia Environmental Assessment Office (BCEAO) for a site at Emsley Cove, initiating the start of the 180-day project review period. Kitimat LNG also submitted the following applications, for concurrent permitting, under the Oil and Gas Commission Act (OGC): gas processing plant; pipeline lateral and natural gas liquid lines; and, transmission line.

Within the 180-day review period, the BCEAO set a 45-day public review period from June 15 to July 30, 2005, during which time the public was able to comment on the application and the OGC permit applications.

On December 19, 2005, Kitimat requested the BCEAO to expand the scope of the EA for the project to include a possible project location at Bish Cove. Based on this request, the BCEAO asked that additional information regarding possible project effects at the Bish Cove site be provided by Kitimat. On January 11, 2006, Kitimat LNG submitted the Bish Cove Addendum Report as a response to the request of additional information.

The BCEAO's report and recommendation will be submitted to the Minister of Environment and the Minister of Energy, Mines and Petroleum Resources for a decision to grant a 'Project Approval Certificate'. Kitimat LNG expects to have project approval by spring 2006, with construction beginning soon thereafter.

In November 2005, the federal Minister of the Environment determined that a comprehensive study was the most appropriate level of EA for the proposed Kitimat LNG project. The Minister's decision was based on the report and recommendation submitted by the Responsible Authorities (RA's) – Transport Canada and Environment Canada – concerning the determination of the EA process for the project. If the Bish Cove site is selected, Indian and Northern Affairs Canada (INAC) will also be a Responsible Authority due to the requirement to issue a lease under section 53(1) of the *Indian Act*.

The federal and provincial EAs are being harmonized. Transport Canada, Environment Canada, and INAC are developing the Comprehensive Study Report (CSR) in coordination with the province and are planning to submit their final report to the federal Minister of the Environment in April 2006. At that time, the public will have an opportunity to comment on the findings and recommendations of the report before the Minister renders her final decision.

Other

In July 2005, Kitimat announced that it had signed an Engineering, Procurement, and Construction (EPC) contract with Tractabel Gas Engineering (TGE). TGE is responsible for the front-end engineering and design (FEED) study for the proposed LNG import facility. A FEED study is a standard and comprehensive pre-construction assessment encompassing detailed site specifications, work plans, schedules and specific costs.

In addition to a technical review of the sites, the EA process requires Kitimat LNG to address local First Nations interests in the project. Kitimat LNG has been meeting with representatives of the Haisla Nation since mid-2004 to discuss the impact the proposed project would have and to better understand Haisla concerns.

In December 2005, Kitimat LNG and the Haisla First Nation signed an Agreement in Principle regarding the proposed LNG facility. The Agreement in Principle addresses Haisla concerns for sustainable development and establishes an economic benefits framework. More specifically, the Agreement in Principle supports the location of the LNG storage tanks and associated facilities on Bees Indian Reserve No. 6 at Beese Creek and the marine LNG import terminal (or marginal wharf) in Bish Cove. The Haisla First Nation prefer the Beese site, as it has already been designated for industrial use by the Haisla community. A final agreement between Kitimat LNG and the Haisla First Nation is expected to be signed in 2006.

Construction of the LNG terminal is estimated to generate approximately 700 jobs and 50 permanent full-time positions once the facility is in commercial operation. Pending

regulatory approval, construction is expected to begin in late 2006, with full operation set to commence in early 2009. Kitimat secured \$50 million in an initial round of financing in January 2005. The cost of the project is estimated at CDN \$500 million.

WestPac Terminals Inc. (Prince Rupert, British Columbia)
(www.westpacterminals.ca)

Project Description

Calgary-based WestPac Terminals Inc. (WestPac) is proposing to construct an LNG import facility 60 kilometres (km) north of Kitimat at Prince Rupert, BC. The CDN \$200 million LNG facility would use the existing docking facilities at Ridley Island, which were once used to ship coal.

WestPac plans to offload LNG at Ridley Island, where it will be transferred to insulated storage tanks before being moved onto smaller barges for delivery to markets on Vancouver Island and in the Lower Mainland.

Other

In December 2004, WestPac entered into a 30-year land lease agreement with Prince Rupert Port Authority (PRPA) to develop its LNG import terminal on PRPA lands. The agreement gives WestPac the exclusive rights for LNG development on 250 acres of industrial land on Ridley Island.

The minimum initial send-out capacity for the LNG import facility is estimated at 150 MMcf/d, with a maximum size capacity of 500 MMcf/d. The facility is scheduled to be operational by 2009, following the completion of all detailed design, construction, and regulatory approvals. The facility is expected to create about 300 direct jobs during construction and 30 full-time jobs once operational.

Quebec LNG Projects

There are three LNG import projects being proposed for Quebec: TransCanada / Petro-Canada's LNG facility in Gros Cacouna, Gaz Metro / Enbridge / Gaz de France's LNG facility in Beaumont, Quebec and Énergie Grande-Anse's LNG facility in Saguenay, Quebec. Two projects are in the later stages of the EA/regulatory review process. Énergie Grande-Anse is in the very early stages of the federal-provincial EA process.

If built, these LNG facilities would have an initial combined send-out capacity of 2 Bcf per day. These LNG projects would provide an alternative source of natural gas supply to markets in eastern Canada, as Quebec is almost entirely dependent on supply from

western Canada. Excess natural gas could also be directed to the US northeast. These LNG facilities are expected to be operational by the 2009-2010 time frame.

Enbridge Inc. / Gaz Métro / Gaz de France Rabaska LNG project (Beaumont, Quebec)
(www.rabaska.net)

Project Description

Developed by Gaz Métro, Enbridge, and Gaz de France, the Rabaska LNG project consists of building a CDN \$700 million, 500 MMcf/d LNG import terminal in the Ville Guay-Beaumont area, Quebec. The Rabaska project includes a terminal comprised of two storage tanks, a jetty to receive the LNG tankers, pumping, compression and vaporizing facilities, and a pipeline of approximately 50 km to connect the LNG terminal to the existing facilities of Trans Québec & Maritimes Pipeline Inc. (TQM) in St. Nicolas, Quebec.

Regulatory Overview

The Rabaska LNG project is subject to an EA under both the *CEAA* and the *Quebec Environment Quality Act*. The main permitting agency for the project is the Quebec Ministère du Développement durable, de l'Environnement et des Parcs (MDDEP), who must issue a "Certificate of Authorization" for the project to proceed.

In January 2005, the federal Minister of the Environment determined that a review panel was the most appropriate level of EA for the Rabaska LNG project. The Minister's decision was based on the report and recommendation submitted by the RA's – the National Energy Board (NEB), Department of Fisheries and Oceans Canada (DFO), Transport Canada and the Canadian Transportation Agency (CTA) – concerning the determination of the EA process for the project.

Rabaska filed its preliminary environmental impact study (EIS) on January 25, 2006 with MDDEP and the Canadian Environmental Assessment Agency (CEAA). Public consultation on conformity of the EIS was held between February 8 and March 13, 2006. Questions and comments on the EIS were submitted to the proponent on March 17, 2006. Once the conformity of the EIS is completed and should the Bureau d'audiences publiques sur l'environnement du Québec (BAPE) receive a mandate, the review panel will be announced. Public hearings are expected to begin in the fall 2006.

On January 13, 2006, the proponents informed the NEB that it would not file an application to the Board for the LNG facilities, but rather only for the related pipeline expansion. Subsequently, on February 7, 2006, the NEB notified CEAA that it would no longer be an RA for the EA review process for the Rabaska LNG project until such time as the NEB becomes officially triggered by the filing of a pipeline application under the *NEB Act*.

Other

Gaz Métro and Enbridge plan to fund the project together, while Gaz de France will arrange natural gas supplies and provide shipping support. The bulk of natural gas from the Rabaska LNG project will be purchased by Gaz Métro to serve the growing needs of its Quebec customers and by Enbridge to serve its Ontario customers. The remaining natural gas will be purchased directly by industrial and commercial customers in Quebec and Ontario. Any excess natural gas could potentially flow to the US northeast.

During the three year construction period, approximately 3,460 direct and indirect jobs will be created. The facility, which is expected to be in-service by 2009, will generate about 70 full-time positions.

TransCanada / Petro-Canada Cacouna Energy Project (Gros Cacouna, Quebec) **(www.cacounaenergy.ca)**

Project Description

TransCanada, in partnership with Petro-Canada, is proposing to construct a CDN \$660 million, 500 MMcf/d LNG import facility on Gros Cacouna Island in Quebec, about 15 km northeast of Rivière-du-Loup. The LNG import terminal would be adjacent to the existing harbor on land leased from Transport Canada.

Regulatory Overview

The Cacouna Energy Project is subject to an EA under both the *CEAA* and the *Quebec Environment Quality Act*. The MDDEP must also issue a "Certificate of Authorization."

In August 2005, the federal Minister of the Environment determined that a review panel was the most appropriate level of EA for the Cacouna LNG project. The Minister's decision was based on the report and recommendation submitted by the RA's – Transport Canada and DFO – concerning the determination of the EA process for the project.

The EIS was filed with the CEAA on June 10, 2005. Federal public consultation on conformity of the EIS ended on December 7, 2005. Questions and comments on the EIS were submitted to the proponent on December 12, 2005.

The EIS was filed with the MDDEP on May 16, 2005. On February 22, 2006, the BAPE announced the commencement of the 45-day public consultation period in Quebec. During the public information and consultation period, any individual may request public hearings.

On March 23, 2006, the Minister of the Environment of Quebec informed the BAPE that they would be required to hold public hearings. The hearings, in which evidence is

presented by experts as well as by members of the public, are expected to commence in May 2006. The BAPE process lasts four months and is completed with a report to the Minister of the Environment.

Other

TransCanada intends to operate the LNG facility, while Petro-Canada would provide the necessary natural gas supplies. In October 2004, state-owned Russian giant Gazprom and Petro-Canada, signed a Memorandum of Understanding (MOU) to investigate the possibility to jointly develop a liquefaction plant near St. Petersburg, Russia, which would deliver LNG to the Gros Cacouna LNG import facility. On March 14, 2006, Petro-Canada and Gazprom signed an agreement to proceed with initial engineering design for the liquefaction plant in Russia.

On September 26, 2005, Cacouna Energy announced the results of a referendum vote held by the village of Cacouna, where 57.2% of voters supported the proposed development of an LNG facility near the town of Gros Cacouna. 75% of all eligible voters participated in the referendum which was held to gauge official community support or opposition to the proposed project. This vote, while not mandatory for regulator approval, will be given consideration in the regulatory authorities' assessment of overall social acceptance for the project.

From the LNG import facility, natural gas would be delivered, via a new 240-km pipeline, to existing natural gas pipeline infrastructure in Quebec. Quebec, Ontario and the US northeast are the anticipated markets for any LNG delivered to the Gros Cacouna facility. Provided the necessary approvals are received, it is expected that the LNG import facility will be in-service by 2009. Cacouna Energy will create about 2000 person-years of direct employment during the three-year construction phase and 35 long-term positions to operate the LNG import facility.

Énergie Grande-Anse Inc. (Saguenay, Quebec)

Project Description

The Saguenay Port Authority (SPA) and Quebec-based Énergie Grande-Anse Inc. propose to develop and build an LNG import terminal in the Port of Grande-Anse, along the Saguenay River in Quebec. The facility is expected to have an initial send-out capacity of about 1 billion cubic feet per day (Bcf/d).

Regulatory Overview

The Grande-Anse Project is subject to an EA under both the *CEAA* and the *Quebec Environment Quality Act*. In addition, the MDDEP must issue a "Certificate of Authorization" for the project to proceed.

In September 2005, Énergie Grande-Anse submitted a preliminary project description to the CEAA, which officially commenced the federal EA process. Under the CEAA, an EA is required for this project because the SPA may provide federal lands for the purpose of enabling this project to be carried out. In accordance with the CEAA, the federal Minister of the Environment is required to decide to continue with the EA by means of a comprehensive study or refer the project to a mediator or a review panel. After this time, the proponent can prepare and submit the necessary EA documentation.

Atlantic Canada LNG Projects

There are three LNG import projects being proposed for Atlantic Canada: Irving Oil / Repsol YPF's LNG facility in Saint John, Anadarko Petroleum's (Anadarko) LNG facility at Bear Head, and Keltic Petrochemicals (Keltic) / Maple LNG's import facility and petrochemical plant near Goldboro. Federal-provincial EA approval was granted to Irving Oil and Anadarko in 2004. Keltic is currently involved in the EA / regulatory review process.

If built, these LNG facilities would have a combined initial combined send-out capacity of 3 Bcf per day. These LNG projects are, for the most part, "import-for-re-export projects," as the demand for natural gas in Atlantic Canada is met entirely by natural gas production offshore Nova Scotia. The facilities are expected to be operational by the 2008-2010 time frame.

Irving Oil Limited / Repsol YPF Canaport LNG project (Saint John, New Brunswick) **www.canaportlng.com**

Project Description

Irving Oil Limited (Irving) and Repsol YPF (Repsol) plan to develop a CDN \$750 million, 1 Bcf/d, LNG import facility near Irving's existing Canaport deepwater marine terminal in Saint John, New Brunswick. The Canaport terminal currently receives crude oil tankers from overseas in excess of 400,000 tonnes. The crude oil is delivered to Irving's Saint John refinery, the largest in Canada.

Regulatory Overview

Irving's LNG project was subject to an EA under both the CEAA and *New Brunswick's Clean Environment Act*. On August 6, 2004, Irving received federal EA approval. The federal Minister of the Environment issued a positive EA decision statement and referred the project back to the RA's – Transport Canada, DFO and Environment Canada – for appropriate decision-making. Days later, on August 10, 2004, the New Brunswick Department of the Environment and Local Government granted Irving provincial EA

approval. The proponent was also required to obtain other necessary federal and provincial approvals, permits or authorizations before commencing work on the undertaking.

Other

In June 2005, Irving and Repsol entered into an agreement to develop the LNG import terminal. The agreement formed a new company, Canaport LNG, which will construct, own and operate the terminal. Repsol, based in Spain, is one of the US' largest suppliers of LNG.

Repsol will be responsible for providing all of the LNG and will hold the capacity of the LNG terminal and the interconnecting pipeline. Irving will market the LNG in Atlantic Canada and Repsol will market the LNG elsewhere in Canada and in the US.

Irving's LNG import terminal would be located approximately 105 km from the US border. A portion of the LNG will be sold into Atlantic Canada, while Irving plans to consume some of the natural gas as fuel in its own nearby refinery. Additional volumes could be sold to local paper mills and power plants, as well as the US northeast.

Clearing of the site was completed in May 2005. The initial phase of construction for the Canaport LNG project began in September 2005. The initial construction phase involved site excavation and leveling, and is the precursor to full-scale construction. Onshore construction is scheduled to begin by mid-2006.

Canaport LNG has also completed the FEED study for the LNG import terminal and a request for proposals for EPC was issued in July 2005. There will be up to 700 jobs created during peak construction of the facility. Once in operation in late 2008, the LNG facility will create approximately 40 permanent jobs.

Anadarko Petroleum Corporation Bear Head LNG project (Strait of Canso, Nova Scotia)

www.anadarko.com

Project Description

Anadarko is proposing to construct a CDN \$650 million, 1 Bcf/d LNG import facility on the Strait of Canso, near Point Tupper, Nova Scotia. On August 12, 2004, Anadarko acquired Access Northeast Energy Inc. (ANE), a private Canadian company whose sole project was its proposed LNG import facility at Bear Head, Nova Scotia. The facility is being developed on a 180-acre parcel of land designated for heavy industrial development.

Regulatory Overview

The project was subject to an EA under both the *CEAA* and the *Nova Scotia Environment Act*. On August 9, 2004, ANE secured federal-provincial EA approval. The proponent was also required to obtain other necessary federal and provincial approvals, permits or authorizations before commencing work on the undertaking. On November 21, 2005, the Nova Scotia Utility and Review Board issued a Permit to Construct to Anadarko to construct tank base concrete foundations for its proposed LNG facility at Bear Head, Nova Scotia.

Other

In August 2005, Anadarko announced that CB&I had been awarded a lump-sum turnkey contract for the design and construction of two 180,000 cubic meter storage tanks (the equivalent of approximately 3.8 Bcf of natural gas per LNG storage tank) required for the LNG facility. CB&I's work scope for the project includes the turnkey engineering, procurement and construction of the storage tanks, including foundations, insulation, paint, and piping to grade. Engineering and procurement activity for the project is under way.

Construction planning, site clearing and leveling, and an upgrade of access roads began in late 2004 to prepare the site for major construction in 2005. In November 2005, construction of the concrete foundations for the two LNG storage tanks began.

Full scale construction, including the actual storage tanks, the ship berthing facility and the jetty, was originally scheduled to begin in mid-2006. However, on March 14, 2006, Anadarko announced that it was "rescheduling" the timing of on-site construction until it finds a secure supply of LNG, which should be determined over the next few quarters.

As a major US oil and natural gas producer with operations in North America, Qatar, Algeria, and Venezuela, Anadarko has access to natural gas supplies, which could be used to supply the LNG facility. Anadarko intends to continue forward on critical-path items for the facilities' development, but to moderate site construction until LNG supply agreements are completed.

The LNG facility is expected to deliver natural gas to markets in Atlantic Canada and the US northeast. The estimated cost of the LNG facility is CDN \$650 million and is expected to be in commercial operation by late 2008.

Keltic Petrochemicals / Maple LNG (Goldboro, Nova Scotia)
(www.kelticpetrochemicals.ca)

Project Description

Halifax-based Keltic Petrochemicals (Keltic), in partnership with Maple LNG is proposing to develop an integrated petrochemical and LNG facility in Goldboro, Nova Scotia. Keltic's integrated project consists of a petrochemical plant, an LNG import terminal and natural gas storage facility, de-methanizing units, power generation up to 200 megawatts, as well as related utility and offsite infrastructure and systems. The proposal also includes construction of a highway between the development site and Antigonish. The project will be located on land in the Goldboro Industrial Park to be purchased from the Municipality of the District of Guysborough.

Regulatory Overview

Keltic's project is subject to an EA under both the *CEAA* and the *Nova Scotia Environment Act*. In January 2005, Keltic submitted a project description to the Nova Scotia Department of Environment and Labour, which commenced the provincial EA process. The Nova Scotia Minister of Environment and Labour determined that the proposal, including the petrochemical plant, the LNG facility, the public highway and the electric generating facility, is subject to a Class 2 individual EA under the *Nova Scotia Environment Act*. The Class 2 process includes public hearings.

On April 8, 2005, the province provided the EA Terms of Reference (TOR) for the proposed petrochemical plant and LNG facility to the proponent. Keltic has up to two years to prepare the EA report in accordance with the TOR.

In January 2006, following public consultation and review of a report and recommendation from the RA's – Transport Canada and DFO – the federal Minister of the Environment determined that a comprehensive study process was the most appropriate level of EA. The scope of project for Transport Canada's EA includes both the marginal wharf and LNG storage and re-gasification facilities, while the scope of the project for DFO's EA is the marginal wharf only.

The RA's have delegated the preparation of the CSR to the proponent. The CSR will be prepared, and then submitted to the Minister of the Environment and to the CEAA. At that time, the public will have an opportunity to provide comments on the findings and recommendations of the CSR before the Minister renders her final decision. The RA's will coordinate the public involvement required under the *CEAA* with Nova Scotia's consultation on the EA report

Other

On March 15, 2006, Keltic signed a deal with Maple LNG, the Canadian affiliate of two

European energy companies. Under the agreement, Maple LNG will develop and control 100% of the proposed LNG import terminal, while providing Keltic with access to the natural gas liquids for its own petrochemical production. Maple LNG, made up of 4Gas of Rotterdam and Russian-owned Suntera, has significant interests in Russian natural gas.

Construction of the complex is expected to generate more than 3,000 jobs during construction and 500 permanent full-time jobs upon initial operation. Construction is expected to take approximately three years. The complex is estimated to cost CDN \$4 billion and could be in operation by 2009.

ACCESS TO PIPELINE INFRASTRUCTURE

In addition to the approximately CDN \$500 million each in investment, the development of any Canadian LNG import terminal, will require pipeline takeaway capacity in order to deliver natural gas from the terminal to consuming markets. In some circumstances, this will mean the expansion (i.e., added compression), extension or reversal of an existing pipeline system, while in other cases, this will require that a new pipeline system be built.

Maritimes and Northeast Pipeline (MNP) (www.mnpp.com)

The Maritimes & Northeast Pipeline (MNP) is a 1,300 km transmission pipeline built to transport natural gas from the Sable Offshore Energy Project (SOEP), located approximately 200 km (or approximately 108 nautical miles) offshore Nova Scotia, to markets in Atlantic Canada and the US northeast. Built in 1999, MNP consists of 30-inch and 24-inch sections of pipe that run from the SOEP's natural gas processing plant in Goldboro, Nova Scotia, through the Maritime provinces of Nova Scotia and New Brunswick and then southbound into Maine, New Hampshire, and Massachusetts.

The Canadian portion of the pipeline was built with a design capacity in excess of 600 MMcf/d and supplies natural gas throughout New Brunswick and Nova Scotia via four lateral pipelines – Saint John and Moncton, New Brunswick and Point Tupper and Halifax, Nova Scotia. The US portion has a design capacity of approximately 400 MMcf/d and interconnects with three US pipeline systems – the Portland Natural Gas Transmission System, Tennessee Gas Transmission, and Algonquin Gas Transmission. MNP's current throughput on the Canadian portion of its system is about 420 MMcf/d, or nearly 70% of total design capacity.

In early 2005, MNP held an open season to gauge interest to expand capacity on its system. In July 2005, MNP signed agreements with Anadarko to transport 793 MMcf/d of natural gas from the proposed Bear Head LNG terminal near Point Tupper, Nova Scotia, and with Repsol to transport 732 MMcf/d from the proposed Canaport LNG terminal near Saint John, New Brunswick.

On January 6, 2006, MNP submitted Project Descriptions (PD) to the NEB and CEAA for two LNG-related pipeline expansions – Bear Head Pipeline and Brunswick Pipeline. The purpose of the PDs are to initiate the federal EA process and to provide an overview of the proposed projects.

The Bear Head Pipeline Project consists of the construction and operation of a 30-inch, 55 km natural gas pipeline that will extend from the proposed LNG re-gasification facility at Bear Head, Nova Scotia (currently under construction) to a point along the existing MNP mainline near Goldboro, Nova Scotia.

MNP is also proposing to construct a 30-inch, 145-km natural gas transmission pipeline – the Brunswick Pipeline Project – from the proposed Canaport LNG facility at Mispic Point, near Saint John, New Brunswick (currently under construction), to the international border near St. Stephen, and then on to the Baileyville compressor site in Baileyville, Maine.

On March 16, 2006, NEB Chair sent a letter to the Minister of the Environment to recommend, on behalf of the RA's, that the Brunswick Pipeline Project be referred to a Review Panel; and also requested, with the support of the other RA's and the CEAA, that the Panel Review be conducted by the NEB under the substitution provisions of the *CEAA*.

Both projects require federal and provincial EA approvals, including a Certificate of Public Convenience and Necessity from the NEB. MNP anticipates filing applications with the NEB pursuant to section 52 of the *NEB Act* for approvals to construct, own, and operate the two pipelines and associated facilities by mid-2006.

CONCLUSION

Both industry and government analysts project continued growth in North American demand for natural gas and a decreasing ability for domestic natural gas producers to meet that demand. Greater LNG imports represent one way to satisfy this expected growth in demand. Before the end of this decade, it appears likely that the North American natural gas supply picture will include at least one or two Canadian LNG import facilities.

USEFUL LINKS

For accurate and up-to-date information regarding the federal-provincial EA status of the proposed Canadian LNG import projects, please visit the following web sites. These web sites will also provide useful information about the federal (NEB, CEAA) and provincial (British Columbia, Quebec, New Brunswick and Nova Scotia) EA / regulatory processes.

Federal

- National Energy Board
<http://www.neb-one.gc.ca>
- Canadian Environmental Assessment Agency
<http://www.ceaa.gc.ca>

Provincial

- British Columbia Environmental Assessment Office
<http://www.eao.gov.bc.ca>
- Ministère du Développement durable, de l'Environnement et des Parcs
http://www.mddep.gouv.qc.ca/index_en.asp
- Nova Scotia Environment and Labor
<http://www.gov.ns.ca/enla/>
- New Brunswick Department of the Environment and Local Government
<http://www.gnb.ca/0009/0377/0002/0002-e.asp>

April 2006
Natural Gas Division
Petroleum Resources Branch
Energy Policy Sector