

National Energy  
Board



Office national  
de l'énergie



**2007 ANNUAL REPORT**  
TO PARLIAMENT

Canada

National Energy  
Board



Office national  
de l'énergie

Office of the Chair

Bureau du Président

14 March 2008

The Honourable Gary Lunn, P.C., M.P.  
Minister of Natural Resources  
580 Booth Street, 21<sup>st</sup> Floor  
Ottawa, Ontario  
K1A 0E4

Dear Minister:

**Annual Report 2007**

I am pleased to submit the Annual Report of the National Energy Board for the year ending 31 December 2007, in accordance with the provisions of Section 133 of the *National Energy Board Act*, R.S.C. 1985, c. N-7.

Yours truly,

A handwritten signature in black ink, appearing to read 'Gaétan Caron'.

Gaétan Caron  
Chair and CEO

444 Seventh Avenue SW  
Calgary, Alberta T2P 0X8

444, Septième Avenue S.-O.  
Calgary (Alberta) T2P 0X8

Canada

Telephone/Téléphone : (403) 292-4800  
Facsimile/Télocopieur : (403) 292-5503  
<http://www.neb-one.gc.ca>  
Telephone/Téléphone : 1-800-899-1265  
Facsimile/Télocopieur : 1-877-288-8803

Materials may be reproduced for personal, educational and/or non-profit activities, in part or in whole and by any means, without charge or further permission from the National Energy Board, provided that due diligence is exercised in ensuring the accuracy of the information reproduced; that the National Energy Board is identified as the source institution; and that the reproduction is not represented as an official version of the information reproduced, nor as having been made in affiliation with, or with the endorsement of the National Energy Board.

For permission to reproduce the information in this publication for commercial redistribution, please e-mail: [info@neb-one.gc.ca](mailto:info@neb-one.gc.ca)



© Her Majesty the Queen in Right of Canada 2008  
as represented by the National Energy Board

Cat. No. NE1-2007E  
ISBN 978-0-662-48189-8

This report is published separately in both official languages  
and is available upon request in multiple formats.

Copies are available on request from:  
National Energy Board  
Publications Office  
444 Seventh Avenue S.W.  
Calgary, Alberta T2P 0X8  
403-299-3562 • 1-800-899-1265

For pick-up at the NEB office:  
Library  
Ground Floor

Internet: [www.neb-one.gc.ca](http://www.neb-one.gc.ca)

Printed in Canada

© Sa Majesté la Reine du Chef du Canada 2008  
représentée par l'Office national de l'énergie

N° de cat. NE1-2007F  
ISBN 978-0-662-08480-8

Ce rapport est publié séparément dans les deux langues officielles;  
il est disponible sur supports multiples, sur demande.

Demandes d'exemplaires :  
Office national de l'énergie  
Bureau des publications  
444, Septième Avenue S.-O.  
Calgary (Alberta) T2P 0X8  
403-299-3562 • 1-800-899-1265

Des exemplaires sont également disponibles  
à la bibliothèque de l'Office  
(rez-de-chaussée).

Internet : [www.neb-one.gc.ca](http://www.neb-one.gc.ca)

Imprimé au Canada

1	<b>CHAIR'S LETTER</b>
4	<b>OUR ROLES AND RESPONSIBILITIES</b>
8	<b>STRIVING FOR REGULATORY EXCELLENCE</b>
14	<b>APPLICATIONS IN 2007</b>
28	<b>ENERGY IN CANADA</b>
34	<b>EFFICIENT ENERGY INFRASTRUCTURE AND MARKETS</b>
46	<b>SAFETY, SECURITY AND THE ENVIRONMENT</b>
56	<b>ENGAGING CANADIANS</b>
62	<b>STRENGTHENING OUR WORKPLACE</b>
68	<b>WEALTH OF EXPERIENCE</b>

**GOAL 1**

NEB-regulated facilities and activities are safe and secure, and are perceived to be so.

**GOAL 2**

NEB-regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected.

**GOAL 3**

Canadians benefit from efficient energy infrastructure and markets.

**GOAL 4**

The NEB fulfills its mandate with the benefit of effective public engagement.

**GOAL 5**

The NEB delivers quality outcomes through innovative leadership and effective support processes.



## VISION

The NEB is an active, effective and knowledgeable partner in the responsible development of Canada's energy sector for the benefit of Canadians.

## PURPOSE

We promote safety and security, environmental protection and efficient energy infrastructure and markets in the Canadian public interest<sup>1)</sup> within the mandate set by Parliament in the regulation of pipelines, energy development and trade.

## VALUES

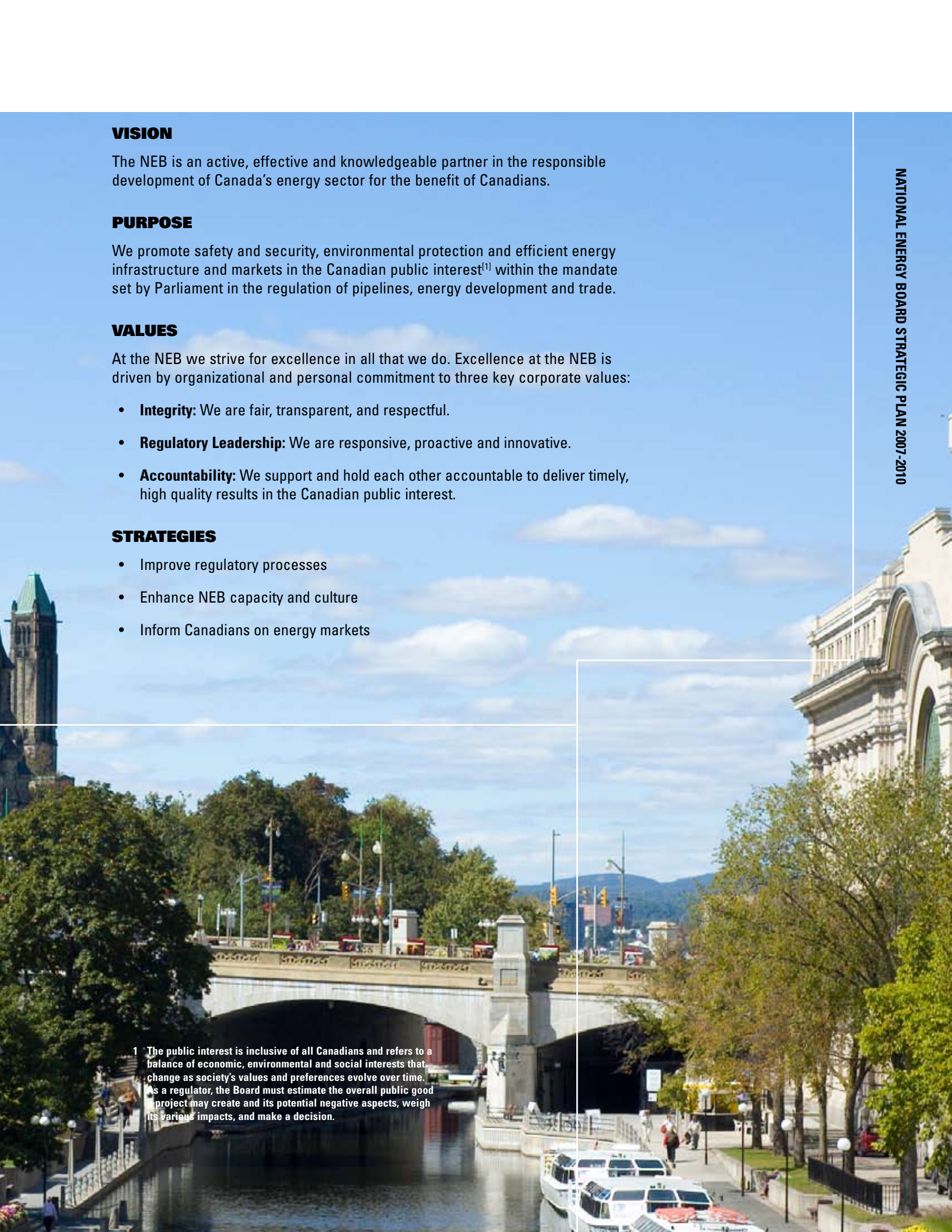
At the NEB we strive for excellence in all that we do. Excellence at the NEB is driven by organizational and personal commitment to three key corporate values:

- **Integrity:** We are fair, transparent, and respectful.
- **Regulatory Leadership:** We are responsive, proactive and innovative.
- **Accountability:** We support and hold each other accountable to deliver timely, high quality results in the Canadian public interest.

## STRATEGIES

- Improve regulatory processes
- Enhance NEB capacity and culture
- Inform Canadians on energy markets

<sup>1</sup> The public interest is inclusive of all Canadians and refers to a balance of economic, environmental and social interests that change as society's values and preferences evolve over time. As a regulator, the Board must estimate the overall public good a project may create and its potential negative aspects, weigh its various impacts, and make a decision.





# CHAIR'S LETTER



Looking back over 2007, I saw an organization running at capacity to serve Canadians who wanted or needed to be part of the NEB's work and I saw a commitment on the part of our Board and staff members to continually improve the way we conduct the business of the Board.

Throughout the year, our workload was very high and the issues and matters we needed to resolve grew in complexity. The number of people interested in energy industry developments and the NEB's role of protecting the public interest continued to grow. Canadians are better informed and more interested in the work of government and how energy-related decisions affect their quality of life. In a year where the price of crude oil hit record highs, Canadians are also keenly interested in learning more about how energy markets work.

We are applying our constant focus on fairness and transparency to the new dimensions and issues brought to our attention by a broad range of Canadians. For example, in October 2007, we established the Land Matters Consultation Initiative to provide a forum for interested parties and the Board to engage in dialogue and develop options that will help support strong working relationships among landowners, energy companies and other parties.

The NEB strives to improve regulatory processes and deliver timely, high quality decisions in the Canadian interest. In December, we launched a pilot project designed to test a new application system that will deliver regulatory efficiency while still promoting safety, security and environmental protection. The proposed process will allow companies who meet certain criteria to proceed with their application without the requirement for a detailed process. This initiative supports the Board's risk-based life cycle approach in that application filing requirements will be tailored so that they reflect the risk, complexity and extent of public interest in a project.

The risk-based life cycle approach relates to a company's performance as well as the scope of regulatory oversight required throughout the life cycle of a project. It supports the NEB's goal oriented direction and allows the Board to focus its resources where they are most valued.

In the spirit of preparedness, we work closely with our regulatory partners to coordinate our activities so we can avoid duplication and unnecessary regulatory burden. The new Major Projects Management Office was created by the federal government to streamline the review of large natural resource projects while maintaining or enhancing Canada's regulatory standards. We fully support and will continue to actively participate in this initiative.

As energy-related issues play an increasingly important role in their lives and economy, more and more Canadians are turning to the NEB for objective, accurate and timely information about Canada's energy



sector. Canada's Energy Future, released in November 2007, is a comprehensive, long-term study that examines our energy system from a variety of perspectives, including supply and demand, pricing, economics and the environment. In developing the study, our project team consulted with experts across Canada, incorporated their advice and summarized their views in the report. This study, along with our seasonal energy outlooks, energy market assessments, forecasts, energy overviews and energy pricing commentaries, will inform Canadians as they engage in the discussions and debates that will inevitably occur about Canada's energy future and the quality of life in Canada.

Throughout 2007, I was amazed by the commitment of our people to continually improve the way we do our work. The concept of *rapprochement* – the act of coming together frequently, talking regularly and working toward common goals – captures the spirit of the workplace I envision. I believe that a vital part of my role as Chair is to foster a work environment where people share their ideas, where they learn and develop their careers, and where they manage the workload so that they experience a healthy work/life balance.

In closing I would like to salute our staff and my fellow Board Members for their commitment and dedication to implementing our values: integrity, regulatory leadership and accountability. I would also like to thank Ken Vollman, our former Chairman, who stepped down in June after 33 years with the Board. Mr. Vollman joined the NEB as a young engineer in 1973 and worked his way through the ranks. Among his many achievements during his tenure, he guided the Board towards a goal oriented regulation philosophy and promoted the culture of excellence that exists within the organization today.

At the NEB, we share a commitment to continual improvement. As I look ahead, I say with confidence, we will be ready to seize the opportunities that come our way.



Gaétan Caron  
Chair and CEO, National Energy Board







# OUR ROLES AND RESPONSIBILITIES



## A LEADER IN ENERGY REGULATION

The National Energy Board (NEB or the Board) is an independent federal agency that promotes safety and security, environmental protection and economic efficiency in the Canadian public interest within the mandate set by Parliament for the regulation of pipelines, energy development and trade. Established in 1959, the Board is funded 90 per cent by the energy industry it regulates and 10 per cent by government. The Board reports to Parliament through the Minister of Natural Resources.

The NEB regulates approximately 45 000 kilometres of pipelines across Canada. In 2007, these pipelines shipped over \$104<sup>2</sup> billion worth of crude oil, petroleum products, natural gas liquids and natural gas at an estimated transportation cost of \$4.4 billion.

The main functions of the NEB are established in the *National Energy Board Act* (NEB Act) and include regulating:

- the construction and operation of pipelines that cross international or provincial borders, as well as pipeline tolls and tariffs;
- the construction and operation of international power lines and designated inter-provincial power lines;
- natural gas imports and exports, crude oil, natural gas liquids, electricity exports; and,
- oil and natural gas activities on frontier lands and offshore areas not covered by federal/provincial management agreements.

Additionally, the Board has regulatory responsibilities under the *Canada Oil and Gas Operations Act* (COGO Act) and under certain provisions of the *Canada Petroleum Resources Act* (CPR Act) for crude oil and natural gas exploration and production on frontier lands and certain areas off Canada's east, west and arctic coasts.

The NEB has environmental responsibilities under the *Canadian Environmental Assessment Act* (CEA Act) and the *Mackenzie Valley Resource Management Act*. In addition, certain Board inspectors are appointed Health and Safety Officers by the Minister of Labour to administer Part II of the *Canada Labour Code* as it applies to facilities and activities regulated by the Board.

The Board monitors aspects of energy supply, demand, production, development and trade that fall within the jurisdiction of the federal government. The Board also provides energy information through public reports and presentations, which are available on our website. The NEB's mandate includes providing expert technical advice to the Canada-Newfoundland and Labrador Offshore Petroleum Board, the Canada-Nova Scotia Offshore Petroleum Board, Natural Resources Canada, and Indian and Northern Affairs Canada.

---

<sup>2</sup> This value is derived from annual throughputs and the weighted average yearly commodity price.

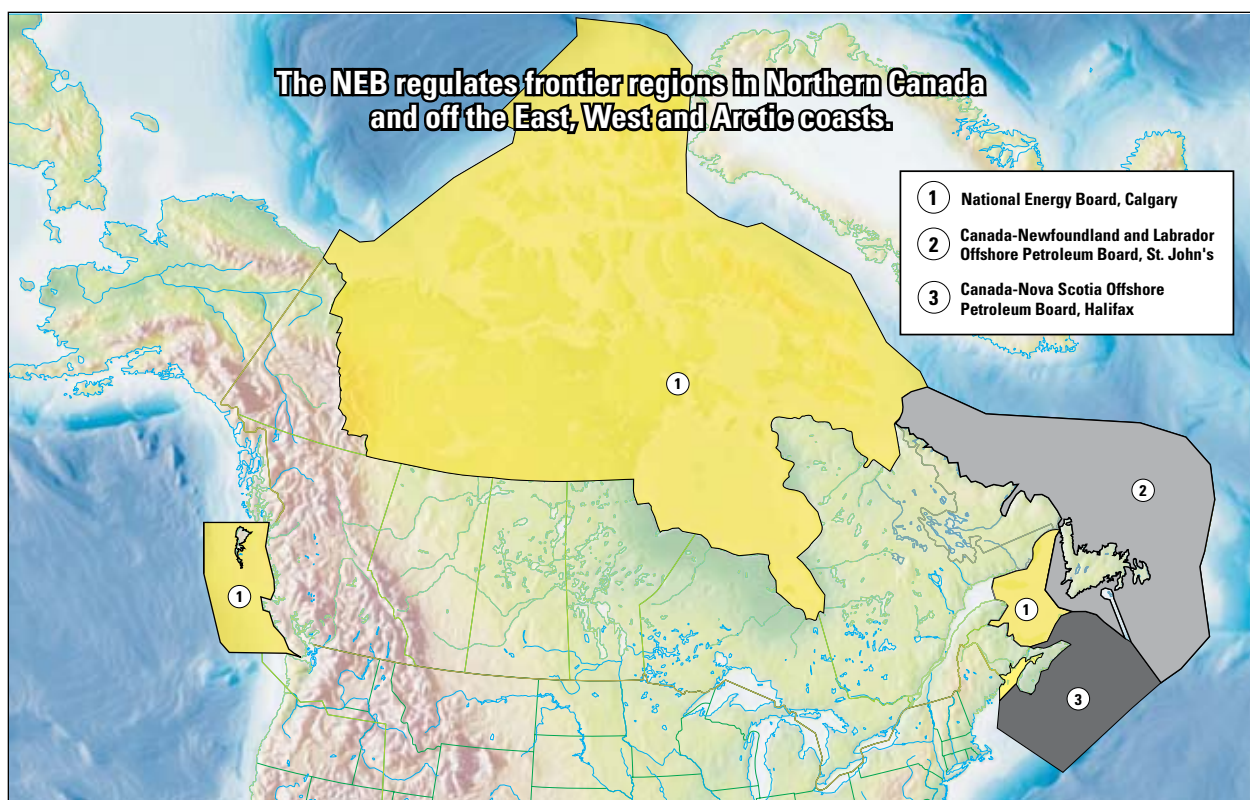
The NEB may, on its own initiative, hold inquiries, study specific energy matters and prepare reports for Parliament, the federal government and the general public. On request, the NEB provides advice to the Minister of Natural Resources Canada and other government ministers, departments and agencies.

The NEB is a court of record and has the powers of a superior court. The NEB Act provides for up to nine permanent Board Members supported by a staff of approximately 300 that includes, among others, financial

and market analysts, environmental and lands specialists, socio-economists, engineers, geologists and lawyers. Public hearings are typically conducted by three Board Members, who constitute a quorum, with one acting as the Presiding Member. The Board's regulatory decisions and the reasons for them are issued as public documents.

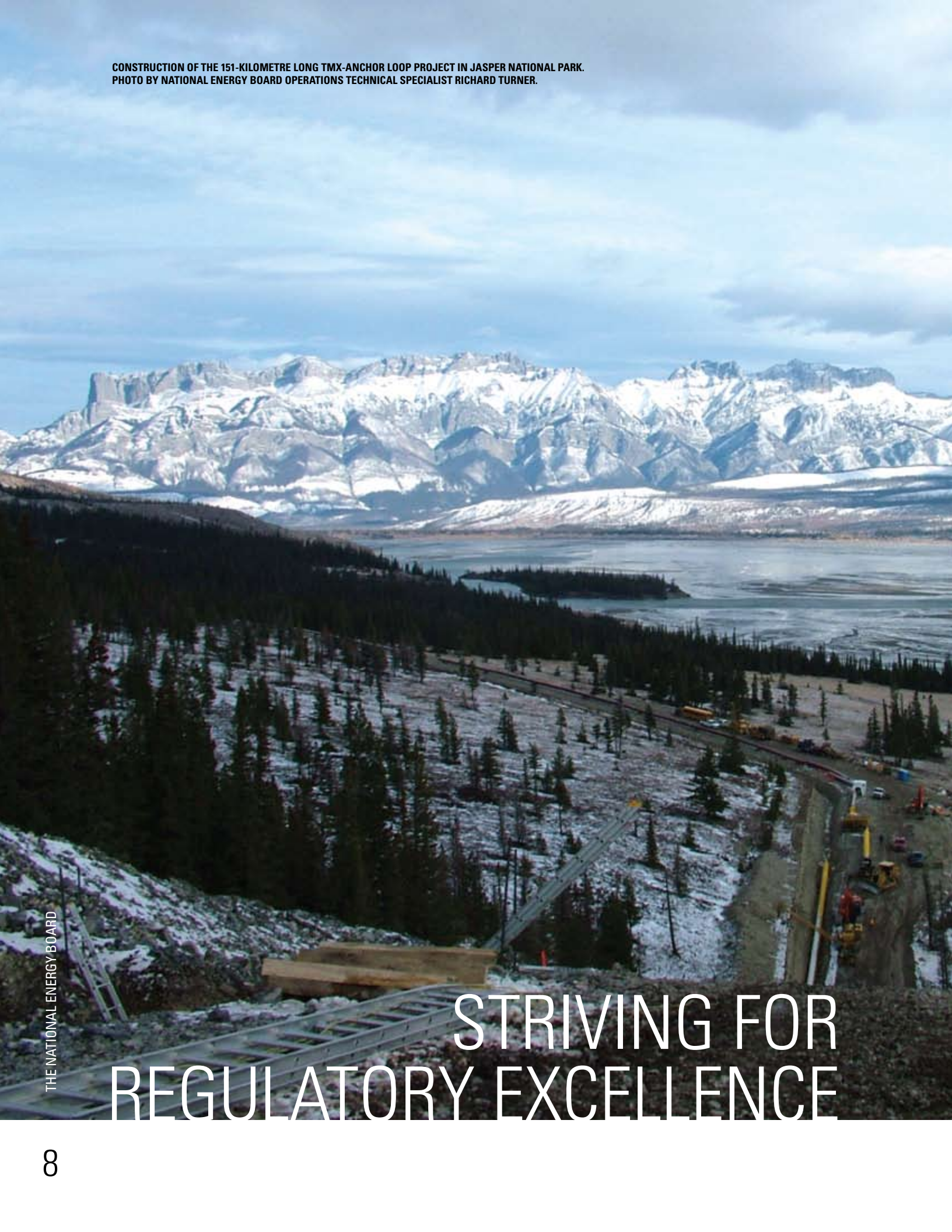
More information on the background and operations of the NEB may be found at the Board's website, [www.neb-one.gc.ca](http://www.neb-one.gc.ca).

**Figure 1: Frontier Administrative Areas**





CONSTRUCTION OF THE 151-KILOMETRE LONG TMX-ANCHOR LOOP PROJECT IN JASPER NATIONAL PARK.  
PHOTO BY NATIONAL ENERGY BOARD OPERATIONS TECHNICAL SPECIALIST RICHARD TURNER.



THE NATIONAL ENERGY BOARD

# STRIVING FOR REGULATORY EXCELLENCE



In carrying out its mandate, the NEB relies on a regulatory strategy that is based on goal-oriented regulations, clear, predictable regulatory processes, quality management systems and cooperation with other government agencies and departments.

## **REGULATORY ACTIVITY**

In 2007, the NEB considered applications for new pipeline facilities, tolls and tariffs filings, international power lines, activities on frontier lands, and requests for changes to short-term export and import orders. These activities are summarized below:

### ***Certificates, Orders, Permits and Applications approved in 2007***

- 483 Certificates, Orders, Permits and Letter approvals

### ***Construction and operation of pipelines and power lines under Parts III and III.1 of the NEB Act***

- 53 Orders and Permits issued

### ***Pipeline tolls and tariffs under Part IV of the NEB Act***

- 13 Orders issued

### ***Exports and imports of natural gas, crude oil, natural gas liquids and electricity under Part VI of the NEB Act***

- 378 Orders and Permits issued

### ***Exploration and production activity in frontier areas under the COGO Act***

- 47 Applications approved

### ***Activity in frontier areas under the CPR Act***

- 3 Significant Discovery Declarations

### ***Proceedings***

- 12 Public hearings
- 39 Public hearing days

### ***Compliance Monitoring***

- 25 Inspections undertaken during construction
- 24 Inspections of operating pipelines and facilities
- 3 Incidents resulting in an on-site response by NEB personnel
- 19 Workplace inspections under the *Canada Labour Code*
- 4 Financial audits
- 4 Management system audits

### ***Landowner Complaint Resolution Program***

- 18 Landowner files considered



## DEVELOPING A REGULATION: A SYSTEM OF CHECKS AND BALANCES

Many individuals, organizations and government departments contribute to the regulation-making process, including the sponsoring department or agency, the Treasury Board and the Department of Justice.

Effective regulation is based on clear and concise direction that provides the flexibility to adapt to changing conditions and new technologies. Because regulations potentially affect people across Canada, the Board carefully considers the issue at hand, consults affected stakeholders, and follows the process below to draft and submit proposed regulations.

1. Evaluate the need. One of the first steps in developing a regulation is to determine whether or not it is required. The need is assessed through consultation with NEB experts and other relevant government departments. When appropriate, the Board will also involve industry and the public in defining the problem and identifying a solution at this early stage of the process.
2. Develop the regulation. A multidisciplinary team from the NEB works with internal legal advisors and colleagues who have expertise related to the proposed regulation. Although some regulations are straightforward, others are complex and require detailed analysis as well as consultation with numerous experts, stakeholders and government departments. Depending on the complexity of the issues, the parties impacted and the number of authorities involved, it can take a substantive amount of time to develop an effective regulation.
3. Legal examination and drafting by the Justice Department and policy review by the Privy Council Office. The legal examination includes a linguistic review of both the English and French versions of the regulation and a review by specialists to ensure that Canada's two legal systems, common law and civil law, are respected.

4. Departmental and, in some circumstances, Ministerial approval for pre-publication.
5. Pre-publication review by Treasury Board and the Privy Council Office. The Treasury Board is responsible for monitoring, coordinating and advising on regulatory matters, and ensuring their consistency with economic, social and federal-provincial policies.
6. Pre-publication in the *Canada Gazette*, Part I. The *Canada Gazette* is the official publication of the Government of Canada. Part I contains all formal public notices, official appointments, miscellaneous notices and proposed regulations from the government that are required to be published by a statute or regulation. This important step gives interested stakeholders the opportunity to see how the final draft proposal compares to previous drafts and contributes to transparency in the regulatory process by allowing for public input and comment. A standard period of 30 days is allowed for the public to express their views.

Public comment is addressed and the proposed regulation is revised, if necessary. Even if the proposed regulation is not changed, a summary of public comments and how they were handled is prepared.

7. Final review of the revised regulation by the Department of Justice and the Treasury Board.
8. Approving, registering and publishing the regulation in the *Canada Gazette*, Part II, which contains regulations and certain classes of other statutory instruments. After this step, the regulation becomes law.
9. Review by the Standing Joint Committee for the Scrutiny of Regulations based on 13 criteria related to matters of legality and the procedural aspects of regulations. The committee members can be drawn from the House of Commons and the Senate.





### WHAT IS GOAL ORIENTED REGULATION?

Goal oriented regulation is the NEB's approach to regulation. The approach describes regulations that include a blend of prescriptive, objective based and performance-based regulatory elements. Goal oriented regulation enables the Board to employ a flexible regulatory approach according to the demands of the situation.

**Prescriptive:** tells you what to do

**Performance based:** tells you the objective and measurable outcomes, but does not tell you what to do to achieve it

**Objective based:** indicates a goal but does not quantify it or tell you what to do to achieve it

In 2007, the Board worked with the Department of Justice on several new or changing regulations, including:

- preparing the proposed *Damage Prevention Regulations*;
- development of new, goal oriented *Canada Oil and Gas Drilling and Production Regulations* which amalgamates the existing *Canada Oil and Gas Drilling Regulations* and the *Canada Oil and Gas Production and Conservation Regulations*. These regulations are being developed in cooperation with Natural Resources Canada, Indian and Northern Affairs Canada, the Canada-Newfoundland and Labrador Offshore Petroleum Board, the Canada-Nova Scotia Offshore Petroleum Board, the Nova Scotia Department of Energy and the Newfoundland and Labrador Department of Natural Resources. The objective is to ensure common regulatory approaches for activities in offshore regions, the Northwest Territories and Nunavut.
- publishing draft *Decommissioning Regulations* in the *Canada Gazette*, Part I. These amendments to the *Onshore Pipeline Regulations, 1999* and the *Processing Plant Regulations* are proposed to correct a regulatory gap identified by the National Energy Board. There is currently no requirement under the *Onshore Pipeline Regulations* that applies to a company planning to permanently remove a pipeline or part of one from operation, when the removal does not result in a discontinuance of service.

## INDUSTRY STANDARDS

The NEB, in partnership with industry, government and stakeholder groups, participated in several initiatives that focused on developing consensus-based standards, best practices and common approaches to safety, security and environmental issues. NEB staff members belong to and chair several technical committees responsible for developing and updating pipeline standards through the Canadian Standards Association. The NEB is also a member of the Canadian Pipeline Environment Committee and the Canadian Association of Members of Public Utility Tribunals, which is currently headed by the Board's chair, Gaétan Caron.





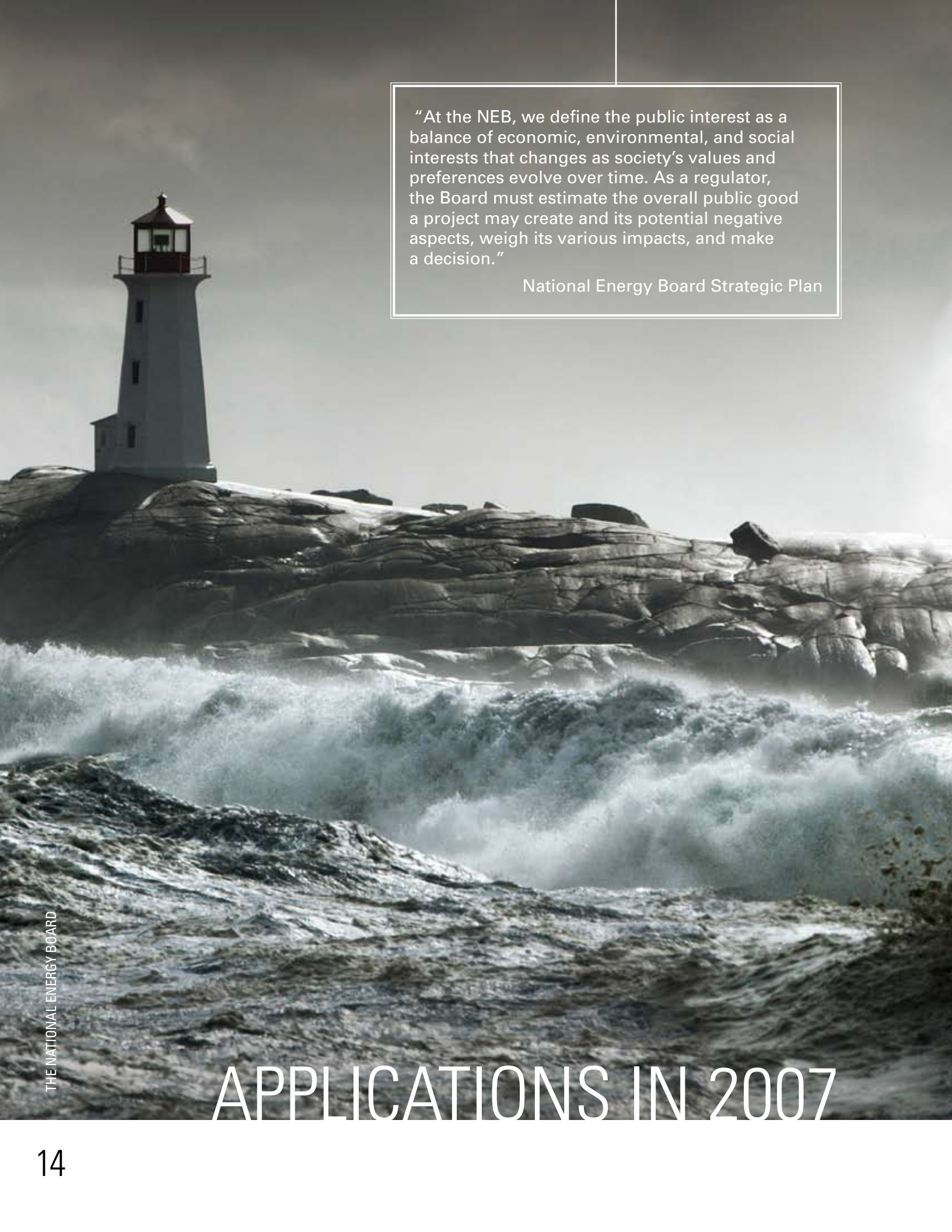
### **MAJOR PROJECTS MANAGEMENT OFFICE LAUNCHED TO IMPROVED CANADA'S REGULATORY SYSTEM**

Increased certainty, significantly improved timelines, high level accountability and avoidance of duplication in the regulatory system are key goals of the \$150 million Major Projects Management Office (MPMO) announced by the Honourable Gary Lunn, Minister of Natural Resources Canada, in October 2007. Participating departments and agencies include the Canadian Environmental Assessment Agency, Natural Resources Canada, Environment Canada, Fisheries and Oceans Canada, Transport Canada, Indian and Northern Affairs Canada, the Canadian Nuclear Safety Commission and the National Energy Board.

The MPMO will provide a single, efficient point of entry into the federal oversight processes – an important benefit as major natural resource projects often require some level of approval or authorization from several different departments and agencies.

A major resource project includes all resource projects requiring federal decision-making and a comprehensive study (for which there is a list), a panel review, or a complex or multi-jurisdictional screening level assessment. Applications to the NEB that require a public hearing will, in most cases, be included in the MPMO initiative.

Located in Ottawa, the MPMO is expected to become operational in early 2008. NEB staff have been working with MPMO and departmental staff to develop the processes, tools and templates needed for operations.

A black and white photograph of a lighthouse on a rocky island. The lighthouse is white with a dark top section. The island is composed of large, dark rocks. In the foreground, there are large, white-capped waves crashing against the shore. The sky is overcast.

“At the NEB, we define the public interest as a balance of economic, environmental, and social interests that changes as society’s values and preferences evolve over time. As a regulator, the Board must estimate the overall public good a project may create and its potential negative aspects, weigh its various impacts, and make a decision.”

National Energy Board Strategic Plan



The National Energy Board continued to work collaboratively with industry, government and other agencies to streamline regulatory processes, reduce or eliminate duplication of effort and expedite applications where appropriate. In the midst of ongoing change, limited resources and the increasing number and complexity of energy infrastructure requirements, the Board remained committed to ensuring that responsible development occurs in the public interest.

Proactive, clear communication between a project proponent and the public can greatly improve the application process. Our filing manual for applications identifies the information a company must file when they submit an application. A key component of this manual is public consultation.

It is important for a project's proponents to consult publicly about its application before it is filed. We encourage prospective applicants and intervenors to meet with NEB staff to make sure our filing manual and our processes are well understood. With respect to public consultation, the Board requires the following information within an application:

- principles and goals of the consultation program;
- design details of the consultation program; and,
- the outcome of the consultation program.

Depending on the nature of the application and the level of public interest, the Board may deal with an application by way of an oral or written hearing, or through a non-hearing process. If an application is approved and deemed to be in the Canadian public interest, the Board will authorize the project through an order, which may include conditions the applicant must fulfill during project development. The Board may then use a variety of post-decision tools, such as inspections and audits, to verify compliance with applicable regulations, company commitments, and imposed conditions.

In 2007, the Board received 152<sup>3</sup> applications from regulated companies, including 90 applications under the COGO Act related to exploration and production in frontier areas.

### **APPLICATION HIGHLIGHTS – PIPELINE APPLICATIONS**

The NEB strives to be an active, effective and knowledgeable partner in the responsible development of Canada's energy sector for the benefit of Canadians. Industry also has a key role to play in this partnership, notably, to submit projects for review that have commercial substance.

That includes, for a pipeline project:

- evidence of supply and market;
- evidence that there will be committed shippers;
- evidence of economic feasibility; and,

---

<sup>3</sup> This number does not include applications for short-term export and import orders.

- the willingness to squarely address the public interest issues that come hand-in-hand with the proposed development of natural resources, notably the environmental and socio-economic dimensions.

### **Mackenzie Gas Project – GH-1-2004**

In October 2004, the NEB received five applications from Imperial Oil Resources Ventures Limited, Mackenzie Valley Aboriginal Pipeline Limited Partnership, Imperial Oil Resources Limited, ConocoPhillips Canada (North) Limited, ExxonMobil Canada Properties and Shell Canada Limited for the construction and operation of the Mackenzie Gas Project (MGP), a \$16.2 billion project to develop and transport natural gas and natural gas liquids from the Mackenzie Delta to market. The NEB issued Hearing Order GH-1-2004 with respect to the MGP applications on 24 November 2004.

Throughout 2005 the NEB held information and pre-hearing planning sessions in many communities near the proposed pipeline route to explain and seek input on its hearing process. During 2006, the Board carried out the scheduled evidentiary portion of its public hearing through a total of 47 hearing days spent in 15 communities in the Northwest Territories and northern Alberta.

On 5 February 2007, the NEB issued a list of proposed conditions for comment by the participants in its hearing. On 10 and 11 October 2007, the NEB held an oral hearing session in Yellowknife to examine updated evidence filed in the GH-1-2004 proceeding.

The Board's hearing process is coordinated with the Socio-Economic and Environmental Impact Review of the Mackenzie Gas Project by the Joint Review Panel (JRP). NEB Board Member Rowland Harrison

was appointed as a member of the JRP in 2004. Following the release of the JRP Report, expected in mid-2008, and a report to the Board by Mr. Harrison, the Board will complete its hearing process and issue its Reasons for Decision.

Throughout 2007, the NEB continued to partner with the Northern Gas Project Secretariat (NGPS), which has offices in Inuvik, Norman Wells, Fort Simpson and Yellowknife, and provides logistical, technical and administrative support to the NEB, JRP, Mackenzie Valley Land and Water Board, and Northwest Territories Water Board in their public hearings for the MGP. The NGPS provides the forum by which agencies responsible for the environmental and regulatory assessment of the Mackenzie Gas Project, including the NEB, can coordinate their activities while respecting the need for their review processes to be conducted independently.

### **TransCanada PipeLines and Keystone Pipeline GP Transfer Application – MH-1-2006**

On 5 June 2006, TransCanada PipeLines Limited (TransCanada) and TransCanada Keystone Pipeline GP Ltd. (Keystone) applied to the NEB to transfer certain pipeline facilities that were part of the TransCanada Mainline natural gas transmission system from TransCanada to Keystone. Keystone stated that, if the transfer were to be approved, it planned to convert the transferred natural gas facilities to crude oil service for use in its proposed Keystone crude oil pipeline project. It asked the Board to determine that converting the facilities from gas to oil service would be in the public interest provided the Board also finds that the Keystone Project is required by the present and future public convenience and necessity.



Following a public hearing on the application in October and November 2006, the Board approved the transfer in its Reasons for Decision released on 9 February 2007. In its decision, the Board determined that the appropriate test to examine this application was the public interest, as opposed to the “no harm to gas shippers test”, proposed by some intervenors. The Board further determined the application to be in the public interest, recognizing that the facilities would not be transferred until and unless Keystone receives additional approval from the NEB to construct and operate the Canadian portion of the proposed Keystone Pipeline.

The Board also approved TransCanada’s request to reduce its Canadian Mainline rate base by the net book value (NBV) of the facilities and Keystone’s request to include the NBV in Keystone Pipeline’s accounts upon the transfer, and to continue including it in its accounts if the Keystone Pipeline is placed in oil transmission service.

### **Keystone Project – OH-1-2007**

After the public hearing for the Keystone facilities transfer application and before the Board released its decision, Keystone submitted a facilities application for the Canadian portion of its Keystone project, including converting the natural gas facilities to crude oil service. The Keystone pipeline project would transport western Canadian crude oil to markets in the Chicago area. The Canadian portion of the Keystone project would consist of a 1 235-kilometre pipeline from Hardisty, Alberta to a location near Haskett, Manitoba, on the U.S. border. The estimated cost of the project is \$664 million and it would have a nominal design capacity of 69 200 cubic metres (435 000 barrels) per day. In June 2007, the Board held a public hearing on this application in Calgary and Regina. On 20 September 2007, the Board released its decision saying the Keystone project was in the public interest.

#### **MACKENZIE GAS PROJECT: NORTHERN REFLECTIONS**

With an estimated cost of \$16.2 billion, the Mackenzie Gas Project is one of the most extensive and expensive projects to be heard by the Board. The Mackenzie Gas Project is, in reality, five separate projects from five different partner companies for two pipelines along the Mackenzie Valley and the development of three natural gas fields in the Mackenzie Delta.

Before the hearing started, NEB staff members visited numerous communities with their Joint Review Panel and Northern Gas Project Secretariat colleagues to share information on participating in the upcoming hearings. A special pre-hearing planning conference in Inuvik, Yellowknife, Fort Good Hope and Fort Simpson helped the NEB to determine which communities to visit and what topics to discuss in each location.

Former NEB Chair Ken Vollman, one of three Board members appointed to the Mackenzie Gas Project, opened the hearing in Inuvik in January 2006, calling the undertaking historic. His colleagues on the Panel are NEB Chair Gaétan Caron and David Hamilton, a longtime Northwest Territories resident appointed as a Temporary NEB Member for this hearing. In recognition of the scale and significance of the hearings, the NEB’s hearing opened in Inuvik with performances by local Inuvialuit and Gwich’in drummers and dancers.





During the course of the public hearing, the Board decided to hold a one day technical conference to obtain further information on engineering matters. At the conference, the Board and its staff questioned Keystone authorities primarily on engineering construction, change of service from gas to oil, pipeline operations and integrity management. The result was an improved understanding of the complex engineering matters associated with the application.

On 23 November 2007 Keystone applied to expand the capacity of the Canadian portion of the pipeline to 94 000 cubic metres (591 000 barrels) per day. The Board has received comments from interested parties and is considering the application.

### **Brunswick Pipeline Project – GH-1-2006**

On 23 May 2006, Emera Brunswick Pipeline Company Ltd. (Emera) applied to the NEB for approval of the proposed Brunswick Pipeline. The Brunswick Pipeline would run 145 kilometres from the Canaport™ Liquefied Natural Gas (LNG) Terminal at Mispec Point, New Brunswick to a point on the U.S. border near St. Stephen, New Brunswick. Emera's application attracted a large public response with more than 70 parties registered as intervenors in the hearing, over 180 letters of comment received by the Board, and oral statements made by 19 people during the oral portion of the hearing.

Pursuant to section 43 of the *Canadian Environmental Assessment Act*, the NEB was permitted to use its own hearing process as a substitution for an environmental assessment by a review panel. The NEB's 11 April 2007 environmental assessment report found that the project is not likely to result in significant adverse environmental effects provided Emera meets all of its environmental commitments, and all of the NEB's recommendations are implemented. An evaluation of the pilot substitute process is currently being conducted by the Canadian Environmental Assessment Agency with a final report expected in 2008.

On 31 May 2007, the Board issued a decision approving the Brunswick Pipeline Project on the grounds that the pipeline is necessary to meet present and future energy needs of Canadians. The Board recognized that many of the benefits of the pipeline are national or regional in scope and that the majority of the burdens will be shouldered by the local community, but the Board concluded that the burdens to the local community of Saint John will be significantly reduced through the conditions and the guidance provided to Emera in the NEB's Reasons for Decision.

### **Brunswick Pipeline Project Detailed Route Application – MH-3-2007**

On 12 July 2007, Emera filed its proposed detailed route for the Brunswick Pipeline Project with the Board. After the maps and related information for the detailed route application were finalized, Emera served notice of its application on potentially affected





landowners and published a notice of its application in local newspapers. Those whose lands might be acquired for the pipeline and people who believed their lands might be adversely affected by the project had 30 days to submit to the Board written statements opposing the route and stating the reasons for their opposition.

The Board received 21 written statements of opposition and determined that 11 of these statements, coming from seven different landowners, met the requirements in the NEB Act for public hearings. These hearings will be held in Saint John, New Brunswick beginning on 28 January 2008. Each landowner will have the opportunity to be heard by the Board on their statement of opposition as it relates to the best possible route of the pipeline and the most appropriate methods and timing of building the pipeline as it relates to their land. Meanwhile, the Board is approving the routing maps for those segments of the proposed detailed route where landowners have been duly notified and the detailed route is not under dispute.

The proposed detailed route includes three short segments which extend slightly outside the general corridor approved as part of the Brunswick Pipeline Project. These three routing adjustments were made in response to landowner requests to avoid potential land use conflicts and to reduce the number of affected landowners. The Board evaluated these three segments pursuant to section 21 of the NEB Act as a proposed variance to its decision approving the Brunswick Pipeline Project. The Board conducted an environmental assessment of the three proposed route variations based on the CEA Act. The Board provided all parties to the original hearing as well as the general public with the opportunity to comment on the proposed route variations. The people who commented on these variations were also given the opportunity to comment

on the environmental screening report prepared by the Board. After evaluating the evidence, the Board recommended that the Governor in Council issue an amending order approving the variance for the three sections.

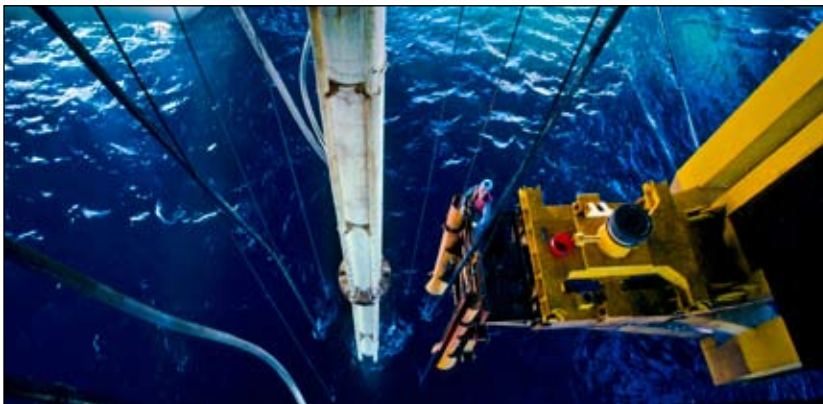
### **Deep Panuke Offshore Gas Development Project – GH-2-2006**

On 9 November 2006, EnCana applied to the NEB to build and operate a 176-kilometre underwater pipeline as part of the Deep Panuke Offshore Gas Development Project. The pipeline would extend from the Deep Panuke production facilities, about 173 kilometres off the east coast of Nova Scotia, to an interconnection point on the existing Maritimes & Northeast Pipeline near Goldboro, Nova Scotia. The pipeline would be designed to transport up to 8.5 million cubic metres (300 million cubic feet) per day of sweet natural gas.

At the same time it applied to the NEB, EnCana also applied to the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) for the Deep Panuke Project. In an effort to avoid duplication, the NEB and CNSOPB coordinated their review processes. Hearings before an NEB member and a CNSOPB-appointed commissioner were held in Halifax on March 5 to 9, 2007. The NEB approved the application, with conditions, and released its Reasons for Decision on 13 September 2007. EnCana announced its intention to proceed with Deep Panuke on 25 October 2007.

### **Alida to Cromer Capacity Expansion – OH-2-2007**

The Enbridge Pipelines (Westspur) Inc. Alida to Cromer Capacity Enhancement (ACCE) Project involves the construction and operation of a 60-kilometre natural gas liquids (NGL) pipeline from the Enbridge terminal in Alida, Saskatchewan to the Enbridge terminal in



## **STREAMLINING THE APPLICATION PROCESS**

In August 2007, the NEB launched a pilot project designed to test a new online application system that will enhance regulatory efficiency while promoting safety, security and environmental protection in the public interest. The pilot process applies to pipelines that fall under section 58 of the *National Energy Board Act*, which deals with pipelines that are less than 40 kilometres in length.

The new application system, scheduled to be implemented during the first half of 2008, supports the Board's risk-based life cycle approach in that companies will use the Board's criteria to evaluate the risks of their proposed projects, confirm the level of risk for each criterion and provide additional information to the Board only if there is more than a low level of risk for a particular criterion. As the complexity of the project increases, so too will the amount of information required. Issues of concern or issues that are higher risk in nature will receive extra oversight by NEB technical specialists with expertise in the specific topics potentially affected by the proposed project. Issues that are low risk in nature will still be assessed, but the amount of information required for the assessment will be streamlined.

Cromer, Manitoba. Although the new NGL pipeline will not increase NGL throughputs beyond current levels, it will free up capacity on an existing pipeline and allow Enbridge (Westspur) to respond to a forecast of growing crude oil production from fields in south and eastern Saskatchewan by increasing the crude oil delivery capacity between Alida and Cromer by about 20 per cent, from 25 000 cubic metres (157 300 barrels) per day to 29 900 cubic metres (188 130 barrels) per day.

Upon receipt of the application for the ACCE project in January 2007, the Board made a preliminary assessment of the risks associated with the project and determined the processing timeline accordingly. Factors considered included the lack of technical complexity, the limited environmental impact and the lack of public involvement. The Board approved the application with conditions in June 2007, a timeline about four months shorter than usual.

### **Enbridge Southern Lights Project – OH-3-2007**

On 9 March 2007, Enbridge Southern Lights GP on behalf of Enbridge Southern Lights LP and Enbridge Pipelines Inc. applied to the NEB for approval of the Southern Lights Project. This project consists of two sub-projects, the diluent pipeline project and the capacity replacement project.

The diluent pipeline project involves transferring the Canadian portion of Line 13 from Enbridge Pipelines Inc. to Enbridge Southern Lights LP and removing the line from southbound crude oil service. Line 13 would be reversed in order to transport diluent from the Canada/US border near Gretna, Manitoba to Edmonton, Alberta. Diluents are light petroleum liquids used to

dilute bitumen and heavy oil so they can flow through pipelines. The reversed line would be the first diluent pipeline regulated by the Board.

The capacity replacement project would offset reduced southbound crude oil capacity on the Enbridge Pipelines Inc. Mainline system resulting from the reversal of Line 13. The capacity replacement project involves building a new 288-kilometre light sour crude oil pipeline from Cromer, Manitoba to the Canada/US border near Gretna and modifications to Enbridge Pipelines Inc.'s Line 2.

The Board scheduled oral hearings in Calgary, Regina and Brandon, Manitoba to accommodate the participation of aboriginal and landowner groups. However, due to consultation and negotiations efforts between the applicants and various stakeholders, some of the parties were able to reach an agreement and consequently withdrew from further participation in the hearing process. As a result, the hearing scheduled for Brandon was cancelled. The oral hearing took place on 13 and 14 August in Calgary, 20 and 21 August in Regina and on 29 and 31 October in Calgary. A decision is pending.

### **Enbridge Alberta Clipper – OH-4-2007**

The Enbridge Mainline system is the primary means of pipeline transportation for Western Canada Sedimentary Basin (WCSB) crude oil to reach eastern Canadian markets. With the development in the Western Canada oil sands, total WCSB supply is expected to grow, necessitating additional pipeline capacity out of the WCSB.

On 30 May 2007, Enbridge Pipelines Inc. (Enbridge) submitted an application for the construction and operation of the Alberta Clipper Expansion Project and for the approval of a proposed tolling methodology.

The Canadian portion of the proposed Alberta Clipper Project would entail approximately 1 078 kilometres of new crude oil pipeline between Hardisty, Alberta and the Canada-U.S. border near Gretna, Manitoba. With an initial capacity of 71 500 cubic metres (450 000 barrels) per day, the pipeline would expand Enbridge's existing mainline system and provide Enbridge with increased flexibility to meet demands from Canadian shippers for more pipeline capacity. It would also accommodate different types of crude oil. The estimated cost of the Canadian portion of the project is \$2 billion, with construction to be completed by the end of December 2009.

To facilitate the participation of affected parties located outside the Calgary area, including landowners and Aboriginal peoples, the Board scheduled the oral hearing to begin 5 November 2007 in Brandon, Manitoba. Similarly, the Board also announced hearing dates for subsequent weeks in Saskatoon, Regina, and Calgary. However, due to consultation and negotiations between Enbridge and various stakeholders, agreements were reached that resulted in a number of parties withdrawing from further participation in the Board's hearing process. As a result, the oral portion of the Alberta Clipper hearing lasted five days and was held only in Calgary and Regina. A decision is pending.

### **Enbridge Line 4 Extension Project – OH-5-2007**

The Enbridge Mainline system from Edmonton to Hardisty, Alberta currently consists of four pipelines; while downstream of Hardisty the Mainline system comprises five pipelines. The existing Line 4 pipeline starts at Hardisty and carries product to the southeast.

Enbridge applied to the NEB on 28 June 2007 to construct and operate its Line 4 Extension project. This project, if approved, would extend Line 4 by about 180 kilometres upstream so that it starts at Enbridge's Edmonton terminal, thereby increasing the Enbridge Mainline system to five pipelines upstream of Hardisty. The project would consist of reactivating 42.5 kilometres of currently deactivated pipeline, and building 137.5 kilometres of new pipeline between Edmonton and Hardisty. When completed, the new pipeline would

have an average capacity of 140 000 cubic metres (880 600 barrels) per day of crude oil. An oral public hearing is planned for 2008.

### **SemCAMS Redwillow Pipeline – GH-2-2008**

On 7 December 2007, SemCAMS Redwillow ULC (SemCAMS) applied to the NEB to construct and operate the Redwillow Pipeline. The proposed Redwillow Pipeline would transport sour natural gas across 150 kilometres of Crown land in British Columbia and Alberta. An oral public hearing is planned for 2008.

## **TOLL AND TARIFF APPLICATIONS**

Tolls are the prices charged by a pipeline company for transportation and other services on its system and can vary from year to year as costs and circumstances change. Tariffs describe the terms and conditions under which the services of a pipeline are offered or provided, including the tolls, rules, regulations and practices relating to specific services. Tolls and tariffs for major pipelines are typically decided either through a public hearing process or through negotiations between pipeline companies and shippers. All negotiated settlements must be approved by the NEB.

### **Gros Cacouna Receipt Point Hearing**

On 17 July 2007, the NEB approved an application from TransCanada PipeLines Limited (TransCanada) for the receipt of natural gas from a proposed liquefied natural gas regasification terminal at Gros Cacouna, Québec, and for the tolling methodology for shipping from this new receipt point.

The NEB approved the applied-for toll methodology which reaffirms the existing rolled-in tolling methodology on TransCanada's Integrated System. This decision means that all eventual costs of extending the TransCanada Integrated system to Gros Cacouna would be rolled into a single, existing cost pool.

### **Alliance British Columbia Expansion – GHW-1-2007**

On 28 February 2007, Alliance Pipeline Ltd. (Alliance) applied to construct a new 5.7-megawatt (7 700 horsepower) compressor station, and for approval of certain tariff amendments. The proposed new compressor station would provide additional receipt capability for the Taylor-Aitken Creek (TAC)



zone in northeastern British Columbia. The requested amendments to Alliance's Transportation Tariff included a new receipt-only service (ROS) for the incremental capacity from the TAC zone and a ROS secondary receipt point toll to help facilitate the continued high use of the available ROS capacity.

The Board established a written procedure that allowed for information requests, evidence and argument and approved the application on 11 September 2007.

### **Enbridge Line 9 Tolls Application – RH-2-2007 and subsequent filings**

On 11 April 2007, Enbridge Pipelines Inc. applied to the Board to raise the tolls charged to shippers using its 849-kilometre Line 9 pipeline. Line 9, which began westbound service in 1999, ships liquid petroleum from Montreal, Québec to Sarnia, Ontario and onward to refineries in Corunna, Ontario. Enbridge said that the toll increase was needed to cover the company's own revenue requirements for Line 9. The proposed tolls would have applied to the final nine months of 2006

and would have been subject to an additional increase effective 1 January 2007.

In Hearing Order RH-2-2007, issued on 27 April 2007, the Board identified a number of issues for discussion during the proceeding including, the proposed rate base, revenue requirement, capital structure, cost of debt and return on equity. The Board stated that it would also consider the proposed changes to depreciation expenses, whether and to what extent terminal negative salvage should be collected and the appropriateness of establishing proposed deferral accounts. Terminal negative salvage refers to the costs associated with the abandonment of a pipeline, net of salvage proceeds, at the end of its useful economic life. The oral part of the hearing was to begin on 24 September 2007 in Stratford, Ontario.

In a letter issued to the NEB on 12 September 2007, Enbridge withdrew its application, saying the company had reached an agreement with Imperial Oil, Line 9's largest shipper, on the terms and conditions of a new transportation service agreement for Line 9.

### **NEGOTIATED SETTLEMENTS**

To improve the efficiency of the regulatory process, the Board supports the use of negotiated settlements as an alternative to toll hearings. A negotiated settlement is an agreement between a pipeline company and interested persons concerning issues related to the company's revenue requirement, tolls, toll design, tariff, or other matters. In the process leading to such an agreement, interested persons are given a fair opportunity to participate and to have their interests recognized and appropriately weighed.

In situations where the settlement is uncontested and the Board is satisfied that the settlement does not contain provisions that are illegal or contrary to the *National Energy Board Act* or the public interest, and that the settlement results in just and reasonable tolls that are not unjustly discriminatory, the need for a formal hearing process before the Board would normally be eliminated. In the last ten years the number of toll hearings has been considerably reduced as the majority of toll matters have been settled by negotiated agreements.

Enbridge also indicated it would file an application with the Board for 2008 tolls along with a second application to make the existing interim tolls final. In a letter issued on 14 September, the Board cancelled the hearing.

On 14 December 2007, Enbridge filed a new application for interim tolls effective 1 January 2008 based on its agreement with Imperial Oil. The Board asked interested parties for their comments on the issues the Board should address, and the process for considering the application. Enbridge said it would file tolls for the period 1 April 2006 to 31 December 2007 in early 2008.

### **Alliance Pipeline Ltd. 2008 Toll Filing**

On 31 October 2007, the Board received an application from Alliance Pipeline Ltd. for tolls effective 1 January 2008. PPM Energy Canada Ltd. (PECL) objected to the new tolls on 12 December 2007. PECL requested a public hearing into the costs underlying Alliance's proposed 2008 Canadian tolls, with a particular interest in Alliance's forecasted rise in operating and maintenance costs. The Board sought comments from interested parties on Alliance's application, and will determine the most appropriate decision process following Alliance's reply to the comments from interested parties in early 2008.

### **Trans Québec & Maritimes Pipeline Inc. Cost of Capital Application**

On 17 December 2007, Trans Québec & Maritimes Pipeline Inc. (TQM) submitted an application to the Board to determine the cost of capital to be used in determining its final tolls for 2007 and 2008. The application also asked the NEB to review its March 1995 RH-2-94 Cost of Capital Decision, only as it applies to TQM. This decision contains the formula that is used to calculate the return on common equity (ROE) to be applied to TQM for 1996 and beyond. TQM also asked the NEB to approve an ROE of 11 per cent on a deemed 40 per cent equity component of the company's capital structure. The calculation would also include TQM's actual cost of debt. Currently, the NEB's approved ROE based on the RH-2-94 formula is 8.71 for 2008 and 8.46 for 2007. TQM's deemed equity component is 30 per cent.

The Board will hold an oral public hearing in 2008.

## **APPLICATIONS FOR POWER LINE FACILITIES**

Although total inter-provincial and international power lines regulated by the Board account for less than one per cent of all transmission infrastructure in Canada, these facilities are vital conduits for electricity trade between Canada and the United States. They enable commercial opportunities and improve the electric reliability of bulk power systems on both sides of the border.

### **Montana Alberta Tie Ltd.**

Montana Alberta Tie Ltd. (MATL) applied to the Board on 20 December 2005 and again on 20 October 2006 with an updated application to construct and operate a 230-kilovolt International Power Line (IPL) from Lethbridge, Alberta to the U.S. border at a point approximately 20 kilometres southwest of the town of Milk River, Alberta.

MATL applied to the Board for a permit to construct and operate an IPL under a provision which states that the Board shall issue a permit without a public hearing. The Board could however recommend to Governor in Council (GIC) that the application be elevated to a certificate process, resulting in a public hearing where the Board could then either approve or deny the application.

In its review of the application, the Board received written submissions from the public, federal and provincial government departments and MATL.

The Board decided it would not recommend to the Minister that the Governor in Council elevate MATL's application to a certificate process. The Board was satisfied that the construction and operation of the IPL would not have any unacceptable effects on the other provinces nor was the project likely to cause significant adverse environmental effects, and therefore approved the application and issued a permit on 4 April 2007.

## **APPLICATIONS FOR LAND RECLAMATION AND LANDOWNER COMPLAINTS**

### **Robert and Donna Siebert – Alliance Pipeline Ltd. MH-R-1-2007**

On 19 May 2006, the Board issued a decision regarding reclamation and monitoring with respect to Alliance's Bear River Crossing of the Spirit River Lateral, and requiring Alliance to take specific actions for reclamation

## **Challenges to the Board's Decisions**

### **EMERA BRUNSWICK PIPELINE PROJECT – GH-1-2006**

Following the Board's decision to approve the project, the Friends of Rockwood Park filed an application with the Federal Court of Appeal for judicial review and another for leave to appeal, on the grounds that the Board failed to comply with both section 16 of the *Canadian Environmental Assessment Act* and the Board's final scoping document, and that the environmental assessment was therefore invalid and unlawful. On 20 September 2007, the Federal Court of Appeal dismissed the leave to appeal with costs. The judicial review was discontinued by the Friends of Rockwood Park on 11 October 2007.

### **ALIDA TO CROMER CAPACITY EXPANSION – OH-2-2007**

Following the rendering of the NEB decision, the Standing Buffalo Dakota First Nation (SBDFN) filed an application for review of the decision pursuant to section 21 of the NEB Act. The SBDFN also filed an application for leave to appeal with the Federal Court of Appeal. The section 21 review decision upheld the NEB decision and the Federal Court of Appeal dismissed the SBDFN's application for leave to appeal the ACCE decision.

### **ALLIANCE PIPELINE LTD. APPLICATION FOR 2008 TOLLS - GHW-1-2007**

On 11 October 2007, the Canadian Association of Petroleum Producers (CAPP) filed an application for review of the GHW-1-2007 decision as well as an application to stay the decision. CAPP also filed an application for leave to appeal with the Federal Court of Appeal. The Federal Court of Appeal dismissed the application for leave to appeal on 23 November 2007.

### **MONTANA ALBERTA TIE LIMITED**

In May 2007, an application for Leave to Appeal, Brian Staszewski v. NEB and MATL, was filed in the Federal Court of Appeal. The Federal Court of Appeal dismissed the case in September 2007.



due to the presence of scentless chamomile on the Sieberts' properties northwest of Grande Prairie, Alberta.

On 20 June 2006, Alliance applied for a review of the Board's decision. The Board subsequently decided to review the decision in two stages. The first stage included a determination of whether the Board had the statutory authority to require Alliance to conduct reclamation activities on the Sieberts' properties outside the right of way or temporary workspace. On 20 March 2007, the Board announced that it did have the authority so long as the damage is caused by Alliance.

For the second stage of the review, the Board decided to hold an oral hearing to consider the reclamation issues in dispute, the cause of the damage, and the requirement for remediation. Hearing MH-R-1-2007 was held in Clairmont, Alberta on 26 and 27 June 2007. The hearing was followed by a post-hearing meeting between the two parties on 13 August 2007, where they reached an agreement on some issues.

In October 2007, the Board issued its decision on outstanding issues in the hearing. The Board was of the view that it was more likely that the scentless chamomile was introduced onto the Sieberts' properties by Alliance's activities than by other potential sources. The Board determined that Alliance was responsible for monitoring, hand picking and spraying scentless chamomile on the Sieberts' properties. The Board also determined that the Sieberts were responsible for monitoring the land on and off the right of way, and for notifying Alliance if any scentless chamomile is found. The Board noted that it did not expect to address issues via a public hearing that should easily be resolved through meaningful consultation between pipeline companies and landowners or through Appropriate Dispute Resolution, which is offered by the Board.

### **Hélène Campbell – TransCanada PipeLines Ltd. – MH-1-2007**

In 1966, TransCanada PipeLines Ltd. built a pipeline across the lands of Mme Hélène Campbell in the municipality of Saint-Sébastien, Québec. In 2006, TransCanada received approval to construct the Saint-Sébastien Loop, which consists of looping 6.5 kilometres of the 1966 pipeline. However, TransCanada was not able to acquire the necessary land rights in order to construct the pipeline.

Subsequently, Mme Campbell filed an application under section 46 of the NEB Act, dated 29 March 2007, to change the route of TransCanada's existing pipeline, on the grounds that it interfered with her drainage system. The Board also received an application, dated 20 April 2007, from TransCanada for an immediate right of entry on and across Mme Campbell's lands. The Board expressed the view that Mme Campbell has raised issues in her application which need to be heard in an oral hearing, and has decided to consider the right of entry application in the same proceeding, planned for January 2008 in Saint-Jean-sur-Richelieu, Québec.

### **ACTIVITY IN FRONTIER REGIONS**

The NEB assessed 36 project applications related to geological, geophysical and drilling activities in frontier regions under the *Canada Oil and Gas Operations Act* in 2007. The majority of applications (80 per cent) were filed by companies operating in the Central Mackenzie region; the remainder related to exploratory work in the Mackenzie Delta and Beaufort Sea. Nearly 40 per cent of the 36 applications were for routine geophysical and geological operations, such as seismic work and airborne surveys.

The NEB also assessed three significant discovery applications under the *Canada Petroleum Resources Act*. Two of these significant discoveries are located in the Mackenzie Delta and one in the Central Mackenzie region.

One of the geological activities involved a two-dimensional seismic program in Baffin Bay in October 2007. This was the only NEB-regulated exploratory activity in Eastern Canada in 2007.

The Board continued to provide regulatory support to the Yukon Government in its administration of oil and gas activities. The NEB's exploration and production team worked with partners in the North including other federal agencies, territorial government and land and water boards, to improve regulatory efficiency. The Board also worked with industry on a variety of initiatives and promoted the use of best practices.

Increasing concerns about climate change and greenhouse gas emissions along with legislation, such as the *Canada's Clean Air Act*, have spurred a need for air quality guidance in the Northwest Territories (NWT). The Government of the Northwest Territories

is developing guidelines for air quality and emissions for the upstream oil and gas industry operating in the NWT. The NEB provided feedback on the development of these guidelines.

The NEB provides regulatory oversight throughout the life cycle of a project. As part of its compliance verification program, the Board conducts environmental and safety inspections and audits to ensure compliance with NEB-authorized program conditions and regulatory requirements. The exploration and production team fosters collaborative working relationships with inspectors from Indian and Northern Affairs Canada as well as other government agencies in the North.

The Board maintains an up-to-date engagement program for northern stakeholders to help ensure responsible development of northern resources. Recent Aboriginal engagement initiatives indicate that the current NEB approach is effective.

The NEB continued to promote awareness of the NWT Spill Line, a 24-hour telephone line maintained by the Government of the NWT for reporting spills. As well, members of the NEB's exploration and production team met with community members during inspections and other occasions. These activities increased the Board's familiarity with community representatives, helped build relationships of trust and enhanced the NEB's understanding of local issues.

In 2007, the exploration and production team also:

- Drafted the new *Canada Oil and Gas Drilling and Production Regulations*, goal oriented regulations that will replace the more prescriptive *Canada Oil and Gas Drilling Regulations* and *Canada Oil and Gas Production and Conservation Regulations*;
- Proposed amendments to the *Canada Oil and Gas Operations Act* and the *Canada Petroleum Resources Act* to improve regulatory efficiency; and,

- Completed the technology upgrades for frontier operations to reflect the change from a North American Datum 1927 to a North American Datum 1983, aligning with industry.

During 2007, an increasing number of visitors came to the NEB's Calgary-based frontier information office to access data released from past exploration activity. This interest could translate into a sizable increase in the level of frontier exploration activity over the next few years as companies analyze and act on the information.

## Preparing for the Future

Activity level in Canada's northern frontier in 2008 and beyond is contingent on a number of factors, chief among them being the status of the Mackenzie Gas Project. The Board has observed the entry of new players in the Northwest Territories and subsequent geological and geophysical activity, including seismic operations.

An increase in drilling activity in the Northwest Territories is possible. A return of activity would not be sudden. Rather, a gradual increase in the number of authorization requests for both seismic and drilling programs should be expected.

Negotiations between the Federal Government and the Northwest Territories on the devolution of natural resource management are ongoing. The effect of devolution would reduce the geographic extent of the NEB's responsibilities for crude oil and natural gas exploration and production activities to Nunavut and certain offshore areas. The NEB may provide support to the Government of the Northwest Territories for such activities under a service agreement similar to the one that exists between the NEB and the Government of Yukon.





THE NATIONAL ENERGY BOARD

# ENERGY IN CANADA



Canada's energy sector is responding to tight energy markets by developing new large infrastructure projects, including oil pipelines, natural gas pipelines, liquefied natural gas receiving terminals and power generation and transmission facilities. These projects could bring additional energy supplies to Canadians and help ensure future energy supplies.

The NEB is responsible for reviewing many of the applications for these infrastructure projects and ensuring that, if they are found to be in the public interest, they proceed in ways that provide benefits to Canadians while minimizing any adverse impacts.

Although the NEB is responsible for regulating only certain aspects of the Canadian energy industry, issues such as renewable energy, emissions and the effects of growing oil sands development can affect the work of the NEB. *Canada's Energy Future*, a report released in November 2007, includes a comprehensive energy supply and demand outlook for 2005 to 2030. In preparing that report, NEB staff consulted more than 250 groups and individuals representing industry, government, non-governmental organizations and academia. In addition, more detailed information on 2007 energy trends can be found in the *Canadian Energy Overview*, to be released in May 2008.

## CRUDE OIL

### Highlights

- In November 2007, the price of West Texas Intermediate (WTI) crude oil soared to a record closing price of US\$98.18 per barrel.
- Canada's oil sands production increased by about 10 per cent.
- With a return to full production at Hibernia and Terra Nova, offshore crude oil production from Canada's East Coast increased by 25 per cent.
- Oil export revenues were approximately \$41.5 billion and total volumes of exports are expected to reach 162 million cubic metres (657 million barrels).

In November 2007, the price of benchmark West Texas Intermediate crude oil peaked at a record intra-day price of US\$99.16 per barrel, a 50 per cent increase over prices at the start of the year. Ongoing geopolitical uncertainty in Iran, Iraq and Nigeria, in combination with low spare producing capacity worldwide, was a major contributor to rising prices and market volatility. Tightening worldwide inventories for crude oil and petroleum products, as a result of OPEC production cuts, also supported higher prices. At year-end, WTI was about US\$96 per barrel. The 2007 average price of US\$72 per barrel represents a 10 per cent increase over the 2006 average price.

In 2007, Canada produced an average of 445 000 cubic metres (2.8 million barrels) per day of crude oil. On average, about 286 000 cubic metres (1.8 million barrels) of crude oil per day were exported – almost all to the United States. Oil export revenue amounted to approximately \$41.5 billion in 2007 – a record high.

High crude oil prices and strong demand continue to stimulate development, including a 10 per cent increase in production from Canada's oil sands. This supply increase more than offset the steadily declining production of conventional crude oil from the Western Canada Sedimentary Basin. In October 2007, the Alberta government announced the province's new royalty framework. The full impact of the new framework is not yet clear and the Alberta government is working with industry to make adjustments to the system, particularly with respect to deep oil and gas wells.

On the East Coast, production averaged 60 300 cubic metres (379 900 barrels) per day, 25 per cent over 2006 levels. This reflects a return to near full capacity in 2007 after operational difficulties at Hibernia and Terra Nova reduced production in 2006. The three producing crude oil offshore fields – Hibernia, Terra Nova and White Rose – have the capacity to produce approximately 68 000 cubic metres (428 400 barrels) per day.

## NATURAL GAS

### Highlights

- North American natural gas markets were well supplied, which resulted in natural gas priced at Henry Hub ranging between US\$6 and US\$8/MMBtu throughout 2007.
- Canadian natural gas production declined to 470 million cubic metres (16.6 billion cubic feet) per day as a result of high costs, which slowed down drilling activity.
- Net natural gas exports are projected to be about 92.8 billion cubic metres (3.3 trillion cubic feet). Net export revenue is expected to be \$24.5 billion.

Increased natural gas production in several large U.S. basins and higher imports of liquefied natural gas into North America offset slightly lower Canadian natural gas production in 2007 in the North American

market. The increased overall supply combined with an overhang in storage due to mild weather resulted in less volatile natural gas prices compared with recent years. Natural gas prices at Henry Hub, the pricing point in Louisiana for natural gas traded on the New York Mercantile Exchange, ranged between US\$6/MMBtu and US\$8/MMBtu throughout the year.

Natural gas production from Western Canada decreased slightly from 2006, averaging about 459 million cubic metres (16.2 billion cubic feet) per day. In previous years, rising drilling activity has offset declining well productivity to keep natural gas supply from the Western Canada Sedimentary Basin relatively flat. However, drilling activity was lower in 2007 as producers faced rising costs to develop natural gas resources, while prices for natural gas remained relatively steady. Other economic conditions also contributed to the decline in drilling, including high oil prices which diverted investments away from natural gas toward crude oil production, and a rising Canadian dollar in the second half of the year which effectively reduced the revenue from export sales, which are generally priced in U.S. dollars.

There was some growth in production from the East Coast. There was also an increase in production from coalbed methane (CBM), natural gas that is formed and remains trapped in coalbeds. In Alberta, CBM production increased from the Horseshoe Canyon and the Mannville formations. In Atlantic Canada, production levels were boosted slightly by the addition of compression at the Sable Offshore Energy Project and new onshore production from the McCully field in New Brunswick. As a result of these activities, production from Atlantic Canada exceeded 11 million cubic metres (400 million cubic feet) per day, up from 10 million cubic metres (352 million cubic feet) per day in 2006.

However, the growth in coalbed methane production in Alberta and offshore gas in Atlantic Canada was not sufficient to overcome the decline in conventional natural gas production from the Western Canada Sedimentary Basin. Overall, Canadian natural gas production in 2007 is expected to average about 470 million cubic metres (16.6 billion cubic feet) per day, down 11 million cubic metres (400 million cubic feet) per day from 2006.

Canada exports slightly more than half of its annual natural gas production to the United States. Natural gas export volumes were up slightly in 2007 over 2006;

however, this was offset by significantly higher natural gas imports into Canada in Ontario. Net natural gas exports in 2007 are projected to be about 92.8 billion cubic metres (3.3 trillion cubic feet), down slightly from 2006. Net export revenue is expected to be \$24.5 billion.

Canadian natural gas consumption has been steadily increasing over the past decade, driven by economic and population growth. In 2007, natural gas use in Canada was about five per cent higher than in 2006 due to space heating demand and additional gas-fired electricity generation in Ontario and Québec. Further increases are anticipated in coming years for oil sands production growth in Alberta and growing demand for gas-fired power generation, especially in Ontario.

## NATURAL GAS LIQUIDS (NGLs)

### Highlights

- Exports of propane and butanes declined slightly.
- The use of natural gas liquids for diluent increased.
- Enbridge Pipelines Inc. filed an application with the NEB to reverse Line 13 and import diluent from the U.S. Midwest.

Natural gas liquids include ethane, propane, butanes and pentanes plus (also referred to as C5+ or condensate).

Natural gas liquids are mainly derived from natural gas production. However, they can also be derived from crude oil refining. In 2007, about 14 per cent of propane and 50 per cent of butane supply came from refinery processes.

With ethane production at about 42 300 cubic metres (267 000 barrels) per day, supply was tight in 2007 and no volumes were available for export.

In 2007, propane and butane production averaged about 30 300 cubic metres (190 000 barrels) and 23 000 cubic metres (144 500 barrels) per day, respectively. Excess volumes of propane and butane were available for export throughout the year; however, year-over-year exports declined slightly. This decline is due to two main factors: first, the growing use of heavier natural gas liquids for bitumen diluent in Alberta (diluent is a diluting agent that helps bitumen flow more easily through a pipeline); and second, reduced demand for heating fuel in the United States. Given the rapid pace of oil sands development, the use of heavy natural gas liquids, such as pentane plus and butane, for diluent increased in 2007 and this trend is expected to continue. With respect to condensate diluent requirements, Enbridge Pipelines Inc. filed an application with the NEB on 9 March 2007 to reverse Line 13 and import diluent from the U.S. Midwest as part of its Southern Lights Project.



## ELECTRICITY

### Highlights

- Electricity supplies were adequate to meet domestic demand across Canada.
- Canada's net electricity exports increased from 17.4 terawatt hours in 2006 to approximately 30.6 terawatt hours in 2007.
- Total net export revenues increased from \$1.3 billion in 2006 to \$2.1 billion in 2007.
- Planning efforts continue across Canada to ensure that domestic supply will meet demand in the future.

In 2007, electricity supplies continued to meet domestic energy demand. At the beginning of 2007, total installed electric generation capacity in Canada was approximately 124 000 megawatts. As in 2006, generation additions over the year mainly consisted of natural gas-fired generation and wind generation. Wind generation capacity increased to 1 770 megawatts, up more than 300 megawatts from 2006.

Following a decline in net exports in 2006, Canada's total net exports increased from 17.4 terawatt hours in 2006 to approximately 30.6 terawatt-hours in 2007 or an estimated five per cent of total generation. Net export revenues increased from \$1.3 billion in 2006 to approximately \$2.1 billion in 2007. The increases in net exports and net revenues can be attributed to favourable export opportunities south of the Canada/United States border and good water conditions in hydro-generating provinces such as British Columbia, Manitoba and Québec. The export price increased from an average of \$60 per megawatt hour in 2006 to about \$63 per megawatt hour in 2007, while the import price increased from an average of \$49 per megawatt hour in 2006 to approximately \$54 per megawatt hour in 2007.

Planning efforts continue across Canada to ensure that domestic supply will be adequate to meet future demand. In 2007, several jurisdictions published reports describing their energy strategies, including British Columbia, Saskatchewan and Newfoundland and Labrador. A diversity of generation options is being considered with an emphasis on developing green electricity generation technologies.









# EFFICIENT ENERGY INFRASTRUCTURE AND MARKETS



**T**he NEB has an influence on the efficiency of energy infrastructure and markets through its regulatory decisions related to pipeline facilities, pipeline tolls and tariffs, and energy imports and exports. In pursuing the goal of economic efficiency, the Board strives to provide effective regulatory processes and foster adequate energy infrastructure and informed energy markets.

## **EFFECTIVE REGULATORY PROCESSES**

Effective regulatory processes help create the conditions required for investors and industry to proceed with new energy projects or infrastructure. The NEB understands that unnecessarily slow, lengthy or complicated regulatory processes lead to delays in infrastructure development, increased costs and could lead to the abandonment of a project that is in the public interest. By streamlining the regulatory process and working proactively with other federal and provincial departments, the NEB has been successful in reducing or eliminating obstacles to development while ensuring it is conducted responsibly in the public interest.

## **SERVICE STANDARDS**

In today's results-based management environment, service standards have become an essential tool for building effective, citizen-focused service in organizations. The NEB develops and applies service standards to many of its regulatory functions and services to measure efficiency and to help manage the expectations of stakeholders. Table 1 identifies service standards for various tasks at the NEB.

In 2007, the Board met many of its service standards. In those cases where it did not, the NEB has developed and adopted an action plan to address any challenges to meeting these service standards.

## **ELECTRICITY EXPORT PERMIT APPLICATIONS**

In 2007, the NEB published new service standards for electricity export permit applications which allowed for applications to be sorted into one of three categories based on the complexity of issues associated with the application. In addition, new tools and procedures were put in place to support the Board's effectiveness and efficiency in processing electricity export applications. For example, a new, simplified, electronic application form along with an electricity export application e-filing guide and an updated list of frequently asked questions for *Category A* permits, which are generally routine matters that generate little public concern, were added to the Board's website. In 2007, the NEB achieved a 100 per cent success rate in processing all electricity export permit applications within the published service standards, as shown in Table 2.

## SERVICE STANDARDS FOR APPLICATIONS NOT REQUIRING A HEARING

The Board receives some applications which do not require a public hearing in order to make a decision. For example, an application to build a pipeline shorter than 40 kilometres is normally considered under Section 58 of the *National Energy Board Act*. Table 3 shows the service standards and results for section 58 applications.

## ADEQUATE ENERGY INFRASTRUCTURE

Adequate energy infrastructure is essential to an effectively functioning energy market. Inadequate pipeline capacity reduces a shipper's ability to transport energy products to market and causes reduced revenues for producers, lower income tax revenues to governments, and potentially higher prices for consumers. For example, when shippers request transportation for more crude oil than a pipeline can transport, each shipper is required to cut back or 'apportion' its shipments. When pipeline capacity is constrained, oil may be shut-in or shippers may be forced to sell their products at lower prices in less attractive markets. Discounts on heavy and light crude

oil tend to increase when there is inadequate pipeline capacity or a lack of available markets. During 2007, heavy crude oil inventories were building partly due to pipeline constraints and problems at U.S. refineries. This increase in inventories put downward pressure on heavy crude oil prices relative to the benchmark West Texas Intermediate price.

Furthermore, inadequate infrastructure would have a potentially significant impact on Canadians as consumers of energy if adequate supplies cannot be delivered to markets, especially at times of high need, such as a cold winter day.

## CRUDE OIL PIPELINE CAPACITY

Increasing production from the oil sands has resulted in tight pipeline capacity out of the Western Canada Sedimentary Basin. Throughout 2007, the major export pipelines were operating at or near full capacity or under apportionment.

In 2007, Enbridge Pipeline Ltd. operated at about 87 per cent of capacity, with actual throughput averaging 254 000 cubic metres (1.6 million barrels)

**Figure 2: Major Crude Oil Pipelines In Canada**



**Table 1: National Energy Board Service Standards and Results in 2007**

Task	Service Standard	No. of Applications or Requests in 2007	Results
Release of Hearing Decision	80% complete within 12 weeks following a public hearing	4	75%
COGO Act Applications to drill a well	Decision rendered within 21 calendar days of the receipt of a complete application	10	100%
COGO Act Geological and Geophysical Applications	Decision rendered within 30 calendar days of the receipt of a complete application	19	100%
New Authorization for export of crude oil and/or petroleum products	2 working days (Short-term Orders only. Long-term licences are subject to a full hearing process)	9 orders	89%
Renewals for authorization for export of crude oil and/or petroleum products	No service standard	95 renewals	N/A
Authorization for export and import of natural gas	2 working days (Short-term Orders only). Long-term licences are subject to a full hearing process).	139 orders	99%
Authorization for export of NGLs	2 working days	114 orders	99%
CPR Act Applications	80% of decisions rendered within 90 calendar days from the day all information is available to begin the evaluation	3	100%
Financial Audits	80% of draft audit reports will be sent to the company within 8 weeks of field work completion	3	100%
Landowner Complaints	80% resolved within 60 calendar days of receipt of the initial complaint (subject to the complexity of the complaint)	34	50%
Responding to NEB library requests	Respond to requests within 1 working day of receipt	1748	93%

**Table 2: Service Standards for Electricity Export Applications in 2007**

Category	Complexity of Issues	Electricity Export Decision Release	No. of Applications	Results	Average Cycle Times
A	Minor complexity of issues	80% of decisions released within 40 calendar days following the completion of the Notice of Application period	7	100%	35 days
B	Moderate complexity of issues	80% of decisions released within 90 calendar days following the completion of the Notice of Application period	3	100%	72 days
C	Major complexity of issues	No service standard	0	N/A	N/A

per day (Figure 3). Capacity was adequate throughout 2007 and no apportionment was required; many of the lines which comprise the Enbridge system were, however, fully subscribed throughout the year. Planned apportionment on the system for December was lifted due to a November accident on Enbridge's Line 3 near Clearbrook, Minnesota.

Kinder Morgan Canada's Trans Mountain pipeline system operated at approximately 95 per cent of capacity based on a combined light and heavy crude capacity of 49 200 cubic metres (225 000 barrels) per day. A pump station expansion in April resulted in a capacity increase of 5 600 cubic metres (35 000 barrels) per day. The Trans Mountain system was under apportionment for much of the year as continued capacity restrictions at the Westridge Dock did not allow for more crude oil to be shipped. Apportionment ranged from one per cent in May to 25 per cent in December, with March being the only month that the system was not apportioned. The TMX Anchor Loop project, which the Board approved in 2006, will add 6 350 cubic metres (40 000 barrels) per day of pipeline capacity to the Trans Mountain system and is expected to be in service by November 2008.

The Express Pipeline Ltd. operated on average at 76 per cent of capacity with throughput averaging 34 300 cubic metres (215 800 barrels) per day. There was no apportionment on the Express pipeline in 2007. However, as a result of the smaller capacity on the downstream connecting Platte system, Express is limited in the volume that can be shipped from Hardisty.

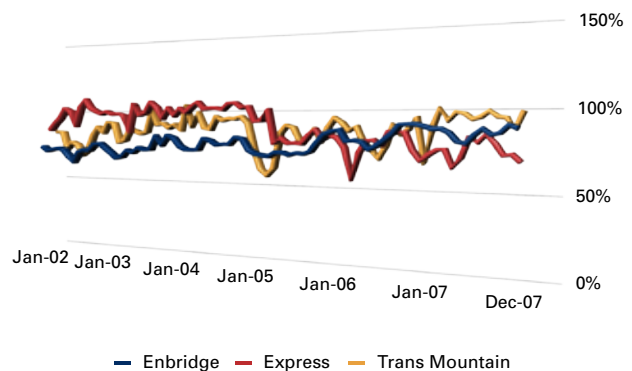
The Cochin Pipelines Ltd. system is the largest and longest natural gas liquids pipeline in Canada. In January 2007, Kinder Morgan Energy Partners L.P. acquired full ownership and became the operator by purchasing the remaining interest from BP Canadian

Energy Company. In 2007, the Cochin system operated at about 43 per cent of capacity, with actual throughput averaging 5 500 cubic metres (34 200 barrels) per day. Cochin continued to operate under voluntary pressure restrictions due to a defect found in the U.S. portion of the pipeline in March 2006. To avoid apportionment, in August 2006 it suspended shipments of ethylene and in the third quarter of 2007 it ceased shipments of ethane.

The industry is actively involved in finding ways to develop markets in high demand areas such as the U.S. Gulf Coast (Southern PADD III) and Chicago (Eastern PADD II). BP, for example, announced in 2007 that it was investigating the possibility of reversing its Line 1 pipeline that currently runs from Cushing, Oklahoma to Chicago, Illinois. Enbridge and Exxon announced they were looking at a joint initiative to build a pipeline from Patoka, Illinois to Beaumont, Texas. Enbridge also plans to expand the capacity of its Spearhead pipeline by 10 000 cubic metres (63 000 barrels) per day.

In Canada, TransCanada's Keystone application was approved by the Board in 2007. The Canadian portion of the pipeline had an initial design capacity of 69 200 cubic metres (435 000 barrels) per day.

**FIGURE 3 - OIL PIPELINE CAPACITY UTILIZATION**



In November 2007, Keystone applied to expand the capacity of this line and the Board is considering the application. If an expansion is approved and built, this project will create 94 000 cubic metres (590 000 barrels) per day of additional pipeline capacity to the Chicago area and on to Cushing, Oklahoma. In 2007, Enbridge filed applications for its Line 4 Extension and Alberta Clipper projects. Alberta Clipper has an initial capacity of 71 000 cubic metres (450 000 barrels) per day and is part of Enbridge's larger Southern Access project. In 2007, Enbridge also filed an application for its Southern Lights project which would see diluent delivered into Alberta from PADD II by reversing an existing Enbridge pipeline. The project will also include the construction of a light oil pipeline from Cromer, Manitoba to the Canada / U.S. border.

The NEB continues to monitor the adequacy of pipeline capacity to carry crude oil and its products from Western Canada to export and domestic markets. The industry is considering a variety of options to increase pipeline capacity, which could result in additional applications to the Board. The Board believes that it is most appropriate for industry to identify which pipeline expansion projects it should support. The Board's role is to provide efficient and effective regulatory processes that do not unduly delay these projects, while at the same time ensuring that projects are in the public interest.

## NATURAL GAS PIPELINE CAPACITY

Approximately 98 per cent of Canadian natural gas production comes from the Western Canada Sedimentary Basin (WCSB). Natural gas production from the WCSB is transported via pipeline to serve regional markets in Western Canada, domestic markets in Eastern Canada, and export markets in the Pacific Northwest, California, the Midwest and the Northeast of the United States. Between 1999 and 2006, average annual marketable natural gas production from Western Canada was quite flat at about 16.7 billion cubic feet (473 million cubic metres) per day. Throughout the 1990s, a series of major natural gas pipelines were expanded. As a result of flat production levels and pipeline expansions, the capacity to ship WCSB natural gas to markets outside Western Canada has been more than adequate since early 2001.

A downturn in drilling activity in Western Canada began in mid-2006, resulting in a drop in WCSB productivity. By early 2008 production was down to approximately 16 billion cubic feet (453 million cubic metres) per day. In addition, since 2001 there have been slight yearly increases in natural gas demand in Western Canada. This increase in Western Canadian demand and decrease in natural gas production has occurred when natural gas pipeline capacity is adequate, resulting in ample natural gas pipeline capacity from Western Canada.

**Table 3: Service Standards results for Section 58 Applications in 2007**

Category	Complexity of Issues	Electricity Export Decision Release	No. of Applications	Results	Average Cycle Times
A	Minor complexity of issues with no third party interest	80% completed within 40 calendar days of the receipt of a complete application	14	93%	35 days
B	Moderate complexity of issues with possible third party interest	80% completed within 90 calendar days of the receipt of a complete application	3	100%	68 days
C	Major complexity of issues with likely third party interest	80% completed within 120 calendar days of the receipt of a complete application	N/A	N/A	N/A

With an abundance of natural gas pipeline capacity and an increasing demand for crude oil pipeline capacity in Western Canada, a small portion of the natural gas pipeline capacity is being converted to transport crude oil. Even with this conversion, natural gas pipeline capacity in Western Canada will still be adequate. Pipelines transporting natural gas from Canada's other major producing areas offshore Nova Scotia and onshore New Brunswick also have adequate capacity.

Figure 5 shows the difference in natural gas prices between the Alberta border and the Dawn delivery point in southwestern Ontario. It also compares the price difference with the firm service toll (including fuel costs) between these two locations on the TransCanada PipeLines system, the largest natural gas transmission system in Canada. The fact that the price difference is typically lower than the cost of firm service transportation indicates that there is adequate pipeline capacity in place. The Board tracks similar data for other Canadian natural gas pipeline corridors and is satisfied that there is generally sufficient natural gas pipeline capacity.

**Figure 4: Major Natural Gas Pipelines In Canada**



## ELECTRICITY GRID CAPACITY

International power lines regulated by the Board are important conduits for electricity trade between Canada and the United States. While the NEB Act authorizes the Board to regulate designated inter-provincial power lines, there are currently no inter-provincial lines under NEB jurisdiction. In 2007, international transmission lines continued to enable commercial opportunities and improve electric reliability of bulk power systems on both sides of the border. The correlation between wholesale electricity prices in Figure 6 is an example of Canadian markets working efficiently with electricity trade markets in the United States.

Alberta has only been able to partially capitalize on differentials between Alberta and Pacific Northwest power prices. Transmission constraints continue to limit the volume of energy that can be traded between the regions. Had the two markets been in closer correlation, i.e. had Alberta been able to import greater amounts of electricity from the U.S. Pacific Northwest thereby increasing its market liquidity, it is likely Alberta would not have seen the extreme price spike shown in Figure 7.

Currently the two markets do appear to be somewhat correlated, largely due to natural gas setting the wholesale electricity price for both regions.

### PIPELINE SERVICES SURVEY HIGHLIGHTS

The Board conducted its third annual Pipeline Services Survey to obtain direct feedback from the customers of the major NEB-regulated pipeline companies on the quality of service provided by those pipelines. The survey also solicits feedback on the Board's regulatory performance with respect to tolls and tariffs.

Shippers who responded to the NEB's 2007 survey gave timeliness and accuracy of invoices and statements high marks with an average score of 3.87 out of five while satisfaction with the level of transportation tolls ranked lowest with an average rating of 3.16 out of five. Overall,

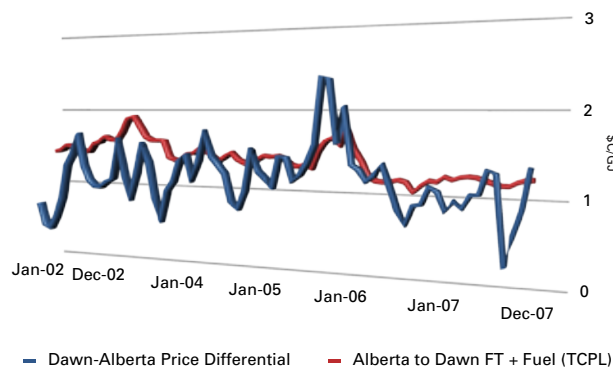
shippers remain reasonably satisfied with the services provided by the pipelines and the NEB.

A summary of the 2007 aggregate results was posted on the NEB website in May 2007. The Board also provided each pipeline company and its shippers with detailed company-specific results, including comments received from shippers.

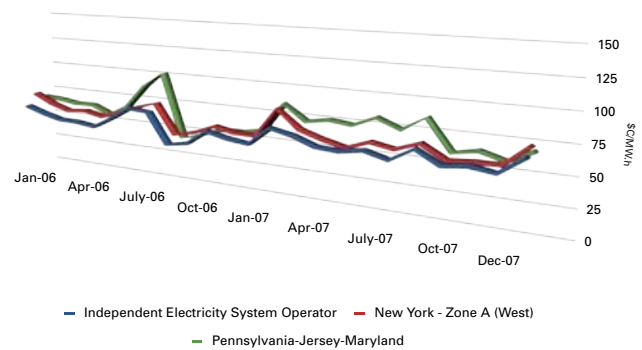
### EFFICIENT AND INFORMED ENERGY MARKETS

The NEB continually monitors Canadian energy markets to ensure that Canadians have access to Canadian-produced crude oil, natural gas and electricity on terms and conditions that are not less favourable than those available to export customers. The Board also provides data and analysis on a wide range of topics, including energy export volumes and prices, developments in

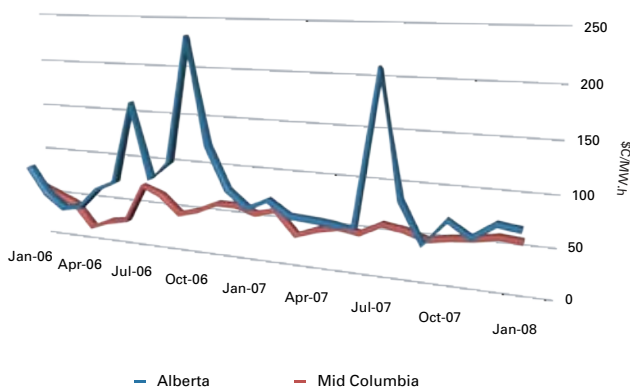
**FIGURE 5: COMMODITY PRICE DIFFERENTIALS (Dollars per gigajoule)**



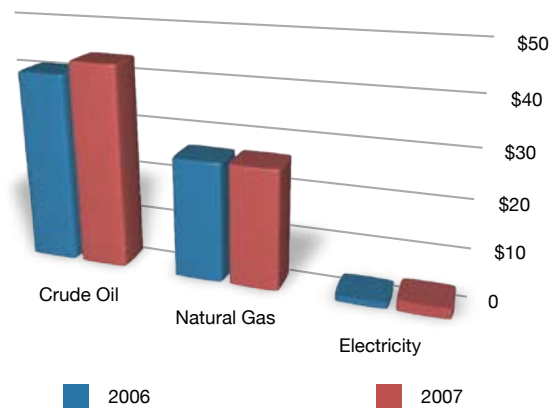
**FIGURE 6: ONTARIO (INDEPENDENT ELECTRICITY SYSTEM OPERATOR) VERSUS U.S. ELECTRICITY PRICES (Dollars per megawatt hour)**



**FIGURE 7: ALBERTA (INDEPENDENT ELECTRICITY SYSTEM OPERATOR) VERSUS U.S. ELECTRICITY PRICES**



**FIGURE 8: ESTIMATED NET EXPORT REVENUES BY COMMODITY (Billions of Canadian dollars)**





natural gas, crude oil and electricity markets; assessments of the supply, demand and future deliverability of natural gas and crude oil; and periodic long-term outlooks for Canada's energy future. Figure 8 shows 2007 estimated net export revenues by commodity.

Providing and interpreting energy market information contributes to the efficient operation of energy markets. Investors, industry planners and consumers can make more informed decisions when they have accurate information provided by an impartial agency such as the NEB. The following is an overview of energy market trends and developments observed in 2007. More detailed assessments can be found in the publications listed at the end of this section and on the Board's website. A plain language discussion of Canadian energy markets is posted in the Energy Pricing section of [www.neb-one.gc.ca](http://www.neb-one.gc.ca).

## CRUDE OIL MARKET

In 2007, the crude oil market functioned efficiently, meaning Canadians had access to Canadian crude oil at a similar price to that paid by export customers (Figures 9 and 10). Canadian light crude oil prices were relatively low in the first half of 2007 as a result of lower world prices and high inventory levels in the Cushing, Oklahoma market where Canadian light crude oil competes. In the second half of the year, prices began to rise as a result of a combination of strong world demand and declining inventories in major markets. Edmonton Par reached record prices in November despite the rising Canadian dollar which somewhat offset the impact of rising West Texas Intermediate prices. Edmonton Par averaged about \$77 per barrel in 2007, a rise of about five per cent over 2006.

Canadian heavy crude oil prices in 2007 generally tracked movements in the market for Canadian light crude oil. Prices for Canadian heavy crude were, however, impacted by refinery disruptions in the U.S. Midwest which caused periods of deep price discounting. In addition, the normal price movements associated with seasonal demand changes for heavy crude oil for asphalt production also affected prices. Western Canada Select (WCS), the Western Canada heavy crude oil benchmark (20° API gravity and 3.24 per cent sulphur), averaged about \$53 per barrel in 2007, a rise of four per cent over 2006.

## NATURAL GAS MARKET

In 2007, the natural gas market functioned effectively, meaning Canadians generally paid no more than export customers for natural gas (Figure 11). Domestic natural gas prices at AECO-C, the main pricing point for natural gas in Alberta, continued to be well connected to continental prices at Henry Hub and were equal to or lower than the price at export points in Eastern Canada. Additionally, the NEB tracks and monitors regional export and domestic markets to ensure that natural gas prices in other Canadian markets are well connected to North American market prices. This data is available on our website.

U.S. supply growth, higher LNG imports, ample natural gas in storage, a lack of sustained hot summer weather, and the absence of any major tropical storms have all contributed to a moderation in natural gas prices. In 2007, natural gas prices started the year at a high level due to cold winter weather in December 2006. After that period, prices were essentially flat for the remainder of the year since there were neither supply concerns nor extreme weather conditions.

### EDMONTON PAR PRICE

In Western Canada, the price of Edmonton Par, a high-quality, light crude oil (40° API gravity and 0.5 per cent sulphur), is the benchmark for all varieties of light crude oil produced in the region. Other crude oils are priced higher or lower than Edmonton Par, depending on their comparative quality. The price of Edmonton Par, in turn, is based on the price at which WTI is sold in Chicago, since this is where the price of exported Canadian crude oil competes in the United States.



## ELECTRICITY MARKET

Canada is a net exporter of electricity. These exports provide electric utilities and provincial governments with a key source of revenue. Major exporters include hydropower-generating provinces such as British Columbia, Manitoba, and Québec. A continued strong electricity trade relationship between Canada and the United States suggests that gains in reliability and export revenue are being made.

## ENERGY MARKET ASSESSMENT REPORTS

During 2007, the Board prepared the following publications and statistical reports related to energy commodities, including crude oil, natural gas and electricity. These reports are available on the NEB's website at [www.neb-one.gc.ca](http://www.neb-one.gc.ca).

*Canadian Energy Overview* – This new report presented an overview of energy commodities supply and markets activity in Canada during 2006.

*Short-Term Canadian Natural Gas Deliverability 2007-2009* – In this annual energy market assessment, the NEB reviews the volume of natural gas that can be delivered to markets from all Canadian sources in the next three years.

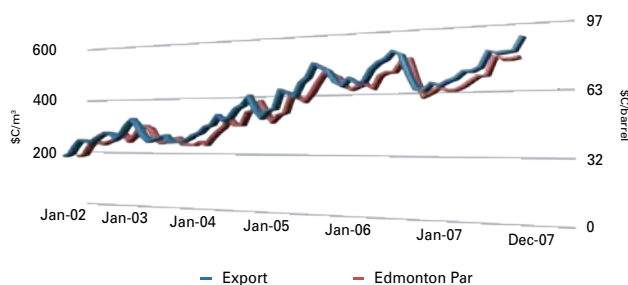
### FOCUS ON ENERGY ISSUES AND INFORMATION

As energy issues play an increasingly important role in their lives and economy, more and more Canadians are turning to the NEB for objective, accurate and timely information about Canada's energy system. The Energy Information Program was established in 2007 to consolidate the Board's information resources and enhance efforts to increase awareness about its collection of reports and statistics.

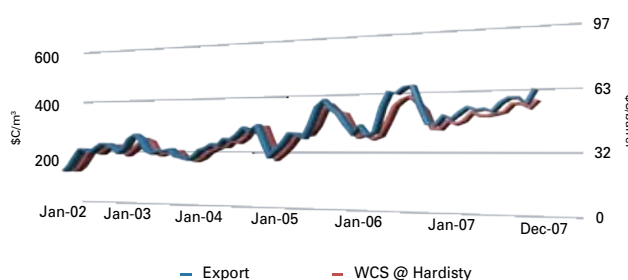
Key publications such as seasonal energy outlooks, energy market assessments, forecasts and energy overviews will be managed under this new program, which also oversees the energy pricing section, speeches, presentations and statistics posted on the website.

This initiative is part of the NEB's goal to continually improve the usefulness and accessibility of energy-related information to diverse audiences such as the Canadian public, oil and gas companies, the media, staff members and other stakeholders.

**FIGURE 9: LIGHT CRUDE OIL POSTED AND EXPORT PRICE AT EDMONTON (Cdn Dollars Per Barrel)**

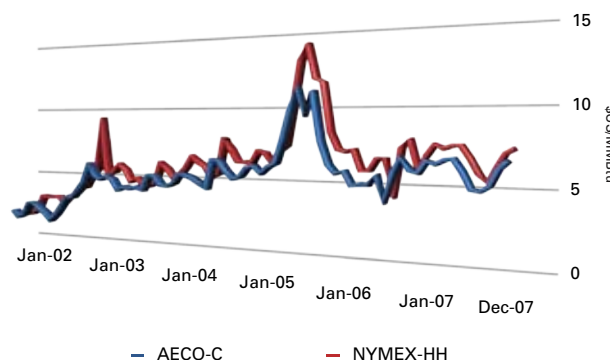


**FIGURE 10: HEAVY CRUDE OIL POSTED AND EXPORT PRICE AT HARDISTY (Cdn Dollars Per Barrel)\***



\*Note: Pricing tracks vary because of differences in crude oil quality.

**FIGURE 11: NORTH AMERICAN NATURAL GAS PRICES**



*Canadian Hydrocarbon Transportation System:*

*Transportation Assessment* – This yearly report examines the adequacy and economic efficiency of the more than 45 000 kilometres of pipelines regulated by the NEB.

In 2007, the Board published semi-annual outlooks of Canadian energy markets. These outlooks assess the supply and demand balance going into heating and cooling seasons and provide the Board's expectations of how the markets will perform over the ensuing months.

The NEB also provided Canadians with up-to-date energy pricing information and analysis on its website. The energy pricing section, which examines oil, natural gas, propane and electricity markets, attracted strong interest, recording more than 74 000 visits in 2007.

In May 2007, the NEB launched a new communication tool – energy briefing notes. Its first briefing note, *Overview and Economics of the Horseshoe Canyon Coalbed Methane Development*, examined the history and current economics of developing this unconventional source of natural gas.

In August 2007, following a recommendation made by the Canada-U.S. task force examining the causes of the August 2003 power outage in Ontario and the Northeastern United States, the Board published a report called *Reporting of Electric Reliability Information by Canadian Entities*. The report concluded that compiling reliability performance information to assess reliability trends would be useful to industry, regulators, policy-makers and the public. The report also found that the North American Electric Reliability Corporation was making efforts toward compiling this information and therefore, another entity to provide reliability information in Canada is not justified at this time.





### **CANADA'S ENERGY FUTURE – A METICULOUS STUDY**

Seek, confirm, validate. That was the mantra of the NEB team engaged in the research and development of the Board's highly sought energy market assessment report published in November 2007. Comprehensive in its coverage of all energy fuels and sectors in all of the provinces, *Canada's Energy Future* examines our energy system from a variety of perspectives, including supply and demand, pricing, economics, and the environment.

Two rounds of consultation with energy experts across Canada resulted in modifications to initial assumptions, methodology and preliminary results. For example, the price range for crude oil was changed after discussions with crude oil market experts who helped the NEB team develop a plausible range of energy outcomes. The authors of the report also incorporated feedback from technical experts familiar with leading edge technology that will affect future production scenarios and others knowledgeable about global energy-related issues and trends.

Published only once every four years, *Canada's Energy Future* examines three possible energy futures that may unfold for Canadians up to the year 2030.



“A risk-based life cycle approach will enable the NEB to focus its resources where it counts the most through every phase of a project and interest areas – whether that is an environmental, safety or land matters inspection, investigation or audit.”

Denis Gagnon

*NEB Project Manager, Risk-Based Life Cycle Approach*

# SAFETY, SECURITY AND THE ENVIRONMENT



The NEB is responsible for ensuring the regulated energy industry operates in a manner that protects the employee, contractor, public and environment. The Board's mandate includes oversight for the security of pipelines, associated pipeline facilities, and international power lines. Regulated companies have the primary responsibility for safety, security and environmental protection because they are the designers, builders and operators of the facilities. The Board ensures that companies identify and effectively manage the safety, security, environmental, socio-economic and land risks throughout the life cycle of regulated facilities.

## SAFETY PERFORMANCE

In March 2007, the NEB published *Focus on Safety and Environment – A Comparative Analysis of Pipeline Performance 2000-2005*. This is the fifth report comparing the safety and environmental performance of pipeline companies regulated by the Board with comparable industries nationally and internationally. This report is published every spring and includes data from the calendar year ending approximately 15 months earlier.

The 2007 report uses eight key indicators to evaluate performance in the areas of safety, integrity and environmental management. The NEB obtained data for the report through the *Onshore Pipeline Regulations* mandatory reporting requirements and through voluntary reporting by regulated companies under the Safety Performance Indicators Initiative. Using these statistics, the report presents the following key findings, which include data up to the end of the 2005 calendar year:

- 2005 is the eighth consecutive year in which there have been no fatalities on NEB-regulated pipelines.
- 2005 is the third consecutive year in which there were no reported ruptures on NEB-regulated pipelines.
- The NEB data collected over the past six years indicate that, on average, one person is injured for every 200,000 hours worked annually.
- NEB-regulated pipelines have experienced very few pipe body releases of liquid hydrocarbon products over the past six years.
- Subsequent to the publication of the report, new data for 2006 and 2007 was obtained as mandatory and voluntary company reporting continued.

## SECURITY MANAGEMENT

Along with Natural Resources Canada, the NEB has been responsible for the security of Canada's federally-regulated energy infrastructure since 2005. From natural disasters to malicious acts, the Board continues to work with our partners in government and industry to identify ways to ensure the resilience of Canada's energy infrastructure. As well, the NEB has been working on implementing several internal and external initiatives to meet our accountabilities in regulating security.

In 2007 our security program hit the road. Our inspectors conducted six entirely security-focused inspections in 2007 with more on the agenda for 2008. The security program continues to evolve on schedule. In 2006, the NEB introduced a proposed regulatory change (PRC) 2006-01 which outlines our expectations for our regulated companies' security programs and our aim to work with the Canadian Standards Association (CSA) and security experts to draft a national security standard for the petroleum and natural gas industry in Canada. This standard is designed to address the prevention and management of security risks that could result in a negative impact on people, the environment, property, or economic stability. The NEB is chairing this CSA technical committee and will deliver a draft for public review in the summer of 2008.

Internally, security training was identified as a priority for the Board's inspection officers through the establishment of the Security Compliance Community. In the field, our inspectors have tested and refined a suite of tools developed for conducting comprehensive security inspections, screenings and assessments to ensure consistency in verifying that our regulated companies comply with the PRC-2006-01.

## MONITORING COMPLIANCE

The NEB monitors activities undertaken by regulated companies from the initial design of facilities through to abandonment. This regulatory function assesses compliance with conditions attached to the original order, certificate or authorization, and ensures the company is designing, constructing, operating and abandoning its facilities in accordance with the applicable regulations under the NEB Act and the *Canada Oil & Gas Operations Act (COGO Act)*. We also ensure companies are meeting the requirements under the *Canada Labour Code Part II* during our safety inspections.

In 2006, the NEB formulated five compliance communities within the Operations Business Unit in the areas of integrity management, safety management, environmental management, emergency management and security management. These communities are charged with a number of measurable tasks including the development and maintenance of a comprehensive, risk-based approach for planning compliance verification activities such as inspections, audits and meetings. In 2007, the NEB began measuring its internal performance against the ability to achieve planned results as identified within the risk-based plans developed by the communities. These internal communities give specialists from each discipline a chance to come together and evaluate the work from the point of view of their own subject matter. The communities also set goals, study trends and share their experience in order to maximize knowledge.



## COMPLIANCE VERIFICATION

The NEB conducts compliance verification activities of its regulated pipelines and facilities throughout various stages of construction, operation and abandonment. Qualified and duly designated NEB Inspection Officers confirm compliance with legal requirements and other conditions of project approval. In addition to compliance activities carried out under the NEB Act and the COGO Act, several NEB Inspection Officers have also been designated as Health and Safety Officers by Human Resources and Social Development Canada who enforce the requirements of the *Canada Labour Code* Part II among NEB-regulated companies.

The NEB conducts various types of inspections and other on-site compliance activities. These not only provide valuable information related to the effectiveness of a company's programs and their implementation, but also serves to reinforce the working relationship between regulated companies and the NEB.

Safety inspections occur during construction and operation and monitor a company's compliance with

safety manuals, applicable occupational health and safety legislation, and industry best practices. The purpose of inspections under the *Canada Labour Code* is to ensure that the health and safety of persons working on NEB-regulated pipelines are protected.

Integrity inspections focus on the physical condition of a pipeline to ensure its safe operation. During construction, the emphasis is on the handling of the pipe, welding, non-destructive examination, coating and pressure testing. During operation, the emphasis is on a company's integrity management activities, such as cathodic protection surveys, in-line inspections and integrity digs.

Environmental inspections confirm the implementation of mitigation measures that are designed to minimize environmental effects resulting from the construction, operation, and abandonment of regulated facilities. On occasion, inspections are coordinated with federal and provincial partners, with a focus on construction practices where there is jurisdictional overlap, as in the case of fisheries resources and the protection of rare species.

**Table 4: 2007 On-Site Compliance Verification Activities**

In 2007, NEB staff members carried out:	
17	Safety and integrity inspections
8	Environmental inspections
6	Post-construction environmental inspections
4	Pipeline crossings inspections
6	Security inspections
2	Inspections in response to landowner concerns
6	Inspections of operation and maintenance activities
3	On-site incident investigations
2	On-site participation in company emergency exercises
26	Compliance screening meetings
19	Workplace inspections under the <i>Canada Labour Code</i>
99	Total number of compliance verification activities in 2007

Note: some of these activities may have been carried out simultaneously and correspond to the information available on an NEB database as of 21 January 2008.



Crossings inspections verify compliance with the *Pipeline Crossing Regulations*, Parts I and II by both the pipeline companies and third parties who cross a pipeline. The purpose of crossings inspections is to ensure that companies have effective damage prevention programs and that they are actively working to promote awareness of safe excavation and construction activities in and around federally-regulated pipelines.

Security inspections verify that regulated companies have an adequate and effective security management program. These inspections allow the NEB to confirm that companies are implementing the appropriate measures to prevent and respond to the occurrence of malicious acts which have the potential to result in adverse effects on people, the environment, property or economic stability.

## MANAGEMENT SYSTEM AUDITS

The NEB audits the management systems of NEB-regulated companies to evaluate compliance with the NEB and COGO Acts, the *Canada Labour Code* Part II, relevant regulations, and a company's own policies, practices and procedures. An audit typically includes evaluation of a company's design and construction,

pipeline integrity management program, emergency preparedness and response program, safety program and environmental protection program. The Board continued to update its management system audit program and improve planning processes, program implementation elements, performance measures and self-assessment procedures. The improvements were identified and prioritized through analysis of previous audits and an assessment of the Board's audit program policy, goals, objectives, processes and procedures. In 2007, the NEB conducted four new audits resulting in eight findings requiring corrective action by the company.

In follow-up to NEB audit reports, companies file a corrective action plan with the Board that addresses each finding. The corrective action plan must be completed and verified before a finding can be officially closed out or completed. To date, audited companies have completed corrective actions for 65 per cent of the findings associated with corrective action plans, and 97 per cent of completed corrective actions have been verified and closed by the Board. This indicates the audit program and follow-up procedure are supporting the Board's mandate for protecting the public, employees and the environment.

### NEB COORDINATES RESPONSE TO PIPELINE OIL SPILL

In July 2007 the Board responded to an oil pipeline spill from an NEB-regulated pipeline operated by Kinder Morgan Canada in Burnaby, British Columbia. The underground 24-inch Trans Mountain pipeline was struck by a third-party contractor doing construction in the community. Burnaby is the third most populated urban centre in B.C. with an estimated population of 203 000.

Approximately 232 cubic metres (1 460 barrels) of heavy synthetic crude oil was released into a densely populated residential area. The incident and the emergency response made national headlines on Canadian TV and in national newspapers for several days.

The NEB arrived at the scene the same day the incident occurred and coordinated the regulatory response with other federal, provincial and municipal agencies. The NEB and BC Ministry of Environment joined the Unified Command established by Kinder Morgan Canada to manage the response to the incident. An NEB environmental specialist joined the Regional Environmental Emergency Unit and the Environment Unit which addresses environmental issues and makes recommendations to the Unified Command. The Environmental Unit included representatives from federal,

provincial and municipal agencies, Kinder Morgan Canada, First Nations and independent consultants.

As a member of the Unified Command, the NEB's role was to provide advice and oversee both the emergency response and the reclamation activities that followed. The Board also provided a one window approach to facilitate the collaboration between the many agencies and groups, including First Nations, involved in the emergency and reclamation phases. This strategy allowed the company to focus on the actual clean-up and reclamation activities. The safety of the public, including workers and local residents, and protecting the environment remained our top priorities.

The emergency phase, 24 July to 9 August, was followed by reclamation activities and long term monitoring. NEB inspectors have visited the site and will continue to monitor Kinder Morgan Canada's efforts to complete the clean-up and reclamation of the neighbourhood and environment. The NEB also organised and managed a 3-day post-incident debrief session with all major participants in this emergency. At year end, the TSB continued to lead the investigation into the incident, supported by the NEB.

## FINANCIAL AUDITS

As part of fulfilling its legislated mandate, the Board periodically conducts financial regulatory audits of the pipeline companies it regulates. In these audits, the Board verifies whether NEB-regulated pipelines comply with the *National Energy Board Act*, its regulations, decisions and orders. By way of these audits, the Board also maintains up-to-date knowledge of the companies it regulates, including their regard for economy and efficiency.

In 2007, the Board completed an audit of Centra Transmission Holdings Inc. (Centra) and as of the end of 2007, had three additional audits underway. In its audit of Centra, the Board found that Centra's nomination and related procedures were outdated and not the same as outlined in their tariff filed with the NEB. To address this finding, Centra agreed to undertake, in consultation with its shippers, a comprehensive review of its tariff

and to file a revised tariff with the Board that reflects current business practices. The Board also identified an opportunity for Centra to improve its internal control over wire transfers, a recommendation that Centra adopted.

## NON-ACCORD CANADA LANDS

On Canada's non-accord, or frontier, lands (lands not subject to a federal/provincial shared management agreement), conservation and safety officers inspected geophysical and drilling programs and production operations of companies to confirm compliance with NEB-approved program and relevant regulations. Occupational safety and health matters were also considered during these inspections. In 2007, conservation and safety officers conducted 12 inspections of activities and facilities on non-accord lands. Eleven assurances of voluntary compliance were issued under the *Canada Labour Code Part II* and

### PROMOTING SECURITY AWARENESS, PLANNING AND RESPONSE

In April 2007, NEB security management specialists participated in an exercise based on a simulated threat to Canadian oil industry facilities in the North. NARWHAL 07 in Norman Wells, Northwest Territories provided an opportunity for northern and federal agencies to practice security and safety responses in collaboration with two private sector companies. During the exercise, Canadian Forces troops and aircraft assisted the RCMP and northern civilian agencies in their response to a simulated threat that tested the security programs of two private sector companies regulated by the Board.

In addition to gaining practical knowledge from the endeavour, participants learned how to work together and develop relationships that will facilitate future communications, planning and responses to real emergencies or threats to Canada's energy infrastructure.

Increasing awareness of security issues among employees, regulated companies and other stakeholders is one of five key principles identified in the Board's security management program. As well, the NEB will:

- Develop efficient information-sharing and information-protection processes among government and private sector partners;
- Pursue an integrated risk management approach for regulatory oversight that includes activities such as prevention, mitigation, response, recovery and restoration; and,
- Apply a life cycle approach that expands security management expertise from operations to other NEB business units where appropriate.



17 non-compliance directions were issued under the *Canada Oil and Gas Operations Act*. Compliance was received to the satisfaction of the conservation and safety officers either while still on-site or within an agreed upon period.

## ENVIRONMENTAL CONDITIONS

The NEB monitors company compliance with conditions on Board orders or certificates, as well as other commitments made by a company in its application or other programs, such as its environmental protection program, mitigation measures or monitoring commitments. By issuing conditions to be adhered to throughout the project, the NEB is able to monitor the project from one stage to the next throughout the project life cycle. The NEB monitors compliance by conducting inspections and holding meetings with companies, as well as by conducting audits to ensure that commitments are achieving their desired outcomes.

## PIPELINE OPERATION AND MAINTENANCE ACTIVITIES

Since 2005, the NEB has employed a risk-based approach for inspecting selected pipeline operation and maintenance activities. This risk-based approach clarifies and streamlines regulatory oversight of activities integral to the operation of approved facilities, allowing the Board and regulated companies to focus resources on higher risk activities.

In 2007, the Board received 49 notifications of operations and maintenance activities, of which six were inspected by NEB inspection officers.

## INCIDENTS AND EMERGENCIES

### Emergency Management

The NEB's primary role during an emergency is to monitor the company's response and ensure that all reasonable actions are taken to protect employees, the public and the environment. The NEB also verifies that regulated companies have adequate and effective emergency management programs that mitigate the impacts associated with an emergency situation.

Regulated companies are required to provide up-to-date versions of their emergency response plans to the NEB for review. The NEB also maintains a manned emergency response contact phone and call down system which operates 24/7, 365 days a year. In 2007, NEB personnel responded to three on-site incidents.

The NEB encourages and participates in tabletop and full-scale emergency response exercises sponsored by pipeline companies. In 2007, the Board participated in Operation NARWHAL 2007 in the Northwest Territories and three NEB-regulated company exercises.

## Incidents

NEB-regulated companies are required to report incidents to both the NEB and the Transportation Safety Board (TSB). Under an agreement between the two agencies, all pipeline incidents are reported to the TSB by the company as soon as practicable. The TSB then immediately notifies the NEB. The NEB and the TSB work cooperatively in investigating pipeline incidents.

Incident reports provide the NEB with the information necessary to determine the appropriateness of the companies' response to events which could have adverse effects on people, security of pipelines, and the environment. In addition, reporting provides the NEB with the opportunity to investigate, or, when appropriate, initiate an emergency response. When an investigation determines that corrective actions are required, the Board ensures they are taken, either by the company individually or by the industry as a whole.

The NEB defines incidents as:

- the death or serious injury of a person;
- a significant adverse effect on the environment;
- an unintended fire or explosion;
- the unintended or uncontained release of low vapour pressure hydrocarbons in excess of 1 500 litres;
- the unintended or uncontrolled release of gas or high vapour pressure hydrocarbons;
- the operation of a pipeline beyond its design limits as determined under CSA Z662, CSA Z276 or any operating limits imposed by the Board; and
- within a processing plant, any occurrence that results in or could result in a significant adverse effect on property, the environment or the safety of people.

In 2007, 56 incidents met NEB reporting requirements compared with 55 incidents in 2006 and 50 in 2005. Of these, three incidents resulted in on-site investigations by NEB staff members.

- On 15 April 2007, a pipeline rupture near Glenavon, Saskatchewan resulted in the release of approximately 990 cubic metres (6 230 barrels) of oil. The NEB has since conducted three separate inspections of the incident site and has confirmed that all contaminated soil has been removed. Remediation activities were complete as of the end of October 2007. The TSB is the lead investigator of this incident and the NEB continues to collaborate with them on this investigation.
- On 24 July 2007, a pipeline within the City of Burnaby, British Columbia, was struck by a backhoe releasing approximately 232 cubic metres (1 460 barrels) of crude oil in a densely populated area. The TSB is leading the incident investigation to determine the cause and contributing factors.
- On 22 October 2007, during a pipeline construction project in Jasper National Park, a contractor employee was struck by a side boom and suffered a compound fracture of his right leg which was eventually amputated above the knee. Alberta Workplace Health and Safety is leading the investigation because the injury was sustained by a contractor employee. The NEB is assisting and continues to conduct safety inspections on this project.

The NEB's response to hydrocarbon spills includes follow-up compliance verification activities to confirm that site remediation is carried out. The NEB is currently working to formalize this process. Tools are being developed to enable the NEB to more consistently and efficiently track and manage spill site remediation files. A summary of the reportable gaseous and liquid releases that occurred in 2007 can be found in Table 5.

On non-accord frontier lands, there were 22 reportable spills in 2007 compared to 21 in 2006. Twenty-one of the 2007 spills were non-hydrocarbon releases such as drilling fluid and waste water. All spills were contained and cleaned up.

## TECHNICAL EXPERTISE

In 2006, the Board was instrumental in forming a new standards technical committee under the authority of the Canadian Standards Association. The committee has worked efficiently to develop a consensus standard for security management programs within the oil and gas industry in Canada. Its planned publication date is July 2009.

Relevant Canadian standards are incorporated by reference into NEB regulations. As a result, Board staff members have been actively engaged in committee work in support of the CSA Z662 Standard on Oil and Gas Pipelines, CSA Z276 Standard on Liquefied Natural Gas, CSA B51 Standard on Pressure Equipment, and ISO/ TC 67 (materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries). Both the Z662 and Z276 standards were extensively revised and reissued in July 2007. Board staff members assisted with the French translation of both standards so they could be referenced by Standards Council of Canada as national standards.

The NEB continues to host foreign delegations and provide overviews of the Canadian regulatory framework. In 2007, the NEB hosted delegations from Thailand, Peru and Norway.

**Table 5: Gaseous and Liquid Releases Reported in 2006 and 2007**

Incident	Number of Occurrences in 2006	Number of Occurrences in 2007
Natural gas releases of any volume, sweet or sour	19	24
Low vapour pressure liquid hydrocarbon spills greater than 1 500 litres (all crude oil)	7	9
High vapour pressure liquid hydrocarbon releases such as natural gas liquids or propane	3	0
Releases of liquid sulphur, smaller volumes of low vapour pressure liquid hydrocarbons (diesel, gasoline and crude oil), amines, and other fluids used in and around facilities and gas processing plants.	11	4

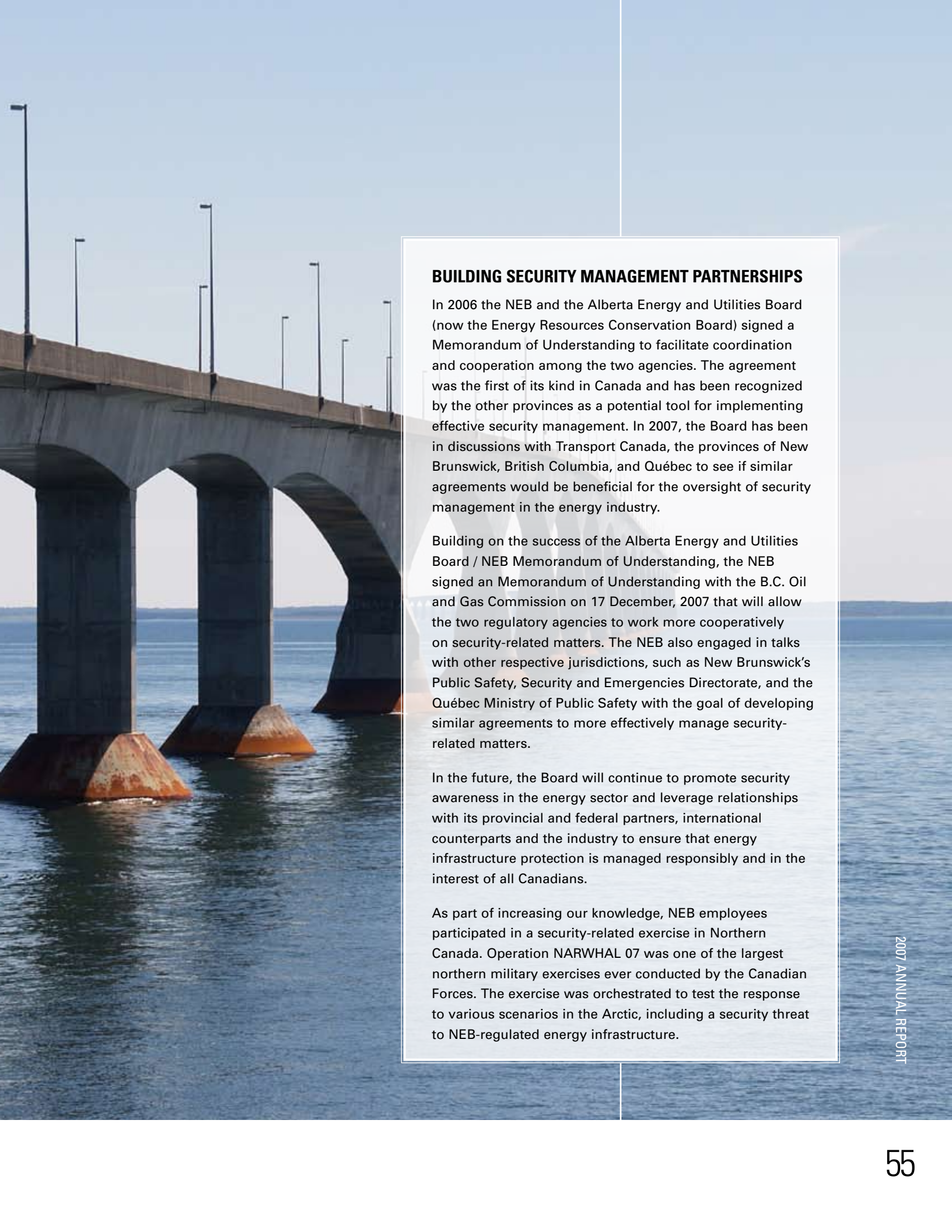
The Board believes it is important to share its expertise nationally and internationally. During the past two years, NEB staff members have made presentations at or actively participated in the organization of major industry events including the International Pipeline Conference, the International Association for Impact Assessment, Northern Oil and Gas Best Practices, the Banff Pipeline Workshop, the United Nations Economic Commission for Europe Forum on Pipeline Accidents, the Rio Pipeline Conference, and the CSA Z662 Biennial Forum. Board staff members also contributed published papers to the *Journal of Pipeline Integrity* and chapters to the companion volume to the ASME Boiler and Pressure Vessel code. The National Energy Board is also a member of the United Nations Ad Hoc Group of Experts, providing advice and expertise in the effort to establish global standards and definitions for petroleum and mineral reserves. NEB staff members participated in organizing and worked on technical committees charged with planning the International Pipeline Conference held in Rio de Janeiro in October 2007 and the CANMET Banff Pipeline Workshop held in April 2007. Our employees also hold executive positions within the American Society of Mechanical Engineers Pipeline Systems Division and the International Petroleum Technology Institute – international non-profit organizations dedicated to promoting advances in pipeline technology throughout the world.

## RESEARCH AND DEVELOPMENT

Research and development in the pipeline industry is international in nature. The Board actively monitors research and development by participating in organizations such as Natural Resource Canada's Panel on Energy Research and Development and the Materials Technical Advisory Committee of the CANMET Technology Centre in Ottawa, and through interaction with the U.S. Pipeline and Hazardous Materials Safety Administration.

The Environmental Studies Research Fund provides funding for environmental and social projects pertaining to petroleum exploration, development and production activities on non-accord Canada lands. The NEB provides technical and administrative resources for the group's management board, which includes members of industry, the government and the public. The Fund is chaired by Robert Steedman, who is part of the Board's Executive Team. In 2007, the management board approved nine new studies, continued to provide funding to others that were previously approved, and participated in updating the CSA S471 Standard for Offshore Structures.





## **BUILDING SECURITY MANAGEMENT PARTNERSHIPS**

In 2006 the NEB and the Alberta Energy and Utilities Board (now the Energy Resources Conservation Board) signed a Memorandum of Understanding to facilitate coordination and cooperation among the two agencies. The agreement was the first of its kind in Canada and has been recognized by the other provinces as a potential tool for implementing effective security management. In 2007, the Board has been in discussions with Transport Canada, the provinces of New Brunswick, British Columbia, and Québec to see if similar agreements would be beneficial for the oversight of security management in the energy industry.

Building on the success of the Alberta Energy and Utilities Board / NEB Memorandum of Understanding, the NEB signed an Memorandum of Understanding with the B.C. Oil and Gas Commission on 17 December, 2007 that will allow the two regulatory agencies to work more cooperatively on security-related matters. The NEB also engaged in talks with other respective jurisdictions, such as New Brunswick's Public Safety, Security and Emergencies Directorate, and the Québec Ministry of Public Safety with the goal of developing similar agreements to more effectively manage security-related matters.

In the future, the Board will continue to promote security awareness in the energy sector and leverage relationships with its provincial and federal partners, international counterparts and the industry to ensure that energy infrastructure protection is managed responsibly and in the interest of all Canadians.

As part of increasing our knowledge, NEB employees participated in a security-related exercise in Northern Canada. Operation NARWHAL 07 was one of the largest northern military exercises ever conducted by the Canadian Forces. The exercise was orchestrated to test the response to various scenarios in the Arctic, including a security threat to NEB-regulated energy infrastructure.



THE NATIONAL ENERGY BOARD

# ENGAGING CANADIANS



**T**hroughout its history, the NEB has provided opportunities for the public to participate in the regulatory decision-making process. In recent years, the NEB has expanded the scope of these opportunities to include broad consultation on new processes, an increased number of meetings and hearings in affected communities, and a wider range of tools for the public to access information about the Board's processes. Effective citizen engagement requires a commitment by all stakeholders for open, honest and transparent communication. Parties affected by proposed projects have much at stake and in order to make decisions in the public interest, it is critical that the NEB ensures appropriate public engagement. Simplified processes, information sessions, Internet-accessible regulatory documents and Appropriate Dispute Resolution are among the methods being used by the Board to support its goal of effective public engagement.

### **NORTHERN AND ABORIGINAL ENGAGEMENT: SEEKING TO UNDERSTAND**

In 2007, NEB staff visited four northern communities – Inuvik, Tuktoyaktuk, Colville Lake and Fort Liard – as a continuation of the Northern Engagement Research Project initiated in 2006.

The goal of the project was to assess whether or not the people living in these communities had an appropriate understanding of the NEB's role in northern energy development and regulatory processes. However, when staff returned to Calgary, they reported much richer insights. Interactions with diverse community groups, including trappers, Métis and First Nations Elders, opened doors to increased dialogue, understanding and a sense of connection between the NEB and people living in these communities.

"They commented that they were surprised and glad to be approached informally, just for discussion," says Karla Reesor, Technical Leader of Engagement and Appropriate Dispute Resolution. "These visits were designed to be community-focused, outside of the usual inter-governmental discussions."

The NEB's approach gave people time to talk and ask questions outside of the rigors of a formal hearing and to exchange understanding in an open, community-focused way. NEB staff created community profiles that identified local needs, increased NEB capacity to understand those needs, and provided the communities with a deeper understanding of the Board's role in the North. This enhanced awareness will inform future engagement work.

The Northern Engagement Research project is a highlight of the NEB's goal to be proactive in developing relationships with Métis, First Nations, and all communities affected by our national energy infrastructure.



## LISTENING AND RESPONDING: LANDOWNER COMPLAINTS

Energy companies regulated by the NEB are expected to involve people potentially affected by their activities in project development discussions throughout the construction and operation phases of their facilities. While the Board expects companies to respond to complaints received from landowners or the public, its staff can provide assistance by helping facilitate interest-based approaches to resolving complaints through the Landowner Complaint Resolution Program.

In 2007, the Board received 34 landowner complaints. Unresolved reclamation issues, such as concerns about noxious weeds on pipeline right-of-ways, comprised one of two main complaints categories; the other concerned landowner rights such as access to property, company notification and the negotiation of agreements. More than 85 per cent of these complaints were resolved.

If an issue is complex, or primarily related to safety and environmental concerns, the NEB often conducts a field inspection and usually facilitates a face-to-face meeting with the parties involved. If the parties are amenable, a facilitator will initiate the dispute resolution process and NEB safety or environment inspectors may provide technical advice to help the parties reach a resolution. In the event that the parties still cannot reach an agreement, the matter will be referred to the Board for a decision.

### WHY ARE PEOPLE SMOKING A PIPE?

Recent hearings attended by the Elders of the Standing Buffalo Dakota First Nation in Saskatchewan were kicked off with a traditional pipe ceremony. The NEB believes in the importance of being proactive in reaching out to Aboriginal communities who may be affected by energy infrastructure development. Respecting the traditions of Aboriginal communities during information sessions and hearings is a big part of how the NEB is continually improving its outreach process.

“This ceremony is one where everyone is equal, everyone participates. It is the equivalent of a ‘swearing-in’, because the focus of the ceremony is about respect, truthfulness and ensuring all present receive blessings,” explains NEB Socio-Economic Specialist Carla Osborne. “Participation in these traditions helps put community members at ease. They know that we are listening to them, and they are more open to listening to us.”

## USING AN INTEREST-BASED APPROACH

The Board believes that resolving concerns early in the regulatory process is in everyone’s best interest. The NEB uses a range of interest-based approaches to fulfill its regulatory mandate. These alternative methods enable the NEB and its stakeholders to discuss needs, reach understanding and develop more comprehensive regulations.

For applications and processes within the NEB’s control, the Board encourages the use of interest-based processes prior to relying on formal, adjudicative practices. This approach results in more efficient outcomes, reduced cycle times and lower costs. At the same time, there are instances where a hearing is the most effective and appropriate approach.

## NON-HEARING APPLICATION NOTICES

The NEB is committed to continually improving its regulatory processes to ensure that its decisions are made in the public interest and in a manner that respects the rights of those affected.

In 2007, staff members assessed existing applications processes and proposed changes to the NEB Filing Manual to ensure that these processes, particularly for applications that do not automatically trigger a public hearing, are fair and inclusive. These changes require applicants to demonstrate that adequate notice has been provided to all potentially affected persons regarding:

- their intention to make an application to the NEB; and,
- how interested parties can raise outstanding application-related concerns with the NEB in a timely manner so their concerns can be considered in the NEB’s decision on the application.

Regulated companies have long been required to notify individuals who could be affected by NEB applications that trigger public hearings. The recent changes to the Filing Manual mean that companies are now responsible for fulfilling similar expectations for applications that may not involve a public hearing.

The NEB expects these changes to provide greater clarity and assurance that its regulated companies are adequately informing people of potential applications that could affect them, and that interested people have a reasonable opportunity to be heard by the NEB before a decision is made that impacts them.

## PRE- AND POST-HEARING ENGAGEMENT

The Board actively pursues its goal of effective public engagement to help fulfill its mandate. This is accomplished through a series of engagement strategies designed to meet stakeholders' needs for information before, during, and after a formal hearing process. The Board's Appropriate Dispute Resolution (ADR) program helps foster better relationships among various groups affected by the Board's work by facilitating interest-based approaches throughout the entire life cycle of a project, from pre-application, through the application process, and continuing on throughout a project's operation. The ADR program helps all parties better understand the issues under discussion, and designs a framework to help parties resolve disputes.

Before an application is even filed, the NEB works with companies and affected communities to ensure that issues which may arise during the hearing process are raised, addressed, and potentially even resolved, before the hearing takes place. Pre-hearing engagement work is supplemented as needed by information sessions that provide an opportunity for people to learn about the NEB's role throughout the life cycle of a project, and to obtain specific information about the hearing process. Pre-hearing planning conferences are also sometimes used to obtain public input into the process.

During a hearing, members of the public may participate by becoming an intervenor in the hearing, joining others with common interests to submit a joint intervention, or joining a non-governmental organization. Interested parties can also submit a letter of comment or, where permitted, make an oral statement during the oral portion of a public hearing.

The Board regulates the entire life span, or life cycle, of approved projects to ensure that conditions applied to a project are met, stakeholders' concerns are addressed, and the facility is operated safely and responsibly. To reinforce the Board's commitment to overseeing its regulated facilities from construction to abandonment, staff members increasingly use post-hearing engagement activities.

For example, public interest in the Emera Brunswick Pipeline project in Saint John, New Brunswick has

### TYPES OF INTEREST-BASED APPROACHES

- Appropriate Dispute Resolution (negotiation, mediation, workshops to increase understanding)
- Negotiated settlements (market participants make their own decisions instead of imposing the judgments and decisions of the regulatory agency)
- Collaborative regulatory development between industry and other stakeholders, including landowners, Aboriginal and environmental groups and different levels of government

been consistently high, even after the decision was made in May 2007 to approve the project. NEB staff identified a need for more communication of the Board's involvement in projects, including the ways in which the NEB works with companies to promote safety, comprehensive emergency planning, responsible environmental management and ensure other important public concerns are addressed throughout the life cycle of a project. In response, the Board has developed several new engagement methods, including a special section on the NEB website that will keep stakeholders informed about regulatory developments on the project, emergency awareness issues, and media outreach strategies. Engagement and communication staff members will continue to play an active role on the Board's Emera Brunswick Pipeline project working group.

## WEBSITE RENEWAL

In 2007 the NEB completed a year-long website renewal project, after gathering user feedback about navigation and the look and feel of the site. The revised website reflects the new Government Online and Common Look and Feel standards as set by the Treasury Board, and its design makes the site more intuitive and easy to use.

Along with the re-design, the communications team has led the way in introducing new front page stories that keep stakeholders and casual visitors up-to-date on NEB activities and initiatives. Other new content includes quick links to major NEB hearings and our in-depth *Canada's Energy Future* report, released late in 2007.

## INFORMING CANADIANS ABOUT ENERGY

The Board provides energy market information through energy market assessments, statistical reporting and consultation with other organizations. All of this material is available to Canadians through the NEB website.

## POST-HEARING SURVEYS

The Board believes that one of the best ways to measure how well we perform in the Canadian public interest is to ask stakeholders for feedback. Following a hearing, the Board issues a survey to all registered participants in order to gather feedback on the hearing process. In 2007, five such surveys were issued, with a majority of respondents agreeing with the statement “Overall, I was satisfied with the NEB.”

### **NEW LAND MATTERS CONSULTATION INITIATIVE – A FORUM FOR DIALOGUE**

As part of its review of certain issues related to land matters, the NEB established the Land Matters Consultation Initiative (LMCI). While details are still evolving since the program was announced in October 2007, the goal of the LMCI is to provide a forum for interested parties and the Board to engage in dialogue and develop options that support the long-term responsible development of the energy sector while respecting the rights of those affected by development or operations. Activities designed to achieve this goal will involve gathering feedback from landowners and interested groups through workshops and meetings, releasing discussion papers and a public hearing into the financial aspects of pipeline abandonment.

The LMCI will address issues that arise throughout the life cycle of facilities, including the planning, application, construction, operation and abandonment phases.

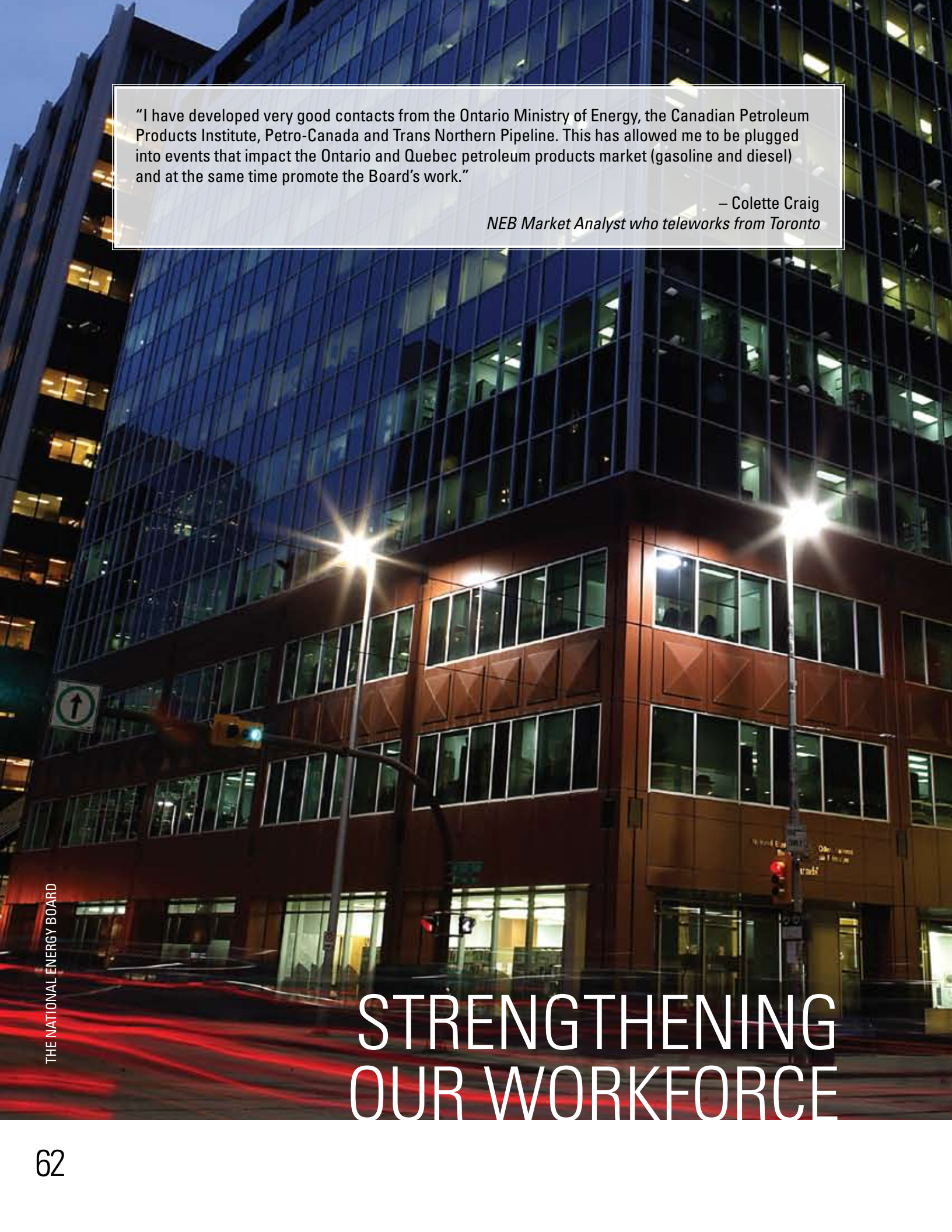
Topics for review include:

- Landowner consultation programs
- Acquiring access to right of ways
- Vehicle crossings of the right of way
- Pipeline abandonment
- Improving accessibility of NEB processes

During 2008, the Board will work closely with a broad range of stakeholders to consider these land-related matters.







“I have developed very good contacts from the Ontario Ministry of Energy, the Canadian Petroleum Products Institute, Petro-Canada and Trans Northern Pipeline. This has allowed me to be plugged into events that impact the Ontario and Quebec petroleum products market (gasoline and diesel) and at the same time promote the Board’s work.”

– Colette Craig  
*NEB Market Analyst who teleworks from Toronto*

# STRENGTHENING OUR WORKFORCE



The Board is committed to demonstrating excellence in all aspects of its work and recognizes the importance of investing in the people, processes and systems needed to continuously improve results and fulfill our mandate.

## **OUR COMMITMENT TO CAREER DEVELOPMENT, COMPENSATION AND BENEFITS**

*The NEB strives to maintain a competent, well-trained professional workforce by ensuring that learning opportunities are available to all staff members.*

The Board is inspired by the vision of a strategically-managed, high performance organization where the right people are available to do the right things at the right time. Recognizing that organizational performance is directly linked to the technical excellence and flexibility of our workforce, we have developed an annual performance assessment process that links individual performance to the Board's business priorities. Over the past year, a performance pay pilot project was introduced so that individual performance could be recognized and rewarded.

During 2007, the NEB further defined a framework for supporting the acquisition of knowledge, skills, and experience that will enable employees to advance their individual career objectives while contributing to the Board's work. The NEB supports career growth through development plans, coaching and other learning opportunities available to all staff. These opportunities may be focused on attaining current job expectations or stretch goals, and are part of a larger succession planning strategy. Last year, NEB employees spent approximately 14 000 hours in learning events, including attending conferences, formal education, courses of study and on-the-job training. In April 2007, the Board launched its Technical Excellence Project. The objective of this project is to promote timely and quality knowledge transfer and skills development. To date, nearly 200 NEB staff have received training in a range of technical and legislative competencies.

In particular, the NEB's leadership development program focused on developing management and leadership skills. By participating in this program, leaders and potential leaders sharpen their skills through hands-on training programs offered in-house and through organizations such as the acclaimed Banff Centre. The in-house program provides the government-specific knowledge required for managing finances, procurement, human resources and government information; the Banff Leadership courses support the growth of strategic, personal, and team leadership skills.

In 2007, the Board launched a new training strategy and offered three customized training courses. Seventy-two employees participated in the course best suited to their role and level of experience. The Board also provided coaching and support to project managers and drafted a standard for defining the skills and competencies required of project managers.

Our Awards and Recognition program, which culminates in an annual ceremony, salutes employee efforts and successes throughout the year. This program features a range of formal and informal measures for collectively expressing and reinforcing NEB values and the way that people work effectively together.

## CONTRIBUTING TO THE COMMUNITY

The NEB continues to be actively involved in supporting our community. In 2007, NEB management made a commitment to building a culture of giving. The Board encouraged employees to take part in the United Way Day of Caring program during working hours by matching employee time off with paid leave. Throughout the year, employees contributed their time and talent to a wide range of initiatives, including:

- raising more than \$60,000 to support the annual United Way/Health Partners campaign. The NEB earned the prestigious Award of Excellence – Public at the United Way of Calgary and Area’s annual Spirits of Gold award ceremony.
- volunteering in our community through the United Way Day of Caring program by:
  - stuffing gift boxes for Operation Christmas Child,
  - decorating the Mustard Seed homeless shelter,
  - helping out with donations and volunteers at the Calgary Interfaith Food Bank; and
- swinging hammers for Habitat for Humanity on three building days,
- donating winter clothing to support the Calgary Urban Project Society.

### THE BENEFITS OF TELEWORK

The National Energy Board provides a flexible work environment for its employees. In an effort to retain staff in the competitive Calgary labour market, several employees telework from different regions of the country. The benefits of a telework policy include retention of experienced employees who thrive on the challenging work of the Board, as well as the ability of those individuals to network with other stakeholders, including provincial governments, associations, pipeline companies and the oil and gas industry, in different parts of Canada.

### RESPONDING TO A TIGHT LABOUR MARKET

In 2007, the tight job market across Alberta, as well as skill shortages and corresponding hikes in wages and benefits, continued to affect our ability to be competitive with other employers. In addition, the high cost of housing affected our ability to attract experienced workers to Calgary where the NEB is located. Changing demographics and the need to work within a highly legislated environment have presented challenges to our recruitment efforts.

During 2007, the NEB obtained additional funds from the Treasury Board to hire more skilled staff to deal with increasing workloads and invest in succession planning. The Board continues to emphasize interesting work in the national public interest, work/life balance, and flexible work arrangements as part of our attraction and retention incentives.

## KEY CORPORATE INITIATIVES

Throughout 2007, the Board continued to implement its Quality Management System as a framework for:

- effective, efficient execution of Board processes;
- ensuring stakeholder needs are met;
- enabling process consistency where required, and flexibility where possible; and,
- encouraging continuous improvement.

By April, the Board had exceeded its target of 60 per cent completion on the ‘QMS Maturity’ index, using the *ISO 9001:2000 Quality Management Systems – Requirement* as a guide.

The QMS is now firmly ingrained in the NEB’s culture and is accepted as the way we work. All new employees receive QMS orientation so they are equipped to use the 500-plus documents that describe the Board’s 70 business processes and sub-processes. In 2007 alone, staff recorded 363 improvement suggestions, many of them implemented, on how to make our products and processes even better.

The Board’s Information Management Renewal project establishes the tools, training, techniques and practices that will respond to the information management needs of the NEB and the Government of Canada. As part of this project, the Government of Canada Information

Management standard toolset known as the Record and Document Information Management System, or RDIMS, is being implemented. Consultations with key staff members and NEB business units have been completed to ensure business alignment with the work to date. The Board's file plan has been reviewed and updated to meet Library and Archives Canada guidelines. The Information Management Renewal project will streamline information handling at the Board, and preserve information of enduring value to Canadians. During the first quarter of 2008, all Board staff will receive Information Management and RDIMS application training, enabling staff to share in and contribute to a managed corporate information repository.

## NEB AS A SEPARATE EMPLOYER

The NEB has been a separate employer since December 1992. As a Public Service separate employer, the authority to carry out certain human resource management functions has been transferred from the Treasury Board to the Chair of the NEB. With the transfer of authority comes the responsibility for creating and maintaining an NEB classification system, human resource management policies and practices, and undertaking collective bargaining to establish terms and conditions of employment.

Although a separate employer, the NEB continues to be bound by federal legislation. The Board is governed by the terms of the *Public Service Employment Act* in respect to promotion, retention and recruitment practices. Employee-employer relations are subject to the *Public Service Labour Relations Act*. In addition, the NEB is subject to the employment philosophy of the broader public service, including public service compensation packages. Financial matters are governed by the *Financial Administration Act* as administered by the Treasury Board Secretariat. Furthermore, the NEB is bound by the provisions and standards set out in the *Official Languages Act* and the *Employment Equity Act*.

For the most part, NEB employment practices are governed by legislation within the purview of the Public Service Commission while many of the compensation and benefit practices fall under the auspices of the Treasury Board Secretariat. The NEB is further impacted by being located solely in Calgary where a highly competitive labour market, low unemployment rate, and high living costs reduce the available pool of qualified resources, especially when recruiting from the broader federal public service.

## NEB LIBRARY – A KEY INFORMATION SOURCE AND RESOURCE

The NEB library provides services to both NEB employees and the public. The range of services provided to the public includes consultation regarding regulatory documents, providing copies of NEB publications, and offering referrals to internal and external sources of information. The public can borrow material through an inter-library loan service.

### The Library's Collection

The main collection consists of statutes, federal regulations, decision-related documents from other jurisdictions, books, annual reports, studies, reports, speeches and standards. The remainder of the library collection consists of directories, dictionaries, encyclopedias and industry-related indexes in the reference collection, as well as journals and newspapers.

Half of the library's collection is directly related to NEB hearings. This includes company applications and related submissions, filings from interested parties, hearing transcripts, and Reasons for Decision. Company applications and related submissions include a variety of information.

In 2007, the NEB Library responded to 1 748 requests from the public.

## FINANCIAL HIGHLIGHTS

Each year, the NEB sets out its plans and planned spending for the coming year in a document entitled *Estimates Part III – Report on Plans and Priorities* which is tabled in Parliament. At the end of the fiscal year, March 31, the NEB reports its results in a document known as the *Departmental Performance Report*. This document is also tabled in Parliament and forms part of the NEB's accountability to the public.

These documents may be accessed at the Treasury Board's website [www.tbs-sct.gc.ca](http://www.tbs-sct.gc.ca).

The financial information in these reports is prepared in accordance with Treasury Board of Canada accounting standards which are based on Canadian generally accepted accounting principles.

Approximately 90 per cent of the NEB's costs are recovered from the companies it regulates. All monies collected from cost recovery are paid into the government's Consolidated Revenue Fund. Cost recovery



“The NEB has the country’s best specialized energy library: it’s a wonderful resource, the staff is knowledgeable and extraordinarily helpful and the long opening hours are appreciated.”

— *Energy Regulatory Consultant*

is based on a calendar year cycle and corresponding financial statements are prepared for reporting on NEB operations. The *National Energy Board Cost Recovery Regulations* set out which costs the NEB may recover and the manner in which money is recovered.

Regulated companies are grouped by size according to definitions set out in the regulations. Small and intermediate companies pay fixed levies. Large companies pay levies that vary according to the total amount of spending by the NEB, the amount of recoverable costs allocated to each of the three commodity groups (natural gas, crude oil and electricity) and the level of activity reported by each regulated company.

The financial statements prepared for cost recovery purposes are audited annually. These statements may be viewed online by visiting [www.neb-one.gc.ca](http://www.neb-one.gc.ca), clicking on the tab labeled Reports and then clicking on the link to Auditor’s Reports and NEB Financial Statements. Cost recovered companies can discuss the NEB’s activities and expenditures by attending meetings of the Cost Recovery Liaison Committee. This committee meets two to four times annually and serves as a forum in which the NEB provides accountability reports and industry representatives may voice questions, make comments and offer ideas on NEB operations.

The Canadian energy sector has been very active, placing a high demand on the NEB in its regulatory role. As a consequence, the NEB has experienced a significant increase in its costs. In order to continue effectively meeting its mandate, it was necessary for the NEB to seek additional financial resources. Accordingly, the NEB made a submission to Treasury Board and, on 18 September, 2007, received approval for an additional \$25.5 million to be provided over the next three years. This funding will enable the NEB to meet the higher cost of its operations. As noted above, these expenditures will be eligible for recovery under the NEB’s *Cost Recovery Regulations*.

In 2007, a business plan was created as a way to provide resource allocation and a method of tracking to each team and business unit in order to support the NEB in delivering upon its mandate and strategic plan. This year, the business plan became a dynamic document that served as an effective tool for managing resources. This was facilitated by having most activities identified in the business plan linked to our financial accounting system.

## TREASURY BOARD SUBMISSION

At the end of the last fiscal year in April 2007, the NEB pursued additional personnel and monetary resources through a Treasury Board submission. With extremely tight timelines and the added constraint of a minority government, the submission was finalized and presented to Treasury Board on 18 September 2007. The submission was of such a high standard that it was approved as presented, with no conditions attached.

The success of this submission is directly attributable to the efforts and dedication of the working group, who were one of the recipients of the Chair’s Award.

## OPINION SURVEY FINDINGS

In response to results of the 2005 government-wide employee opinion survey, an employee advisory group made 25 key recommendations related to workplace enhancements, relationships and communications.

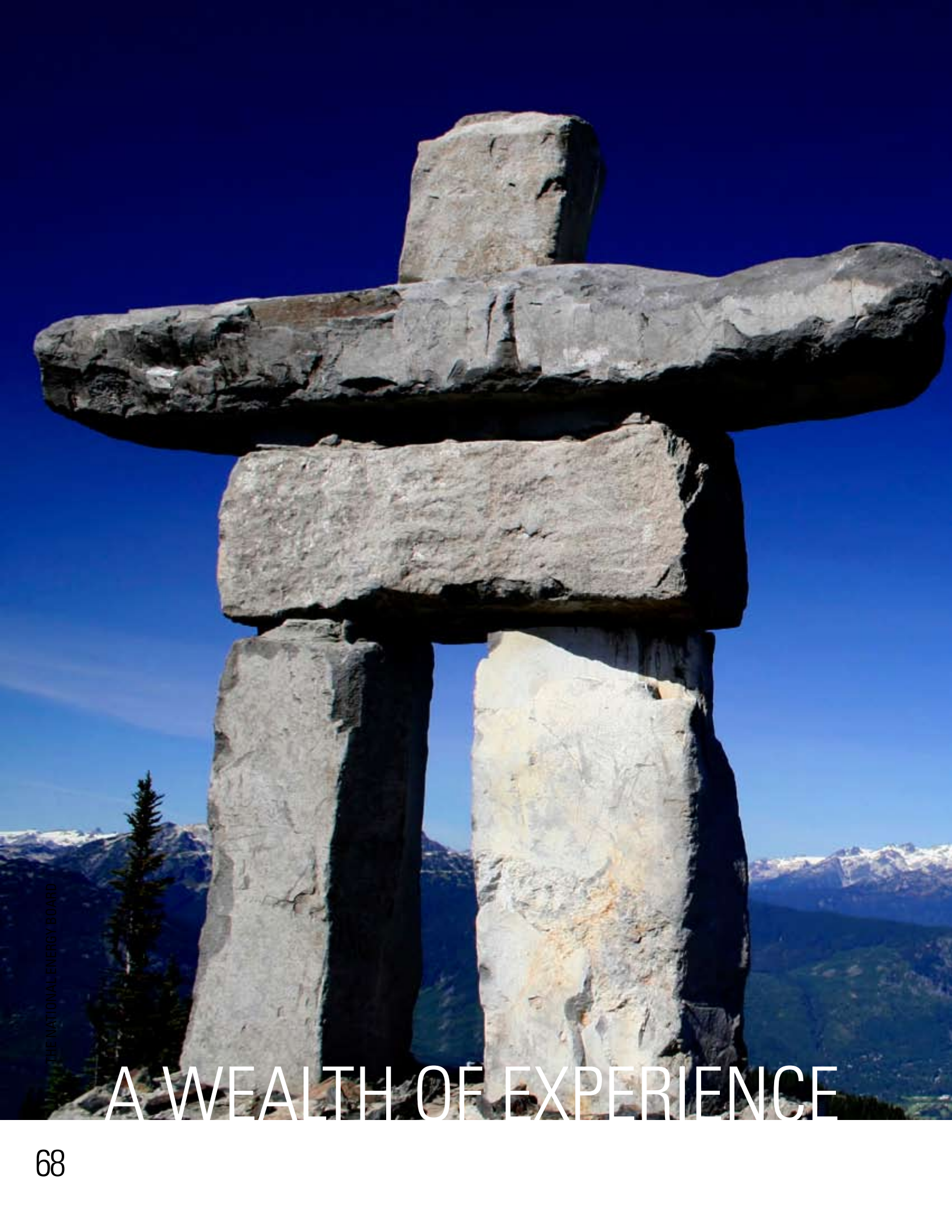
In 2007, the NEB executive team acted on many of the recommendations and posted an action log on our intranet. The log records specific activities and initiatives implemented to address priority items such as:

- revitalizing the NEB values;
- expanding Executive Team communications;
- enhancing our performance management program (RESULTS) and training programs;
- developing plans to implement change management training for leaders and employees; and
- launching an employee classification review.

A “mini” Employee Opinion Survey is planned for 2008 to measure progress of these and other ongoing initiatives.



Interested in a challenging career  
in the public interest? Visit our website  
at [www.neb-one.gc.ca](http://www.neb-one.gc.ca) and click on  
*Careers* to see if working at the NEB  
is the right fit for you.



THE NATIONAL ENERGY BOARD

# A WEALTH OF EXPERIENCE

## CHAIR AND CEO

### **GAÉTAN CARON**

Originally from Québec City, Mr. Caron obtained his Bachelor of Rural Engineering degree from Laval University and his Master of Business Administration degree from the University of Ottawa.

Mr. Caron joined the NEB in 1979, where he has held several positions. Prior to his appointment as a Board Member in 2003, he held the position of Chief Operating Officer. He was designated Vice-Chair in 2005 and Chair in 2007.

Mr. Caron is the Chair of the Canadian Association of Members of Public Utilities Tribunals (CAMPUT) and a member of the Association of Professional Executives of the Public Service of Canada, the Québec Order of Engineers and the Board of Directors of the Calgary and Area United Way.



## VICE-CHAIR

### **SHEILA LEGGETT**

Ms. Leggett has a Bachelor's degree in Biology from McGill University and a Master's degree in Biology from the University of Calgary. She has regulatory experience as well as a background in environmental issues.

Recently, Ms. Leggett was a Board Member with the Alberta Natural Resources Conservation Board (NRCB) which conducts hearings into natural resource development projects. She also served as Director of Operations for the NRCB. Prior to working with the NRCB, Ms. Leggett was a vice-president and senior consultant with an environmental consulting firm. She also has experience as a project biologist and advisor focusing on reclamation programs.

Ms. Leggett has published numerous papers and made presentations at conferences across Canada.



## MEMBERS

### **ROWLAND HARRISON, Q.C.**

Originally from Australia, Mr. Harrison has a Master of Laws degree from the University of Alberta and is a member of the bars of Nova Scotia and Alberta. He has gained extensive advisory, consulting and research experience in various aspects of energy regulation and policy during his career.

As a Professor of Law at various Canadian universities, Mr. Harrison taught Oil and Gas Law, Advanced Petroleum Law, Constitutional Law and Administrative Law. He has held senior management positions with a number of organizations including Canada Oil and Gas Lands Administration, the Canadian Institute of Resources Law, the Institute for Research on Public Policy and the Dalhousie Institute of Environmental Studies. Before his appointment to the Board, he was a partner in the Calgary office of Stikeman Elliott, a national and international Canadian law firm.



## JOHN S. BULGER

Originally from Manitoba, Dr. Bulger has a PhD in Physical Chemistry from York University in Toronto, as well as a Graduate Management Diploma from McGill University in Montreal. He has experience in procurement, operations, planning, regulatory affairs and providing advice on energy issues.

Prior to being appointed to the Board, he held the position of Senior Manager, Regulatory Affairs at Maritimes and Northeast Pipeline in Halifax, Nova Scotia. He also spent almost 20 years at Gaz Métropolitain in Montreal, Québec in various senior management positions. He began his career at DuPont of Canada Ltd. Dr. Bulger is a member of the Chemical Institute of Canada.



## KENNETH BATEMAN

Mr. Bateman holds a Bachelor of Law degree from the University of Alberta and a Master in International Business Management degree from the American Graduate School of International Management. He is a member of the Alberta Law Society, the Canadian Bar Association and the General Counsel Roundtable.

Most recently, Mr. Bateman was vice-president of Legal Affairs at ENMAX Corporation. In this capacity, he was responsible for legal services, environmental affairs and compliance and information management. Mr. Bateman has also acted as interim Regulatory Department head where he reviewed transmission and distribution applications, refilings and implementation of Alberta Energy Utility Board decisions.

Mr. Bateman has extensive experience acting as senior legal counsel for a variety of organizations including a corporate commercial practice firm, investment group and technology companies.



## STRATER CROWFOOT

Mr. Crowfoot holds a Bachelor of Science degree and a Master of Business Administration degree from Brigham Young University.

Mr. Crowfoot has extensive experience working with First Nations peoples in Canada. He has served as Deputy Chairman and Chairman of the Indian Taxation Advisory Board (ITAB). Mr. Crowfoot has worked to support the development of its policies, procedures and regulations. In his role as Chairman of the ITAB, his work included advising federal ministers on general tax policy, developing relationships with rate payers and their associates and directing complaint resolution.

For ten years, Mr. Crowfoot served as Head Chief of the Siksika Nation. He has also served as executive director of Indian Oil and Gas Canada.





## **ROLAND GEORGE**

Mr. George holds a Bachelor of Science degree in Mathematics and Computer Science from McGill University, a Master's degree in Economics from Carleton University and a Master of Business Administration degree from École des Hautes Études Commerciales in Montreal.

Mr. George worked primarily in the private energy sector for 25 years. Most recently, he was senior principal at Purvin & Gertz, an international energy consulting firm. There he led the North American natural gas practice. Mr. George has also held positions with the Canadian Energy Research Institute, Gaz Métropolitain, Têléglobe Canada and Canadian Pacific Limited.

Mr. George chairs the National Energy Board's Regulatory Policy Committee and is a member of CAMPUT's Regulatory Affairs Committee.



## **GEORGETTE HABIB**

Ms. Habib holds a Bachelor's degree in Mathematics from the American University of Beirut and a Master's degree in Economics from the University of Alberta.

Before joining the NEB, Ms. Habib spent 24 years with the Alberta Energy & Utilities Board, most recently as Manager of the Economics Group. During her time with the EUB, Ms. Habib acted as a panel member at public hearings and provided expertise and advice to the Board on regulatory and policy issues. Ms. Habib has also lectured in micro and macroeconomics at the University of Calgary.

## TEMPORARY MEMBERS

### **KENNETH VOLLMAN**

A native of Saskatchewan, Mr. Vollman has a Master's degree in Mechanical Engineering from the University of Saskatchewan and is a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

Mr. Vollman has spent his career working in the energy sector gaining his practical experience with oil and gas production while working in the private sector. After joining the NEB in 1973, Mr. Vollman gained experience in energy supply and demand, pipelines, energy regulatory issues and management. In 1998, he was designated as Chair after serving as a Member and Vice-Chair.

Over the past four decades, Mr. Vollman has authored and presented numerous papers at Canadian and international conferences. He retired as Chair of the NEB on 2 June 2007 and was appointed a Temporary Member of the NEB on 27 June 2007 for a term of two years. As a Temporary Member, Mr. Vollman will continue to chair the Mackenzie Gas Project Panel.



### **DAVID HAMILTON**

Originally from Scotland, Mr. Hamilton has a Master's degree in Leadership and Training from Royal Roads University, Victoria, British Columbia. Mr. Hamilton has more than 30 years of experience working in the Northwest Territories in the development of people and communities through both parliamentary and democratic processes.

Mr. Hamilton was Deputy Minister and Clerk of the Legislative Assembly of the Northwest Territories for 20 years. He also held the appointment as Chief Electoral Officer for the Northwest Territories. Mr. Hamilton administered the first general election for Members to the Legislative Assembly in Nunavut and the Northwest Territories, following the division of the NWT in 1999. Mr. Hamilton participated in the ratification votes for the Gwich'in Land Claim Agreement, the Sahtu Settlement Agreement and the Inuit Land Claim Settlement.







- 3 National Energy Board Emergency Management Specialist Shane Richardson
- 4 Masterfile
- 6 National Energy Board Environmental Specialist Marc Pauzé
- 8 National Energy board Operations Technical Specialist Richard Turner
- 16 National Energy Board Environmental Specialist Marc Pauzé
- 17 Getty Images
- 20 National Energy Board Environmental Specialist Pamela Romanchuk
- 23 National Energy Board Environmental Specialist Marc Pauzé
- 25 Masterfile
- 33 Larry Kelly, Brunswick Pipeline
- 38 National Energy Board Environmental Specialist Marc Pauzé
- 51 National Energy Board Security Management Specialist Jamie Kereliuk
- 56 Masterfile
- 67 Masterfile
- 73 Masterfile

*In Memoriam*

Remembering our friend and colleague Ann Shalla, who passed away suddenly on 30 October, 2007. Ann dedicated more than 25 years to the National Energy Board Library where she worked as a purchaser, classifier and cataloguer. Ann knew the collection by heart, call number and all. In fact, she could often take you to any item you were looking for. Ann was a true believer in learning, a lifelong lover of books, a tireless employee and a great friend. She will be missed.



The NEB is  
an active, effective  
and knowledgeable  
**PARTNER IN THE  
RESPONSIBLE  
DEVELOPMENT**  
of Canada's energy  
sector for the benefit  
of Canadians.

