

NATIONAL ENGAGEMENT INITIATIVE REPORT
Engaging Canadians on Pipeline Safety



NEB

National Energy
Board



Office national
de l'énergie

Canada

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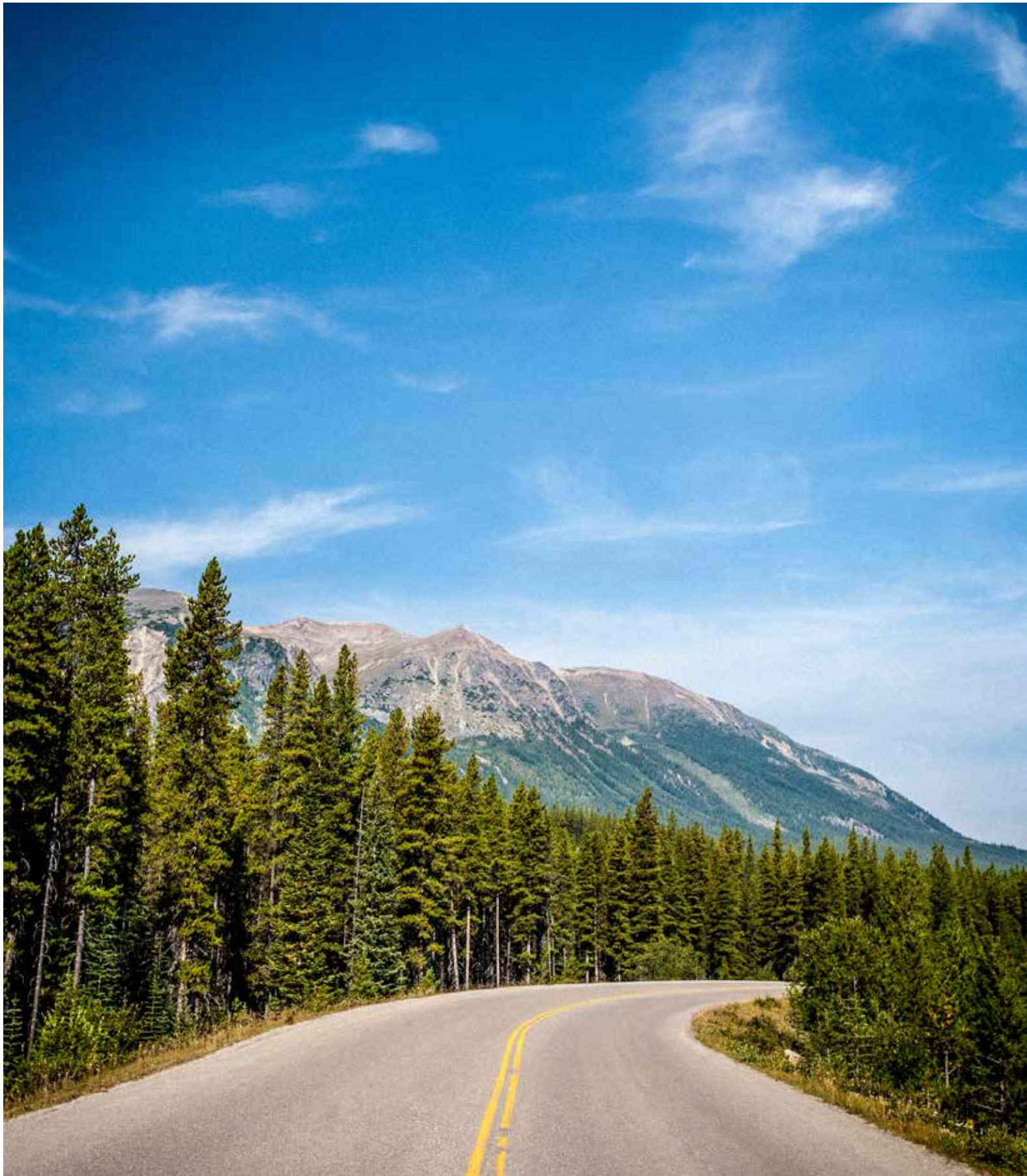
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CHAIR'S INTRODUCTION

When I joined the Board in 2014, the NEB had been quietly processing project applications, monitoring the safe operation of pipelines and regulating tolls and tariffs to little fanfare for more than 50 years. As an organization, it was not accustomed to being a focal point for intense and complicated energy debate, but that was increasingly the context that it operated in.

Public scrutiny was at a peak. Media requests had grown exponentially in the last few years. More and more people applied to participate in application processes. Meanwhile, studies demonstrated that public trust in the energy industry and associated parts of government was low.

It was clear to me that inaction in the face of that public debate was not an option. The NEB needed to understand what was at the heart of the debate, and to be prepared to respond. To truly understand the public's views on pipeline infrastructure, we would have to get out from behind our desks and our meeting room tables.

Beginning in early 2015, I committed to visiting every province and the North to hear from Canadians on how the Board can improve its pipeline safety program. We wanted to hear what Canadians had to say: positive or negative, we focused on understanding the issues and concerns and ideas that were offered to us.

This report is the summary of what the NEB has heard from Canadians since we kicked off the Engagement Initiative in November 2014. It outlines the common issues and concerns we heard from people in every region of Canada. It is also a summary of what we, as the federal energy regulator, will do about the feedback that Canadians have shared.

The NEB is not done with engaging Canadians: on the contrary, the Engagement Initiative was meant to be the beginning of a new and different kind of conversation with our stakeholders. Author Haruki Murakami once wrote: *"When you come out of the storm, you won't be the same person who walked in."* I can say with confidence that the NEB is not the same organization it was before the engagement initiative. We have, in fact, been changed by the storm.

That change is just beginning. We've set out on a path of ambitious modernization, anchored on improving relationships with municipalities and Indigenous Peoples, enhancing environmental and safety outcomes, and increased transparency for pipeline safety measurement. What lies ahead is a journey across a sometimes familiar and sometimes unfamiliar territory, with the NEB as a regulator, mapping some new boundaries as we go.

I am deeply grateful to each and every individual who took the time to meet with myself and my colleagues and to everyone who, whether in person or online, shared their thoughts, concerns and ideas with us.



C. Peter Watson , P.Eng, FCAE
Chair and CEO



Who we are:

*Canada's Federal Regulator
for more than 50 years*

*A team of 9 Board Members,
5 Temporary Members and
more than 450 expert staff*

*A Top 100 Employer and a Top
Family Friendly Employer*

WHAT IS THE NATIONAL ENERGY BOARD?

The National Energy Board is an independent federal regulator of several parts of Canada's energy industry with the safety of Canadians and protection of the environment as its top priority. Its purpose is to regulate pipelines, energy development and trade in the Canadian public interest.

Regulating in the Canadian public interest means factoring economic, environmental and social considerations into our decision-making processes.

Canadians depend on the pipeline transportation system for safe, reliable and efficient energy supply, now and in the future. The ability of this system to safely deliver natural gas, natural gas liquids (NGLs), crude oil, and petroleum products is also critical to Canada's economy.

The Board regulates Canada's federal energy infrastructure over its entire time in operation, through to its eventual abandonment. We do not simply make a decision on a project and walk away. We oversee safety for the full lifecycle – from project proposal to construction and operation, and through to the end of its use. Through every phase of a facility's construction, operation and abandonment, we explicitly require the companies we regulate to anticipate, prevent, manage, and mitigate any potentially dangerous conditions associated with their activities.

Our regulatory framework requirements encourage innovation where possible but also specify mandatory design, operational practices or management methods when necessary. It supports a sustainable energy system that will meet Canadians' needs today, while taking into consideration the needs of Canadians tomorrow.

*Our Strategic Plan is at the core of the NEB's mandate,
and is the cornerstone of our planning framework.*

STRATEGIC PLAN

PURPOSE

We regulate pipelines, energy development and trade in the Canadian public interest.

VISION

The NEB is active and effective in Canada's pursuit of a sustainable energy future.

GOALS

- NEB-regulated facilities and activities are safe and secure.
- The environment is protected throughout the lifecycle of NEB-regulated facilities and activities.
- Canadians benefit from efficient energy infrastructure and markets.
- The rights and interests of those affected by NEB-regulated facilities and activities are respected.

VALUES

Integrity:

We are fair, transparent, and respectful.

Regulatory Leadership:

We are responsive, proactive and innovative.

Accountability:

We are accountable and support each other to deliver timely, high quality results.

Strategies:

- Lead Regulatory Excellence
- Take action on Safety
- Engage with Canadians



We are proud of the work we do protecting the interests of Canadians. Our staff feel personally responsible for helping to ensure the safety of Canada's energy infrastructure.

THE STAFF BEHIND THE SCENES

The staff of the National Energy Board consists of **450 highly skilled employees**, who come from all backgrounds and professional disciplines. We employ engineers, environmental specialists, energy auditors, inspectors, engagement and communications specialists, lawyers, regulatory analysts and human resources professionals, among others, and we have been recognized as a Top 100 employer for several years running.

NEB staff support a team of permanent and temporary Board Members, who come from all parts of Canada, and from diverse backgrounds that include farming, aquatic ecology, law, economics and community development. The Board Members share in common a deep understanding and expertise in energy-related issues. They also share a personal passion for and commitment to integrity, accountability, and excellence in their work, and are dedicated to serving the public interest.

Regulators – the NEB included – are bound by legislation to stick to their mandates, and to resist straying into other regulator’s mandates, or advocating for certain policies. They must do their jobs well, provide public assurance of safety and industry performance, and do so in an unbiased and neutral manner. Both NEB Board Members and staff are similarly bound by strict codes of conduct and conflict of interest requirements, which were created to ensure that matters of decision before the NEB are heard without bias – **real or apprehended**.

Analysis of Canadian traditional media from March 1 to September 10, 2015 turned up over 2,300 articles mentioning the NEB and approximately 230 featuring the NEB.

“In order for us to do the best job possible, we want to know what Canadians are thinking when it comes to pipeline safety and environmental protection. In the coming months, I will be travelling across Canada to meet with Canadians and local organizations and listen to what they have to say. And I invite you, right now, to get the conversation started.”

Peter Watson, Chair and CEO,
National Energy Board, November 25, 2014

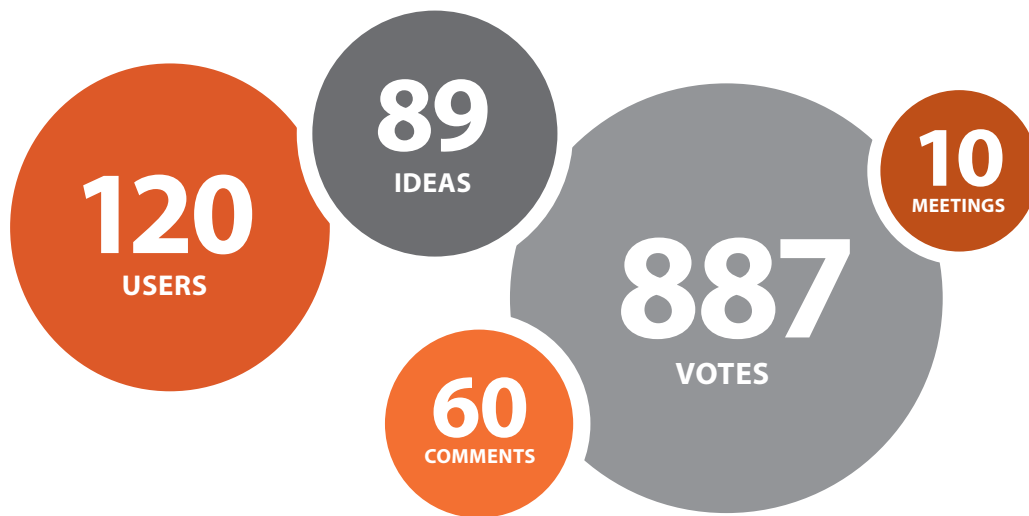
THE NATIONAL ENGAGEMENT INITIATIVE

Listening to Canadians

Energy infrastructure, and the NEB's role as the federal regulator, has been under growing scrutiny in the past several years.

In November 2014, we launched a National Engagement Initiative. We asked Canadians to tell us what was most important to them about the work that we did, and how they felt we could adjust our pipeline safety program, public engagement activities and communications.

The Online Discussion Forum had over 27,500 views, and...



THE ONLINE DISCUSSION FORUM

The Initiative began with an online discussion forum in which we invited people to comment on four themes:

- Improving the safety of pipelines we regulate
- Promoting environmental protection
- Engaging with landowners and people who live near pipelines
- Keeping Canadians informed about the topics they care about

The Online Forum provided a space in which people could ask questions, comment on the four identified themes or on the NEB's processes generally, offer ideas, and "vote" on the comments and ideas of others. Active on the NEB's website for the full seven months of the Engagement Initiative, the Forum garnered about 120 users, and dozens of ideas and comments. The ideas and comments touched on a variety of topics, from technical elements of pipeline safety to the nature of the NEB's mandate. In particular, a common thread throughout the online discussion was a desire for climate change and cumulative environmental impacts to be considered as a part of new energy infrastructure approvals.

THE ENGAGEMENT INITIATIVE

On November 25, 2014, NEB Chair and CEO Peter Watson launched the NEB's cross-Canada engagement initiative in Saint John, New Brunswick. In a speech to the Saint John Chamber of Commerce, Mr. Watson committed to visiting every province and the North to meet directly with municipal and provincial leaders and staff, First Nations Chiefs and Band Councils, environmental groups, first responders and academics, as well as professional and industry organizations, to discuss pipeline safety and environmental protection.

The National Engagement Initiative was new territory for the NEB, unprecedented in the history of the regulator. It signaled a change in tone for how we interacted with Canadians. We quickly learned that the process – the journey – was as important as the outcome.

Accompanied by some technical staff and the Board Members who lived in each area, the Chair met with as broad and varied a selection of people as possible to hear about their thoughts and concerns.

"I think, first and foremost, people were surprised that we came. Then, I think they were surprised to see that we weren't there to push our viewpoint, but to hear theirs."

Peter Watson

80
MEETINGS

9
PROVINCES

2
TERRITORIES

40,000 km
TRAVELLED

5
MEETINGS CANCELLED
(BECAUSE OF SNOW)

34
CITIES

BRITISH COLUMBIA
April 2015

ALBERTA
May 2015

SASKATCHEWAN
May 2015

MANITOBA
May 2015

INUVIK
December 2014

YELLOWKNIFE
December 2014
& February 2015



GROUPS MET WITH

UNIVERSITIES	3
ENVIRONMENTAL GROUPS	13
OTHER REGULATORS	7
FIRST NATIONS CHIEFS AND BAND COUNCILS	14
BUSINESS GROUPS/ ASSOCIATIONS	4
LANDOWNER/ FARMING ASSOCIATIONS	9
MUNICIPALS ASSOCIATIONS/ GROUPS/ MAYORS	25
REGIONAL FIRST RESPONDERS	8

PLACES VISITED

IOALUIT
January 2015

ST. JOHN'S
January 2015

**THUNDER BAY,
KENORA**
April 2015

QUEBEC
Late February to
early March 2015

NEW BRUNSWICK
January 2015

HALIFAX
January 2015

**ONTARIO, NORTH BAY,
OTTAWA, TORONTO, SARNIA**
April 2015

WHAT WE HEARD

Over the course of the Engagement Initiative, the NEB Chair and accompanying staff and Board Members heard many perspectives on pipeline safety in Canada. A complete summary of the groups that Mr. Watson met with and the topics discussed in each meeting are listed in Appendix A.

Common themes soon began to emerge from these meetings.



1 First and foremost, Canadians care deeply about protecting local waterways and land from potential pipeline failures. People expressed their concern at the possibility of such an event and what it could mean for their communities, children, health and livelihoods. What was the NEB doing to make sure such a thing did not take place? This primary and intrinsic concern, which lay at the heart of every meeting, prompted at times very complex discussions. From the marine analysis of shipping oil, to the relative merits of hydro-testing, to the placements of shut-off valves, to the archeological consideration of ancestral land: people had a lot of questions about exactly how we, as the regulator, protected the communities and land near pipeline infrastructure.

Three Common Themes

1 Without exception, every person's first priority is the protection of their local and regional environment – especially water systems and land – from negative effects and risks of energy infrastructure.

2 Stakeholders clearly said that they want a two-way conversation with the NEB and industry where they cannot only say what is on their mind but also get assurance that they are being heard and that their concerns are being acted on.

3 Stakeholders want to be able to review industry emergency management plans, to understand what would happen in the event of an emergency, and apply their own knowledge of local resources, infrastructure and capacity to make plans better and more responsive.

“There’s a perception of leaks, and that Calgary is the only point of response...”

Lakehead and Region Conservation Authority representative

2 Connecting to this issue was the consideration of emergency response. If a failure did happen, would the NEB be ready? Would community resources be ready? First Responders – fire chiefs and emergency personnel – stressed the importance of having more equipment in place and more comprehensive and integrated training, because they would be the first on the ground in the event of an emergency.

3 The issue of transparency with respect to emergency management garnered significant public attention, specifically in the Montréal and Vancouver areas where pipeline facilities with dense urban populations, water systems and other critical infrastructure. Emergency response capacity between proponents, operators and affected municipal governments, was also of particular concern for many mayors and municipal officials.

“Our community wants to be engaged, to monitor, and to participate.”

Nipissing First Nation representative

The questions people had about what companies and the regulators were doing to keep them safe, and what would be done in case of emergency, led to a broader theme of better engagement. Many groups expressed their desire to know more about pipelines, safety measures, company performance, emergency response, and the specifics of what each of those things mean at the local level. Many felt that it is far too difficult to access that information, or that they are not allowed to have a meaningful role in the planning and execution of the processes in place to protect them. This was a source of frustration. Stakeholders clearly said that they want a two-way conversation with the NEB and industry where they can not only say what is on their mind but also get assurance that they are being heard and that their concerns are being acted on.

“How does the authority engage long-term, after a project has been approved? The NEB should be seen as a partner within a system...”

Municipalities of North Bay representative

Perhaps the most powerful realization for the NEB, was that many groups that we spoke with did not understand the NEB’s role as a lifecycle regulator - that we not only decide whether or not projects should be built and operated, but that we regulate a project for the entire time that it operates.

In hindsight, this is understandable. The bulk of information flowing to the Canadian public about the NEB focused on high-profile applications for pipelines. The focus of NEB public engagement in the past was primarily in application hearings.

We offered very little in the way of information about what happens after a pipeline is built: inspections, audits, compliance verification, emergency response exercises, damage prevention, and so on. And that aspect of our work is almost never highlighted in media or social media communications.

For the Chair and NEB staff, it raised questions about our changing role as the regulator, and the need for the NEB to consider new approaches to public consultation and information sharing about the dual nature of our regulatory role – with far more emphasis on sustained engagement during the operating lifecycle of energy infrastructure.

CLEARING A NEW PATH

The NEB’s mandate states that it must perform its roles as a regulator “in the public interest”, which we define to be inclusive of all Canadians and referring to “a balance of economic, environmental and social considerations that changes as society’s values and preferences evolve over time”. An integral aspect of the public interest is that it DOES in fact evolve: therefore, the NEB must continually adapt to respond to concerns that the Canadian public raise with us.

The National Engagement Initiative was about hearing those concerns, and even before the entire Initiative was complete, the NEB began to deliver tangible changes in response to what we heard. The following are examples of responsive solutions to stakeholder issues that were announced during the Initiative.

- Regional Offices – announced January 2015
- Memorandum of Understanding with the Montréal Municipal Community – Announced February 2015; signed November 2015
- Online National Interactive Incident Map – Released February 2015
- Pipeline Emergency Management Information Transparency Consultations - Announced April 2015; consultation completed June 2015

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H3A 3C2

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Marc-André Plouffe
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JUNE 2 and 3, 2015

The Safety Forum



The National Engagement Initiative culminated with the NEB's second Pipeline Safety Forum in Calgary.

The Pipeline Safety Forum focused on three

MAIN OBJECTIVES:

- 1 An open exchange of information on technical pipeline issues
- 2 Increased understanding of stakeholder concerns
- 3 Opportunities that both industry and regulators can take to improve safety outcomes to better protect people, property and the environment

For the Chair and the NEB staff who had been travelling and meeting with stakeholders for months, the Forum was an opportunity to share what they had learned, and to begin engaging technical experts, industry and fellow regulators in addressing issues.

Peter Watson welcomed all participants, noting "...we are the people who can recommend improvements, drive change, and instill safety culture in our organizations. The ball is on our court and we need to challenge ourselves to up our game and really think beyond "business as usual".

If the Chair issued the call to action, keynote speaker Chris Seifert framed it in working terms: "safety is not a goal, but an expectation, held in common by everybody – from landowners to mayors to CEOs to regulatory bodies. Safe operations shouldn't be rewarded or incentivized, because it should not be an option".

The themes of sustained engagement as a pathway to trust, and taking proactive action to improve safety culture, remained the focal point throughout much of the two-day session. Participants pointed out, time and again, that with knowledge exchange and collaboration across a variety of groups will come better safety outcomes, because stakeholders at all levels and perspectives would be working from a common base of understanding and trust. As one speaker said "Safety is a collaborative effort of all stakeholders".

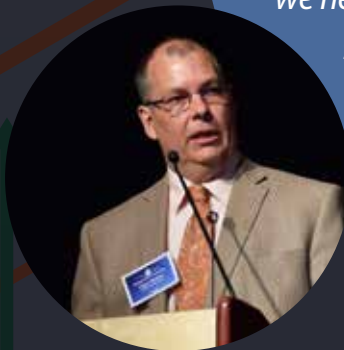


For a synopsis of sessions and speakers, please see **Appendix B**

The Forum drew together speakers and participants from a wide variety of backgrounds, many of whom the Chair had already met with during the cross-Canada Engagement Initiative. In total, over **400 attendees** from industry, Canadian municipalities, first response organizations, landowner associations, regulatory groups and academia came together to listen to, consider and discuss the common themes that emerged from the National Engagement Initiative.



Peter Watson welcomed all participants, noting *"...we are the people who can recommend improvements, drive change, and instill safety culture in our organizations. The ball is on our court and we need to challenge ourselves to up our game and really think beyond "business as usual".*



"The fact that so many of you have joined us to have a focused and forward-looking conversation about safety in our industry is tremendously positive and I think it speaks to our common understanding that safety and environmental protection is - has to be - our Number One job."

Peter Watson

Our Strategic Priorities:

*Engaging Canadians,
Leading Regulatory
Excellence and Taking
Action on Safety.*





THE ROAD FORWARD



It has been a year since the Chair announced that he would undertake the National Engagement Initiative, which started the NEB down a new path of unprecedented stakeholder engagement, intended to help us navigate a “perfect storm” of public expectations and opinions.

What we found at the heart of the storm was the common issue of keeping the things that we value safe: our environment, our water and land, our families and communities, our coworkers, ourselves.

Protecting the things we value most is fundamental and personal. People need to be connected to the process of protection. They want to know what is being done to protect what they value, to be assured that their own knowledge of how and why something is valuable is understood, and that their expertise in any factor affecting that protection is considered. Canadians want to trust that the NEB, as the federal regulator, will accommodate that. The NEB is committing itself to building that trust.

Now that we have heard feedback on what Canadians want and need from the NEB, we are planning how to respond in a meaningful, integrated way. As a base for our planning, we refer back to our Strategic Priorities - Leading Regulatory Excellence, Taking Action on Safety and Engaging Canadians – as a framework on which to build on the suggestions and ideas that we received.

TABLE OF COMMITMENTS FROM NEB

STRATEGIC PRIORITY	COMMITMENTS IN CHAIR'S REPORT	STAGE OF COMPLETION		
		Being Planned	In Progress	Completed
Leading Regulatory Excellence	Strong Internal Management Systems + NEB Framework for Regulatory Excellence		✓	
	Publish field inspection reports online			✓
	Online map of NEB-regulated pipelines		✓	
	Improve pipeline approval conditions compliance information and make accessible by the public		✓	
Taking Action on Safety	Refine data collection and analysis systems to learn from past incidents and regulate against future incidents		✓	
	Make more information about pipeline safety and industry performance available over the lifecycle of energy infrastructure		✓	
	Conduct a review of integrity management program to harness the best practices of other regulators	✓		
	Work with industry associations on safety management systems		✓	
	Present the Safety Culture Framework, including the draft safety culture indicators, to industry		✓	
	Facilitate regional Emergency Response approaches by engaging with municipalities, first responders and community	✓		
	Revise our Emergency Management Program to clarify our expectations of regulated companies	✓		
Engaging with Canadians	Regional Offices			✓
	Regional Desks		✓	
	Engage with Indigenous groups to develop engagement programs that provide sustained and consistent lifecycle interaction and communication approaches	✓		
	Enhance and revitalize role of Land Matters Group		✓	
	Engage environmental and other non-government or public organizations to identify the kinds of information Canadians would like to have about energy that they do not have today		✓	
	Modernize website and social media strategies to facilitate easier access to information		✓	

LEADING REGULATORY EXCELLENCE

Earning the trust of Canadians is not about what we say, but about what we do. As a regulator, it is imperative that we demonstrate excellence in our actions and in fulfilling our mandate because that is what Canadians expect of us. Our goal in this is to show, quantitatively and qualitatively, that our programs are focused on the right things and achieving the right results.

Strong internal management systems

We are in the process of building an NEB-specific Framework that responds to our realities, challenges, and opportunities for excellence. We are also planning the measurements and metrics that will gauge our success over a three-year horizon. Our intention is to report out on those metrics. This will enable the NEB to demonstrate that we are focusing on the right things and working on the right goals.

THE NEB DEMONSTRATES REGULATORY EXCELLENCE = THE NEB IS EFFECTIVE AND EFFICIENT IN FULFILLING ITS PUBLIC INTEREST MANDATE ON BEHALF OF CANADIANS

Increased transparency of company performance data, condition compliance and online maps

During the National Engagement Initiative, people in communities that have (or could have) pipeline infrastructure told the NEB that it is difficult to find information about pipeline company compliance, and specifically about the status of conditions placed on project approvals. They were not always aware of the NEB's lifecycle oversight of pipeline infrastructure or the measures in place to gauge how well the energy industry performs on safety and environmental protection. In response, the NEB will increase the availability and transparency of information regarding the safety performance of the regulated industry:

- We are publishing our field inspection reports online, along with the information we currently publish about incidents and key compliance and enforcement actions.
- We will provide Canadians with an online map of Board-regulated pipelines that will allow our stakeholders to see where NEB-regulated facilities exist, and what specific facilities' operating performance has been.
- We will improve information about company compliance with pipeline approval conditions, to ensure that condition compliance information is clear and can be accessed efficiently by the public.

CANADIANS CAN READILY ACCESS DATA ON A SPECIFIC COMPANY'S COMPLIANCE AND SAFETY PERFORMANCE AND NEB ACTIVITIES IN THEIR REGIONS = INFORMATION DEMONSTRATES THAT THE REGULATOR IS DOING THE RIGHT THINGS

Regulatory Excellence

The path to regulatory excellence is underway. It is by nature a continually evolving state that is nimble and responsive. The NEB has been working with the Alberta Energy Regulator (AER) and others in the national and international field, to define excellence, understand how a regulator can foster excellence within its organization, and to continually monitor this state.

Following the release of the AER report "Listening, Learning, Leading – A Framework for Regulatory Excellence", developed by Cary Coglianese from the University of Pennsylvania, our next step is to build an NEB-specific Framework that responds to a national energy regulator's realities, challenges, and opportunities for excellence.

The NEB continues to work with other regulators around the world to examine the concept of regulatory excellence and learn from each other's experiences. This includes work with:

- The Arctic Offshore Regulators Forum
- The International Regulators Forum
- The Organization of Economic Cooperation and Development
- The Canadian Community of Federal Regulators
- The Public Policy Forum on the Global Energy Regulators Summit

Internally, the Board has established Member-led committees - the Board Risk Management and Safety Committee, the Governance Committee and the Regulatory Excellence Committee - to challenge and consult on the continual improvement of the NEB's regulatory framework.

TAKING ACTION ON SAFETY

Public safety and the protection of the environment are the paramount concerns of the NEB, as they are for Canadians. It is the NEB's job to make sure companies are doing what it takes to keep their pipelines safe through their entire lifecycle - from design and construction to operation and abandonment.

Improving our Pipeline Integrity Management Process

Inspecting pipelines to ensure that they are being used and maintained safely and according to set standards over the duration of their service life is a fundamental aspect of the work we do as a regulator. During the National Engagement Initiative, we heard that people do not understand how inspections are planned and performed, or when and why we inspect certain pipeline systems over others. They also are uncertain as to whether the NEB is doing enough to ensure that pipelines are being maintained and operated safely, or if we are actively working to prevent repeated incidents.

In response to this, we are refocusing the way in which we collect and share pipeline safety performance information, by:

- Refining our data collection and analysis systems to learn from past incidents and put additional measures in place to regulate against future incidents.
- Making more information about pipeline safety and industry performance available to the public over the lifecycle of energy infrastructure.
- Conducting a review of our integrity management program with a view to harnessing the best practices of other pipeline regulatory agencies.

Each of these key activities will be measured and assessed for effectiveness in promoting safety and environmental protection.

STRONGER INTEGRITY
MANAGEMENT PROGRAM
THAT IDENTIFIES RISKS
BEFORE INCIDENTS CAN
OCCUR

=

IMPROVED SAFETY
PERFORMANCE
BY REGULATED COMPANIES

Review of Company management systems audits

Along with inspecting pipelines over the course of their operation, the NEB regularly audits companies to ensure that they manage their safety and environmental protection processes in a way that minimizes risks to the safe and environmentally responsible operation of their facilities. During the Engagement Initiative, industry told us that how we audit their management systems and our expectations of their performance is not clear. In response to this, the NEB will:

- Work with industry associations on safety management systems.



CLEAR, STRAIGHTFORWARD EXPECTATIONS FOR MANAGEMENT SYSTEMS THAT BETTER ENABLE RISK MANAGEMENT = IMPROVED SAFETY BEHAVIORS BY REGULATED COMPANIES

Engaging Industry on Pipeline Safety Indicators

The culture of an organization influences the behavior of people in the organization, and behavior drives safety performance. A strong safety culture is one where safety means more than profit, where the most junior operator would not hesitate to shut down a facility in case of a threat, and where all levels of leadership value safety first.

The NEB believes that supporting and encouraging the development of strong safety cultures within the companies it regulates will have positive long-term effects on industry safety and environmental protection performance. One way to do this is by developing safety culture indicators – specific organizational attributes and behaviors that can be used to assess company safety culture. To further this work the NEB will:

- Present the Safety Culture Framework we have co-developed with the North American Regulators Working Group on Safety Culture, including the draft safety culture indicators, to industry.

SAFETY CULTURE INDICATORS ENABLE REGULATORS AND INDUSTRY TO OBJECTIVELY ASSESS COMPANY SAFETY CULTURE = IMPROVED SAFETY BEHAVIOR AND PERFORMANCE BY REGULATED COMPANIES

Emergency Management

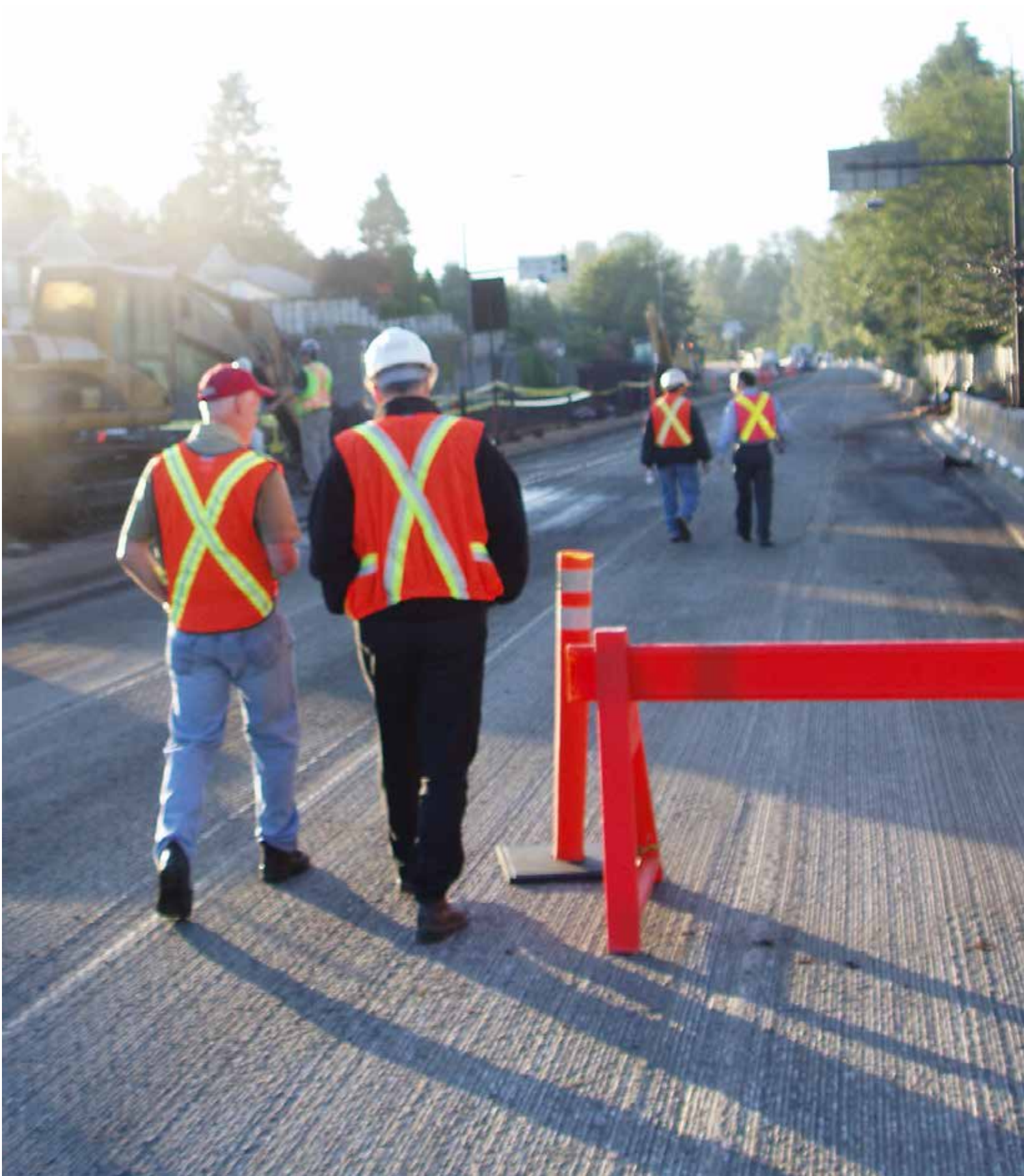
During the National Engagement Initiative, the NEB heard that there is a need for better communication, planning, training, and consultation with provinces, municipalities, local governments and first responders on emergency management systems. These stakeholder groups requested better coordination of company plans with their own emergency and resource planning – for a clearer description of roles and responsibilities, for better first-response training and resource support, and for continuous communication with the general public around emergency response planning.

The NEB’s subsequent public consultation on emergency management in the spring of 2015 further tapped into the thinking and recommendations of interested parties. From these sources of feedback, as well as through our continued engagement with stakeholders in key energy infrastructure communities, the NEB is developing strategies to promote and support well-defined and coordinated emergency management with stronger communication and coordination between regulated companies and community-level stakeholders. Moving forward, we will:

- Facilitate regional Emergency Response approaches by engaging with municipalities, first responders and community representatives.
- Revise our Emergency Management Program to clarify our expectations of regulated companies.

BETTER COORDINATION AND STRONGER COMMUNICATION BETWEEN COMMUNITY, INDUSTRY, GOVERNMENT AND REGULATORY PLAYERS = COMPREHENSIVE REGIONAL EMERGENCY RESPONSE THAT COVERS ALL CONTINGENCIES

“Safety Culture means the attitudes, values, norms and beliefs which a particular group of people shares with respect to risk and safety.”



ENGAGING WITH CANADIANS

The views of Canadians matter. What the NEB heard during the National Engagement Initiative is that we need to do a better job of listening to those views as a part of our regulatory lifecycle oversight.

Canadians want to be better informed about, and engaged in, the NEB and our regulated companies' processes, plans and decisions about pipeline operations – especially at a regional level.

Moving forward, the NEB will incorporate public engagement throughout the lifecycle of energy infrastructure regulation, and set similar expectations of industry through our regulatory framework, with a particular focus on Indigenous communities, landowners, and municipalities.

We will become more deliberate about explaining the work we do as a regulator, and about sharing the data and information that we use to inform our processes as an energy regulator. We will do this in a way that is responsive to the local and regional information needs of our stakeholders, and that still captures the “big picture” of cohesive energy infrastructure regulation in Canada.

Regional Offices and Desks

The NEB committed to opening regional offices in Montréal and Vancouver in January 2015, citing the decision as a first step in raising regional awareness about its lifecycle regulatory work, and building relationships with local communities, municipal and Indigenous groups, and landowners. Since the announcement, both offices have been established and staffed with regional directors. Further staffing is underway, as is the development of regional engagement plans.

These two new regional offices join the Yellowknife office, which opened in 2011 as part of the NEB's commitment to support increased Northern engagement, and which is run by the NEB's Professional Leader, Northern Engagement.

“[the NEB’s] willingness to decentralize sends a message of the seriousness of their intentions”.

Denis Coderre, Montréal Gazette, 17 January 2015

As a direct result of a suggestion heard during the National Engagement Initiative, the NEB will also establish “Regional Desks” for the Maritimes, Ontario and the Prairies. Based in Calgary, these desks will be staffed with dedicated engagement specialists, who will conduct engagement planning and engagement in regions where the NEB does not maintain an office, and who will be a stable and consistent point of contact for stakeholders in those regions.

A report from the new Regional Offices

VANCOUVER

The focus of the Vancouver Office, following the Chair's Engagement with stakeholders in April, May and into the summer, has been on acting as an NEB point of contact for concerned citizens, and on becoming knowledgeable and active in the lower mainland emergency response system.

NEB staff have done an inventory of all of the regional emergency planning and preparedness networks, activities and groups. They have met with key personnel, including municipal emergency management planners and first responders, and developed strategic partnerships with several organizations including the Regional Emergency Planning Committee, Canadian Coast Guard and the Transport Canada-led area response-planning steering committee. Along with the Coast Guard, the NEB co-led a process that will result in the development of a Greater Vancouver Integrated Pollution Response Plan, and assisted with planning for the emergency response exercise at the Westridge terminal.

Beyond emergency management, NEB's Vancouver staff have focused on increasing public information about lifecycle regulatory processes. They have delivered presentations on NEB's lifecycle activities at key forums including the Clean Pacific Conference and the First Nations Pipeline Summit, and have attended meetings with First Nations, municipal and provincial officials, business groups and environmental groups.

A report from the new Regional Offices

MONTRÉAL

The Montréal office has continued building on the relationships developed in Quebec during the Chair's National Engagement Initiative. Much of the Office's work has centered on engaging key stakeholders in the Montréal area to address regional concerns and questions regarding Enbridge's Line 9B project.

NEB staff have regular interaction with the Communauté métropolitaine de Montréal (CMM) and regional municipalités régionales de comté (MRC) staff, and have presented to elected councils in regions affected by NEB-regulated infrastructure. This engagement has largely focused on the NEB's role as a lifecycle regulator, integrity management, environmental protection and emergency management.

NEB staff are working with the CMM and government of Quebec in ongoing meetings with Enbridge to develop a Joint Committee on Emergency Preparedness for Quebec. This committee would oversee the development of a coordinated approach to Emergency Management in the Montréal area, increased capacity for local First Responders and continuous sharing of information between the company and regional municipalities.

Montréal office staff have also travelled to Ontario and New Brunswick to meet with First Nations representatives and members of the public who have concerns regarding NEB-regulated infrastructure. The office is working with industry partners to develop a series of Pipeline Safety workshops to be delivered throughout Quebec in early 2016. Ongoing coordination with Operations leadership has enabled the office to execute technical engagement activities with regional stakeholders in collaboration with staff specialists to demonstrate how the NEB holds companies to account in the areas of environmental protection and public security.

Indigenous Engagement

In meetings with Indigenous leaders and community representatives across Canada and the North, the NEB gained a new understanding of the gaps in engagement between these groups and the energy industry, the questions that have been left unanswered, and the need for meaningful relationship building.

Indigenous communities are important stakeholders in the debate over energy development in Canada. During the National Engagement Initiative we heard the importance of having a sustained dialogue that taps into their unique perspectives, knowledge and needs – on land use, on energy issue management and on incident first response and infrastructure. We commit to having that sustained dialogue on lifecycle regulation.

- The NEB will use their presence in the regional offices, and dedicated regional desk staff, to build stronger relationships by providing a consistent point of contact for lifecycle regulatory information.
- We will engage with Indigenous groups to develop and deliver workshops on the lifecycle of energy infrastructure, energy literacy, safety and environmental protection, and the NEB's role and functions regarding land users.
- We will further continue a proactive dialogue with Indigenous people and communities on their unique viewpoints, needs and requirements for lifecycle regulatory information, and develop our Indigenous engagement programs to provide sustained and consistent interaction.

NEB STAFF DEVELOP MORE UNDERSTANDING OF INDIGENOUS ISSUES AND CONCERNS, AND MAINTAIN RESPONSIVE, TWO-WAY ENGAGEMENT ON THESE ISSUES

INDIGENOUS STAKEHOLDERS FEEDBACK AND ISSUES ARE HEARD

Land Matters Group

The NEB consistently heard during the National Engagement Initiative that land use issues arising from energy infrastructure are not being addressed effectively. As a result of this feedback, the NEB plans to revitalize an existing engagement vehicle: the Land Matters Group (LMG). The LMG will bring together landowners, Indigenous groups and industry to share their knowledge and expertise to:

- Build awareness and interest in land matters, and encourage a fuller exchange of information between affected individuals and groups.
- Promote and facilitate in-depth discussion and recommendations on land matters.
- Inform regulatory development, priority setting and program delivery decisions made by the Board.

NEB STAFF BUILD AN UNDERSTANDING OF LOCAL AND REGIONAL ISSUES, AND ENGAGE PROACTIVELY WITH COMMUNITIES DIRECTLY ON THOSE ISSUES

LAND USE ISSUES ARE HEARD AND RESOLVED.





Improved energy information programs

Canadians make decisions about energy every day – from consumer-level choices about products and consumption, to business and government decisions about investment, markets and operations, to regulatory decisions that impact trade systems and safety. Having neutral, data-sourced information that supports decision-making at all levels is important.

The NEB is committed to enhancing both the type of information we produce and share with Canadians, and the way we deliver it. It is our goal to become a go-to, trusted source in Canada on energy and pipeline safety information.

We are actively seeking better, more user-friendly ways to present information about the functioning of Canada's energy markets. We are identifying and developing new ways to involve a broader cross-section of Canadians in our Energy Information Program, beyond its traditional audience of energy professionals. As a part of this:

- We will actively engage environmental and other non-government or public organizations to identify the kinds of information Canadians would like to have about energy that they do not have today.
- We have begun website modernization that will facilitate easier access to information and better use of social media.

THE NEB PROVIDES
NEUTRAL, SOUGHT-AFTER,
DATA-DRIVEN ENERGY
INFORMATION THAT IS
ACCESSIBLE TO ALL
CANADIANS

=

CANADIANS ARE BETTER
ABLE TO ENGAGE IN ENERGY
ISSUES THAT AFFECT THEM

Sharing information to improve energy data

To improve Canadian energy data and information, the NEB has built strategic alliances with provincial, national and international energy regulators and government agencies.

There are several initiatives underway, including:

The Trilateral Initiative on Energy Information:

The NEB is participating in the trilateral initiative on energy information with the U.S. and Mexico. This Trilateral aims to create a framework for consultation and sharing of publicly available information among the participants, setting the stage for dialogue, comparisons and deliverables on information and energy outlooks for the North American region.

NEB- EIA Cooperation:

The NEB has also established a framework for continuous and regular dialogue with the U.S. Energy Information Administration (EIA). This is a significant milestone, as the EIA is a world leader in collection, dissemination and provision of energy information. A draft MOU between the two organizations has been developed and is in the process of being finalized.

Through these initiatives, the NEB is learning and adopting best practices for energy information sharing.



CONCLUSION

The National Engagement Initiative fundamentally altered the way that we understand our role as a federal regulator. For most of the 50-plus years of our organization, we have focused on the independent, quasi-judicial function of making regulatory decisions. Our engagement efforts were directed at the stakeholders who were directly impacted by, or who could provide expert testimony on, energy infrastructure development. We have always felt confident that we act in the Canadian public interest.

The Canadian public interest has evolved. For a variety of reasons, people are more actively concerned about how energy infrastructure is developed, how it is maintained, and who is accountable if something goes wrong. They are more alert to environmental risks, and regional needs. They have a lot of questions about “how...”, “if...”, and “when...”. Few of the answers are simple, and most lead to more questions.

We realized that we need to be far more attentive to those questions and concerns during the lifecycle of energy infrastructure, and we need to ensure that industry is, as well. We realized that some of our processes and expectations (the transparency of emergency response plans, for example) should be modernized and improved to respond to the evolved operating context in Canada.

The Engagement Initiative has given us the necessary foundation to chart a course for our future that is responsive to the needs of Canadians. We have heard first-hand what is needed from us. We have listened to ideas and issues. We have promised to do better, starting immediately.

Our mandate has not changed. Our function as an independent decision-maker has not changed. Our role in keeping energy infrastructure in Canada safe, secure and functioning has not changed. What has changed is the way we will work with Canadians in fulfilling our mandate, role and function.

We do not expect that the journey ahead will be smooth, easy or without challenges, but we do feel we are on the right track toward building the kind of responsive regulatory organization that Canadians want. Ultimately, our success will be determined by the trust that Canadians have in us as we go forward.

APPENDIX A

THE MEETING SUMMARIES

Accompanied by some technical staff and the Board Members who lived in each area, the Chair met with as broad and varied a selection of people as possible to hear about their thoughts and concerns. Approximate total cost of the online discussion forum, travel, meeting rooms and translation over the National Engagement Initiative was \$293,702. The cost of the Safety Forum, held in Calgary on June 2 and 3 2015, was \$114,153.

Atlantic Component

Dalhousie University, Engineering - Discussion Topics: the hearing process; how the NEB defines 'public interest'; technical questions around converting gas pipelines to oil pipelines; emergency management; lifecycle regulation and differentiating between the NEB's federal jurisdiction and that of the provinces.

Canada-Nova Scotia Offshore Petroleum Board - Discussion Topics: addressing public sentiment of energy development; strengthening understanding of ourselves as regulators; managing the expectations of participants in a hearing process and how we can strengthen the transparency of our reporting.

Ecology Action Centre (Halifax) - Discussion Topics: the role of the NEB with regards to climate change; legislative context surrounding environmental assessments and time limits for the hearing process; infrastructure regulated by the NEB in Atlantic Canada and differentiating between the NEB's federal jurisdiction and that of the provinces.

St. Mary's First Nation (Chief Candice Paul) - Discussion Topics: industrial development on traditional territory; hearing process; responsibilities of the NEB as it pertains to Indigenous engagement; financial responsibility of companies in the event of an incident or pipeline abandonment.

Agricultural Alliance of New Brunswick - Discussion Topics: landowner rights and compensation; use of land on pipeline right-of-ways; pipeline safety and process and conditions for pipelines abandonment.

Conservation Council of New Brunswick/ Fundy Baykeepers - Discussion topics: the hearing process; the role of the NEB with regards to climate change; communications; environmental assessment of projects; protection of marine environments.

New Brunswick Woodlot Owners' Association - Discussion Topics: NEB regulatory engagement; alternative dispute resolution process; lifecycle regulation; environmental assessments; hearing process; use of land on pipeline right-of-ways.

Fundy North Fishermen's Association - Discussion Topics: legislative context surrounding environmental assessments; TERMPOL reporting; hearing process; pipeline safety and protection of fresh and saltwater fisheries.

Hampton Town Council - Discussion Topics: hearing process; pipeline safety; environmental assessments; lifecycle regulation; landowner concerns; damage prevention; how the NEB defines 'public interest' and abandonment process.

Horst Sauerteig (Saint John) - Discussion Topics: Communications; NEB hearings; pipeline safety; integrity management plans.

Canada Newfoundland Labrador Offshore Petroleum Board - Discussion Topics: addressing public sentiment of energy development; strengthening understanding of ourselves as regulators; pipeline integrity management plans; emergency management and response; safety culture and how we can strengthen the transparency of our reporting.

Memorial University, Harris Centre - Discussion Topics: Hearing process; role of the Board; infrastructure regulated by the NEB; coordination with provincial energy regulators.

Quebec Component

Huronne-Wendat First Nation (Québec City) - Discussion Topics: history of the group; hearing participation; and future impacts of energy development (i.e. economic and environment).

Mayors of Capitale Nationale Region (Québec City) - Discussion Topics: Emergency response; compensation; integrity of water systems; NEB enforcement and compliance; and approach to emergency management.

Malecite de Viger First Nation (Rivière-du-Loup) - Discussion Topics: NEB 101; hearing participation; and the availability of project information.

Mayors of Bas Saint-Laurent Region (Rivière-du-Loup) - Discussion Topics: maintaining integrity of watercourse crossings; local capacity for emergency response; NEB 101; mandate and process; group noted the benefit to having these discussions with the NEB.

Conseil du patronat (Montréal) - Discussion Topics: the role of the group; approach to regulatory engagement; and social dialogue.

Equiterre (Montréal) - Discussion Topics: NEB as a lifecycle regulator; NEB communications; 15-month time limit for project review; information sharing; NEB's planned regional office in Montreal; social license; natural justice; hearing process; and climate change.

Communauté métropolitaine de Montréal (CMM) (Montreal) - Discussion Topics: integrity of water systems; watercourse crossings and valve placements; pipeline integrity; inline inspection tools; social license and sharing of information; emergency response procedures; responsiveness of companies; company consultation requirements.

HEC Montréal (Montréal) - Discussion Topics: NEB 101; independence of the Board; climate change and the scope of NEB mandate; NEB project review process; Crown consultation and the NEB role; Safety Culture; and transparency of communicating incidents.

Association of Chiefs of Quebec Fire Safety (Lavaltrie) - Discussion Topics: background on the group; NEB as a lifecycle regulator, NEB hearing process; information sharing; emergency preparedness and response (e.g. training); suggested information about product transported made available through CANUTEC (Canadian Transport Emergency Centre); incident detection systems; public safety; and liability.

Union des producteurs agricoles (UPA) (Longueuil) - Discussion Topics: NEB hearing process; participant funding; French project information; landowner issues; timing of detailed route; integrity of water systems; social license; pipeline infrastructure standards; NEB communications; NEB oversight before hearing process; and pipeline abandonment.

Mayors of Outaouais Region (Lachute) - Discussion Topics: NEB 101; compensation; integrity of water systems; availability of project information; right of way concerns; emergency preparedness and response; information sharing; NEB process;

pipeline design; and process for condition compliance.

Grand Council of the Waban Aki First Nations (Wolinak) - Discussion Topics: role and mandate of the group; NEB as a lifecycle regulator; NEB hearing process; and NEB communications.

Kanesatake Mohawk First Nation (Kanesatake) - Discussion Topics: NEB hearing process; pipeline locations sensitivity; integrity of water systems; balancing future impacts of energy development (e.g. economic and environment); Crown consultation and the NEB role; and emergency response.

Mayors of Lanaudiere, Laurentides and Mauricie Regions (Trois-Rivières) - Discussion Topics: NEB as a lifecycle regulator; NEB mandate; pipeline maintenance; compensation; information sharing; landowner dispute mechanisms (compensation/reclamation); liability; abandonment; emergency response; and NEB's planned regional office in Montréal.

Ontario Component (North Bay, Ottawa, Toronto and Sarnia regions)

Nipissing First Nation - Discussion Topics: history of the group; NEB role and mandate; integrity digs; archeological sensitivity of their lands; duty to consult and NEB role; project awareness; hearing participation.

North Bay Fire Department - Discussion Topics: emergency management; emergency response and coordination; emergency exercises; engagement and communications; integrity of water systems; emergency response procedures; local capacity for emergency response.

City of North Bay and the North Bay-Mattawa Conservation Authority - Discussion Topics: integrity of water supply; hearing participation; pipeline regulation and safety; engagement; how the NEB defines 'public interest'.

North Watch (also Stop Energy East, Timiskaming Tomorrow, Friends of Temagami) - Discussion Topics: engineering standards; pipeline incidents (beneath ice); NEB role and organization; liability and compensation; integrity of water systems; treaty obligations; how the NEB defines 'public interest'; hearing process; NEB communications; public participation.

City of Ottawa - Discussion Topics: integrity of water systems and environment; pipeline safety; emergency response procedures; health effects of pipelines during construction and operation; role of the NEB with future of energy; climate change and the scope of NEB mandate.

Toronto and Region Conservation Authority - Discussion Topics: integrity of water systems; emergency response times; land erosion; geo-hazard surveys.

City of Toronto - Discussion Topics: Emergency preparedness and response; pipeline safety; integrity of water systems.

City of Sarnia, Emergency Management, Fire Department, Lambton County and St. Clair Township - Discussion Topics: Current pipeline system and infrastructure; local capacity for emergency response; emergency response training for municipal officials (i.e. first responders, elected officials); information sharing amongst regulators; pipeline safety; integrity of water systems.

Association of Municipalities of Ontario (Gary McNamara, President) - Discussion Topics: Gas supply; local capacity for emergency response; safety and emergency management.

Ontario Federation of Agriculture - Discussion Topics: Gas supply; pipeline safety; abandonment and decommissioning; soil contamination; NEB mandate; liability and compensation; landowner/company engagement; land matters group; communications; integrity digs; biosecurity; depth of coverage; existing pipeline infrastructure; transparency of pipeline integrity data; hearing participation.

Mississaugas of the New Credit First Nation - Discussion Topics: duty to consult and the role of the NEB; archeological sensitivity of their lands; NEB requirements; integrity digs.

Association of Canadian Fire Chiefs - Discussion Topics: background on the association; communications; compensation for training/equipment; emergency management training; coordination and consistency of programs; volunteer fire department capacity; information sharing (i.e. pipeline contents); framework for response capability.

Ontario Association of Fire Chiefs - Discussion Topics: Company-provided training; emergency response times; training (resources, integrated); incident reporting; public trust; communications; information sharing with first responders; offer support to NEB (communications).

Ontario Energy Board - Discussion Topics: Standardized performance measures; scope of energy futures; gas supply.

City of Kingston and regional First Responders - Discussion Topics: NEB role and mandate; emergency preparedness and response; local capacity for emergency response; pipeline safety; emergency response training.

Rural Ontario Municipal Association - Discussion Topics: background on the group; emergency response time; pipeline safety and inspections; integrity of water systems; emergency management information.

British Columbia Component

Métis Nation of British Columbia - Discussion Topics: Traditional land use mapping; capacity building; continued engagement; the NEB as a lifecycle regulator; role of NEB's regional office; NEB hearing process; environmental protection; and pipeline and public safety.

Fraser Valley Regional District Board of Directors - Discussion Topics: emergency response capacity; pipeline and public safety; integrity of water systems; the NEB as a lifecycle regulator; air quality and protection of regional biodiversity; compliance and enforcement; public engagement; pipeline integrity and leak detection; safety and environmental performance reporting; how the NEB defines 'public interest'; and transparency.

David Suzuki Foundation - Discussion Topics: environmental protection; pipeline integrity; the NEB as a lifecycle regulator; emergency preparedness and capacity; and Indigenous groups' involvement in emergency response.

Union of BC Municipalities - Discussion Topics: emergency response procedures and transparency; hearing process; tanker traffic; previous incidents; emergency response capacity; liability and remediation; pipeline and public safety.

City of Burnaby - Discussion Topics: hearing process and public perceptions; tanker traffic; climate change; NEB mandate and role; previous incidents; and emergency response procedures and transparency.

Metro Vancouver Mayors' Council & Canadian Coast Guard - Discussion Topics: pipeline and public safety; hearing process and public perceptions; previous incidents; impact of incidents to the local economy; emergency response capacity; emergency response procedures and transparency; and NEB mandate and role.

Regional First Responders (Government of BC, Fire Chiefs' Association of BC, RCMP, City of Burnaby, City of Vancouver, Fortis BC, Regional Emergency Planning Committee) - Discussion Topics: emergency preparedness; capacity and response; emergency response procedures and transparency; and compliance and enforcement.

Vancouver Aquarium - Discussion Topics: emergency response capacity; capacity for ocean research; monitoring and baseline reporting; previous incidents; impact of incidents on aquatic environment.

Capital Regional District Board of Directors - Discussion Topics: hearing process and public perceptions; emergency response; tanker traffic; emergency response capacity; emergency response procedures and transparency; sustainable development; climate change; NEB mandate and role; engagement of Indigenous groups; environmental protection; and protection of sacred sites.

Sierra Club BC, Dogwood Initiative, CPAWS, Georgia Strait Alliance, Forest Ethics, West Coast Environmental Law - Discussion Topics: hearing process; climate change; environmental protection; engagement with environmental groups; public engagement; independence of the Board; and pipeline and public safety.

Ocean Networks Canada - Discussion Topics: technology to anticipate movement of product in the ocean and predict when a wave may have an impact on operations at a marine terminal; and emergency response.

Alberta Component

Alberta Urban Municipalities Association - Discussion Topics: federal vs provincial pipeline regulations; pipeline integrity; regulatory coordination; engaging communities; NEB public hearing process.

Mayor of Strathcona and Northeast Region Community Awareness and Emergency Response (NRCAER) - Discussion Topics: engagement with municipal areas; NEB public hearing process; collaboration with municipalities; safety culture; emergency management.

Manitoba Component

Grand Chief Derek Nepinak and representatives from the Assembly of Manitoba Chiefs - Discussion Topics: Organization of the NEB, duty to consult and the role of the NEB; company's communications with

group; environmental assessment processes; jurisdictional differences regarding energy; project procurement processes.

Manitoba Pipeline Landowners Association - Discussion Topics: company's communications; property rights; decommissioning and abandonment; landowner issues; perception of the NEB; compensation for landowners.

Mayor Brian Bowman and senior City of Winnipeg Staff - Discussion Topics: transparency of safety and incident inspections; perception of NEB; NEB's role and mandate; NEB communications; technical details of pipeline transportation.

Manitoba Eco-Network - Discussion Topics: NEB hearing process and participation; climate change; scope and mandate of the NEB; jurisdictional difference in energy regulation.

Association of Manitoba Municipalities - Discussion Topics: pipeline safety; rail loading stations vs. pipelines; emergency management procedures and collaborations across jurisdictions; NEB hearing process and participation; emergency management training.

Northern Component

Minister of Industry, Tourism, and Investment, Government of the Northwest Territories; and, NWT Regulator of Oil and Gas Operations (Yellowknife) - Discussion Topics: NEB-GNWT service agreement; post-Devolution overlapping regulatory responsibilities; regulatory development.

Chair, Mackenzie Valley Land and Water Board (Yellowknife) - Discussion Topics: NWT Board Forum; community engagement; overlapping regulatory responsibilities.

Chair and CEO, Inuvialuit Regional Corporation; and Chair, Inuvialuit Regional Development Corporation (Inuvik) - Discussion Topics: history of the Inuvialuit Land Claim Agreement; history of oil and gas exploration in the Inuvialuit Settlement Region; regulation of offshore exploration; proposed regulatory changes (financial responsibility; absolute liability) for offshore exploration; community engagement.

Mayor of Inuvik (Inuvik) - Discussion Topics: NEB's post-Devolution regulatory responsibilities; Inuvik's experience with the cyclical nature of oil and gas exploration in the Mackenzie Delta; construction of the Inuvik-Tuktoyaktuk road.

Nunavut Oil and Gas Summit – various Nunavut stakeholders (Iqaluit) - Discussion Topics: NEB's regulatory mandate in the North; NEB focus on safety and protection of the environment.

Premier of Nunavut (Iqaluit) - Discussion Topics: NEB's regulatory mandate in the North; NEB focus on safety and protection of the environment; community engagement.

Chair, Nunavut Impact Review Board (Iqaluit) - Discussion topics: review of Memorandum of Understanding; community engagement; overlapping regulatory responsibilities.

President, Qikiqtani Inuit Association (Iqaluit) - Discussion topics: NEB's regulatory mandate in the North; history of oil and gas exploration in Nunavut; regulation of offshore exploration; community engagement.

President, Nunavut Tunngavik Incorporated (Iqaluit) - Discussion topics: NEB's regulatory mandate in the North; history of Nunavut Land Claims Agreement; history of oil and gas exploration in Nunavut; regulation of offshore exploration; community engagement.

NWT Board Forum – various Northwest Territories regulators (Yellowknife) - Discussion topics: NEB's regulatory mandate in the Northwest Territories; NEB focus on safety and protection of the environment; NEB strategic priorities; regulatory cooperation; post-Devolution overlapping regulatory responsibilities.

Premier of Northwest Territories and Ministers of Industry Tourism and Investment, and Environment and Natural Resources (Yellowknife) - Discussion topics: NEB's regulatory mandate in the North; NEB focus on safety and protection of the environment; NEB-GNWT service agreement; NEB-OROGO cooperation and coordination.

President, Inuit Tapiriit Kanatami (Ottawa) - Discussion topics: NEB's regulatory mandate in the North; history of Nunavut Land Claims Agreement; history of oil and gas exploration in Nunavut; regulation of offshore exploration; community engagement.

Ontario Component (Thunder Bay and Kenora regions)

Northwest Ontario Municipal Association (NOMA) - Discussion Topics Included: valve location and placement; definition of major water crossing; emergency response training and capacity in rural communities; liability; pipeline safety and integrity

Lakehead and Region Conservation Authority - Discussion Topics Included: valve location, placement and shut-off procedure; integrity of water system; emergency response time; safety culture; emergency response capacity in rural communities

Nishnawbe-Aski Treaty 9 - Discussion Topics Included: impact of pipeline development; capacity for hearing participation; duty to consult and the NEB's role; climate change; environmental impacts; design and materials; prevention and mitigation efforts; process to incorporate aboriginal values; definition of public interest; remediation; participation in pipeline inspections

City of Kenora and First Responders - Discussion Topics Included: capacity for emergency response training; emergency response times in rural areas; integrity of the water systems; definition of directly affected; NEB engagement; company's liability

Treaty 3 Grand Council - Discussion Topics Included: duty to consult and the role of the NEB; definition of directly affected; participant funding; process to incorporate aboriginal values; NEB communications; participation in pipeline monitoring; integrity of water systems

Transition Initiatives Kenora - Discussion Topics Included: climate change; NEB role and mandate; amount of company information provided; definition of public interest; duty to consult and the role of the NEB; hearing time limits; whistleblower process; environmental considerations

APPENDIX B

NATIONAL ENERGY BOARD PIPELINE SAFETY FORUM SUMMARY

Introduction

As part of the National Energy Board's engagement initiative, a Pipeline Safety Forum was planned for 2-3 June 2015 to address how to better improve pipeline safety. We maintain a proactive approach to pipeline safety, and recognize that in order to prevent incidents before they happen, we need have discussions, as well as share ideas and information. The Pipeline Safety Forum focused on three main objectives:

- An open exchange of information on technical pipeline issues;
- Increased understanding of stakeholder concerns; and
- Opportunities that both industry and regulators can take to improve safety outcomes to better protect people, property and the environment.

Peter Watson, Chair and CEO welcomed all participants and noted that:

- Pipeline companies, their service providers and the regulators are technical experts.
- We are the people who can recommend improvements, drive change, and instill safety culture in our organizations. The ball is on our court and we need to challenge ourselves to up our game and really think beyond "business as usual".

Safety Culture Announcement

A strong example of the work we are doing to improve is the development of the Safety Culture Framework which was released one year ago. Since then we have been working with recognized experts in the field of safety culture, and other regulators in Canada and the United States, to draft a comprehensive set of safety culture indicators. We plan to work with CEPA to identify how these indicators can support and assist the work they have underway already. We plan to release the draft safety culture indicators for public and industry feedback later this year.

SESSION 1:

The National Energy Board Engagement Feedback

The Chair engaged with municipal leaders, ENGOs, Indigenous groups and First Responders, among others in 80 meetings in 25 cities and towns across Canada. The common themes included:

- The need for people, water and land to be protected from possible pipeline failures
- The assurance that, if a pipeline incident occurred, the authorities would be able to respond swiftly and appropriately
- The desire from all stakeholders to continue to build and develop their relationships with the NEB and the industry so they are better informed about the pipeline activity in their communities

A key learning was that people really didn't understand that the NEB is a lifecycle regulator and that we regulate a project from start to finish. A result of this was a Memorandum of Understanding with the Communauté métropolitaine de Montréal - the Montréal Municipal Community - to better share information about regulatory activities, industry performance and community concerns in the area.

This engagement process is different for us, but demonstrates our commitment to being a better partner at the local level. We heard there is room for improvement around emergency response planning and communication on

emergency response plans, which so directly and substantially involve not only the company and the regulator, but the communities where these plans would be implemented.

One of the other results of the Engagement Initiative has been a commitment on the part of the NEB to meet with stakeholders and other Canadians more often, on their terms, in their communities.

SESSION 2:

Keynote Address by Chris Siefert, Senior Executive Advisor

The world has changed. Complexity is now the way of the world and traditional risk management is not equipped to deal with complexity. Lessons from the nuclear navy are:

1. Safety is not a Goal - It is an expectation. Similarly, keeping product in the pipe is not a goal.
2. Simplify your Management System – A proactive risk management system allows a company to learn faster than under a reactive risk management system.
3. Culture Kills – Safety and reliability rely on specific behaviours (a level of knowledge, formality, questioning attitude, a forceful watch team backup and integrity). As a leader, you can change the system of consequences to ultimately alter beliefs and behaviours.

SESSION 3:

Pipeline Issues in Municipalities

This session was a panel discussion on municipal issues and priorities where oil and gas pipelines impact municipal infrastructure and require municipal resources.

We heard from a municipality in Quebec where there are very few oil and gas pipelines but they fear trucks and trains are more dangerous. However, they want their communities safe from pipelines as well. This means paying attention to potential environmental and ecological impacts as well as providing joint emergency response plans. They want a spill clean-up to be a complete restoration because the potential impacts of pipelines in populated areas can affect drinking water supplies and tourism. Consultation does not always feel genuinely open and they questioned the economic benefit to a community. It was recommended that companies consult with municipalities prior to signing agreements with landowners to learn what information is available on sensitive areas and future development. It also was recommended that the NEB have more regional offices with more expertise.

We also heard from a municipality in Sarnia, Ontario where there have been pipelines since the 1850s. They are comfortable with pipelines given the safeguards put in place through a Community Awareness and Emergency Response (CAER) organization. However, accurate pipeline identification and mapping is essential, as there can be 22 pipelines in a single corridor. It was recommended that the NEB provide this service similar to what PHMSA does. Publicly available information on pipeline safety should be made available (see myCNN in the USA). Emergency procedures should put emphasis on communication and also be made available and easily accessible.

A Northeastern Alberta-based CAER provided details on how all industries need to be integrated in communication of risk and in emergency response in populated and rural areas. Standardized training is important for first responders – industry can help. Emergency notification was identified as a critical issue from the perspective of:

- Resident fatigue is a challenge because of the multiple industries and differing methodologies.
- Personal information security.
- Industry does not have authority to give direction.

It is recommended that there be regulations to support mutual aid organizations and that there be an “All hazards” emergency notification system.

SESSION 4:

Connecting Safety Culture to Technical Outcomes

This panel was to examine aspects of improving pipeline company safety culture and its role in achieving safety and environmental protection during technical activities.

One speaker identified that if the regulator is setting standards and influencing industry safety culture, they should also be examining their own culture and how it fits within the industry.

Industry associations should be having ongoing discussions to ensure that the industry as a whole is not being judged by a member who is doing poorly. Industry leaders can also share their guidance and tools and collaborate on approaches – there may have been an investment to develop these tools, but from an industry-level perspective they benefit all. Provide a framework to guide change and do not wait for consensus.

Are the NEB and API aligned in terms of safety culture? Safety culture is crucial to management systems – they strengthen each other. Companies should ask themselves: What is the link between operational procedures and safety culture? How do we define and create a good safety culture? The more mature the safety culture, the fewer incidents there will be. Small breaks in the safety culture “link” going unnoticed can quickly lead to a larger breakdown in safety culture.

CEPA cautioned that every company has a safety culture but is it the one you want? Incidents often are attributed to a breakdown in technology/management system/regulatory framework – but ultimately they are often because of safety culture, as well. CEPA has just recently implemented membership conditions in order to pull up the “poor player”. CEPA used the NEB Safety Culture Framework to develop and implement a safety culture survey that will attempt to set a benchmark for employee ideas.

SESSION 5:

Using Operational Audits as a Continual Improvement Tool

This topic was to examine the benefits of operational or internal audits going beyond the normal regulatory compliance audit approach to an audit where input on how to improve is gathered from staff for management reviews. The NEB reviewed the regulatory audit requirements and explained how a management system is structured for continual improvement. In order for companies to influence safety culture and move away from compliance aspects of audits they were encouraged to audit for best practices and evaluate measures of performance. Four focus areas for continual improvement were discussed.

1. Being Able - There is a lot of pressure to be better, to be more complex. This is very difficult to simplify once you’ve complicated things. Operational discipline can be achieved through commitment to improvement, a mature culture and sound systems. Once the impetus on getting things done is

APPENDIX B

underway the size of the task gets more complex – discipline allows maturity to increase and then performance increases.

2. Being Resource-efficient and Reliable - Integrate audits with other assurance activities to identify objectives then simplify and build a competent team.
3. Getting Better Audit Results - You need clear audit objectives which include improvement requirements and you need competent auditors that look for the most valuable outcomes (not always compliance) with enough detail to take action.
4. Reviewing and Decision Making - Management needs integrated assurance outcome findings along with staff feedback (weak signals) heard during the audits as well as business requirements and constraints. Continual improvement decisions can be made if presented with reliable information.

SESSION 6:

Right of Way Issues and Solutions

This panel of representatives from three organizations reviewed their perspectives on issues pipeline Right-of-Ways pose for private property during the lifecycle of a pipeline.

We heard that the risks are very much the same as those expressed by municipalities with the added issue of loss of freedom of usage. Sometimes infrastructure is too close to buildings and some crops are not allowed near pipeline infrastructure. There is a loss of assets, and then a loss of the value of those assets. Landowners are concerned because infrastructure is imposed on them. Company staff, not representatives, need to dialogue with landowners on a one-on-one basis and continually through the lifecycle of a pipeline.

A number of recommendations came from the Canadian Federation of Agriculture pipeline committee, some of which follow:

- Annual compensation to landowners for pipeline right-of-ways should be a way of doing business.
- Easement agreements should be standardized so they are comprehensive but clearer and easy to read through.
- Agreements should spell out compensation and liability for damages by the company. The NEB should maintain necessary funds to abandon pipelines including removal of all lines.

The Canadian Association of Energy Pipeline Landowner Associations expressed frustration because landowner's interests are not always a first consideration by regulators. Industry is also frustrated. A challenge for the NEB is improving the right-of-entry process. Landowners want to be a strong part of the process and decision-making surrounding energy pipeline development. With landowners having a stronger presence, safety will be brought front and center.

SESSION 7:

Western Regulators Forum

Alberta, British Columbia and the National Energy Board were represented on a panel that outlined plans to collaborate on pipeline issues. These included incident reporting, performance measures, flaring emissions and well bore integrity. In addition, emergency response planning was discussed.

SESSION 8:

Valves at Water Crossings for Outflow Control

Recent liquid pipeline applications in urban areas have generated debate on the criteria for placing valves and how it relates to watershed protection.

Management strategies for risk of a pipeline failure include: managing both the probability and consequences of failure. A company has the greatest control over probability through proper construction with suitable material and a management system that detects and predicts failure so repairs can be made in advance of a failure. The only way to manage consequence is reduce the volume spilled which influences valve placement and leak detection.

Valve placement involves balancing risk. The balance is between minimizing potential outflow and environmental health with the possible leak source, access, power sources and communications. For example, it is difficult to place a valve on a steep slope. It was also noted that valves do not prevent releases. They are designed primarily to isolate sections of pipelines. However, placement takes into account output volume control and elevation of terrain which can artificially limit outflow.

One of the panelists described how operators detect leaks. Not only are control centers with leak detection technology used but also ground patrol, aerial patrol, first responders and public awareness efforts are employed. Companies also are using best available technology for sensing leaks. Staff are trained with control room simulators. An important component of this is many companies now use a ten minute rule to verify a suspected leak either publicly or internally identified. If there is any doubt, the system is shut down. Approval is then required before startup.

SESSION 9:

Emergency Response and Stakeholder Expectations

This panel was asked to speak about public expectations and industry initiatives with regard to liquid leaks and gas releases.

The new Canadian Standards Association Standard for Emergency Preparedness and Response for Petroleum and Natural Gas Systems (CSA Z246.2) was reviewed. It outlines how an Emergency Preparedness and Response Program is structured in management system elements and what are the components of an Emergency Response Plan. This includes identifying where mutual aid agreements are necessary, a procedure for engaging stakeholders and a process for communicating with external responders during an emergency.

We heard from industry how an efficient spill response is conducted starting with public awareness, monitoring and emergency responder outreach. It extends to first responder communication, contracted resources and training including conducting exercises.

Lastly it commits to a full response that addresses all regulatory and community expectations. Key components are a trained incident commander, a mobile command post and ground truthing of assumptions.

We also heard from the Canadian Association of Fire Chiefs (CAFC). Eighty-three percent of firefighters in 3500 fire departments are volunteers so specific training is a problem, and resources are sometimes scarce. There is a need for a focused approach on first responders – they are not the general public. Including them would increase public trust. Recommendations are:

- Access to information on contents of a pipeline through Canadian specific database (Canutec).

- First responders need to be collaborated within the preparation stage.
- Training for first responders for flammable liquids provided and funded by industry.
- Provision of response equipment in equipment depots.
- Creation of an Emergency Responders Strategy Group under the NEB with representation from the CAFC, Canadian Association of Chiefs of Police, and Paramedic Chiefs of Canada.

SESSION 10:

Pipelines and People – Preventing Damage and Harm

The final session spanned the spectrum from preventing damage to a pipeline to the design of gas pipelines for safety of the public and finished with the integrity management system requirements when population density increases near a pipeline.

The Canadian Common Ground Alliance is committed to preventing damage to pipelines. Its goal is zero damages but to get there requires a One Call System that serves all of Canada. They also advocate legislation to require buried pipelines to be registered to One Call services. Online platform for locate requests is successful with over 80% of locate requests now online. In May 2015 the CSA-Z247 standard for damage prevention for the protection of underground facilities was published. It requires a Damage Prevention Program and prescribes standards for excavation. It should target damage mechanisms that typically lead to failure in particular populated areas.

Gas pipeline design addresses risk of failure. If your consequences are very high (high population density, high location class) then you have to control the operating stress (pressure) or have a thicker walled pipe to reduce the probability of failure. CSA prescribes design and location factors to limit maximum operating stress.

Pipelines must coexist with occupants of the land because the occupants must carry on with their lifestyle and pipelines must deliver the energy that everyone needs. However, a pipeline integrity management program (IMP) must address increasing urbanization through at a minimum, Threat Assessment Risk Estimation and Mitigation. Other IMP focus should be on reducing equipment failure and overpressures; providing signage, fences and surveillance, conducting public awareness and taking preventative measures in populated areas such as slabbing and checking puncture resistance of the pipeline. Mandating CSA Z663 land use guidelines was advocated.

Conclusion

A satisfaction survey was conducted of participants with 118 responses from 347 attendees. Most of the respondents found the Forum informative and 83% would definitely attend a similar event again. The wide range of topics was of concern to some but the intent was to examine as many aspects of pipeline safety as was possible in the short time available. Many issues were identified and recommendations were heard. As one speaker said "Safety is a collaborative effort of all stakeholders" so moving forward the NEB will use what was heard to further develop its programs to provide more assurance of pipeline safety.

APPENDIX C

RECENT CANADIAN PIPELINE LEGISLATIVE AND REGULATORY INITIATIVES

January 2015

NEB regulated companies required to follow new NEB Event Reporting Guidelines and to report events to the Online Event Reporting System (OERS).

February 2015

The NEB issues clarifications as to requirements for assessments of fish and fish habitat and navigation.

June 2015

The Pipeline Safety Act (Bill C-46) amended key legislation governing pipeline regulation by amending the National Energy Board Act and the Canada Oil and Gas Operations Act. The amendments increased absolute corporate liability to at least C\$1 billion with parallel unlimited liability in cases of proven fault or negligence. It also set parameters for financial resource requirements for operators and allowed the NEB to take any action or measure considered necessary in the event of a release. The NEB was empowered with more flexible jurisdiction to set safety zones around pipelines, and with other powers to prevent, mitigate and remediate any post-abandonment impacts from pipelines. The powers for inspection and enforcement for Officers was expanded to include audits and to issue cease work orders. Royal assent was received in June, 2015 – The Act comes into force June 2016.



