Submission to Parliament of Canada Standing Committee on Transportation, Infrastructure and Communities

Review of the Navigation Protection Act

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1. INTRODUCTION

The Canadian Energy Pipeline Association (CEPA) represents Canada's 12 major transmission pipeline companies who transport 97 per cent of this country’s daily natural gas and onshore crude oil production.

CEPA is an active participant and is fully committed to the regulatory review process being carried out by the government. CEPA believes that the regulatory review process underway is a critical forum to build new relationships, public confidence and advance our shared values toward improving Canada’s environmental performance. The pipeline industry seeks to develop in partnership with all levels of government including Indigenous governments, various organizations and communities across Canada, a regulatory review process that is fair and transparent, based on science, evidence and facts.

For more than 60 years, CEPA members have operated pipelines across the country and now operate approximately 119,000 km of pipelines within Canada. As a result of this long history and vast network, the environmental and socio-economic effects of building pipelines are well understood, as are the standard mitigation measures and best practices that have been adopted to avoid and minimize the effects on the environment. We know that building a pipeline may have an impact on the surrounding environment, so the aim is to significantly reduce that impact through planning, design and operations that are governed by robust environmental regulations.

2. REVIEW OF THE NAVIGATION PROTECTION ACT: THE PURPOSE OF THE ACT

The Government of Canada has committed to review the Navigation Protection Act (“NPA”) with a view to understanding the changes that were made in 2012 to the previous act, the Navigable Waters Protection Act (“NWPA”). This review is aimed at restoring lost protections and incorporating modern safeguards.

While CEPA is committed to the highest standards of environmental protection and oversight, based on experiences with both the NWPA and the NPA, we would not view the changes to the previous NWPA as resulting in “lost protections”. Many of those changes were aimed at modernizing the legislation, reducing duplication and inefficiencies and clarifying the purposes of the NWPA relative to other legislation. This current Parliamentary Review of the 2012 amendments now gives the Federal Government the opportunity to fully consider the impact of those changes, hear views from all stakeholders and Indigenous groups and determine how the changes are meeting the intent of the legislation.

With that in mind, CEPA understands that the primary intent of the NPA is to regulate interferences with the public right of navigation and in doing so must balance that right with the need to construct infrastructure. Its priority is to ensure that development can occur safely and with minimal impact on navigation. The legislation itself, dating back over 130 years, was never intended to be environmental protection legislation. That role belongs to other legislation including the Canadian Environmental Assessment Act and the Fisheries Act, both of which are currently under review. Together with the National Energy Board Act, which is being examined as part of an NEB modernization review, these acts consider the impact to the environment and how pipelines are regulated.

Given the broad mandate of other environmental legislation, CEPA does not believe that environmental protection has been eroded or impaired by the 2012 changes to the NWPA. Rather, for the pipeline industry, the environmental and socio-economic impacts of pipelines crossing navigable waters are considered under the Canadian Environmental Assessment Act (CEAA) or by the NEB as part of a project review. In addition, the 2012 changes to the NWPA and the National Energy Board Act (NEB Act) reduced duplication and allowed government, industry and stakeholders to improve outcomes by focusing...
assessments on key areas of potential impact and allocating resources more efficiently to review these areas. These changes have strengthened, focused, and clarified the purposes of the NPA as well as CEAA and the NEB Act and set the scene for enhanced environmental outcomes going forward.

CEPA is hopeful that this review of the NPA will be mindful of the intent and purpose of the NPA and will not re-introduce duplications of the protections available under other legislation. CEPA is also hopeful that this review will look at the NPA with a view to which changes are working and which may require modification. Government departments now have the benefit of several years of experience applying the former NPWA and the NPA and could provide valuable information regarding the effectiveness of each. From CEPA’s point of view, the changes have improved outcomes without diminishing environmental protection.

3. LEGISLATIVE CHANGES MADE UNDER THE NPA THAT IMPACT PIPELINE COMPANIES

In 2009, the NWPA was amended to implement a Minor Works and Waters Order, which established classes of waters and works that were pre-approved and did not require a separate authorization from Transport Canada. In 2012, further amendments were made to the Act and it was renamed the Navigation Protection Act to better reflect the intent of the legislation. These changes and corresponding changes to the NEB Act by Bill C-38 meant that the NEB was now required to consider a pipeline’s impact on navigation and navigation safety for federally regulated pipelines crossing a navigable water body. This had previously been the responsibility of Transport Canada. Transport Canada maintained responsibility for pipelines that did not cross a provincial or international boundary. The application of the NPA was also restricted to specific navigable waters set out in Schedule 2 of the Act.

These key amendments were incorporated into the new NPA and a Memorandum of Understanding was entered into between Transport Canada and the NEB in 2013. Key impacts to the pipeline industry from these changes included:

- Transferring responsibility for assessing federally regulated pipelines that cross navigable waters from Transport Canada to the NEB;
- Narrowing of the scope of the NPA from all navigable waters in Canada to those listed in a schedule that includes approximately 162 rivers, lakes and oceans. This reverted focus back to navigation protection, moving to a risk-based framework that focused on Canada’s busiest waterways. Previously, the NWPA applied to 17,000 waterways in Canada, including thousands that were minor or ephemeral in nature.
- Provincially regulated pipelines (not regulated by the NEB) crossing a navigable water identified in the Schedule continue to be subject to Transport Canada’s jurisdiction under the NPA. Where a crossing meets the Minor Works Order criteria for pipelines, an NPA authorization is not required.

4. PIPELINES AND WATERCOURSE CROSSINGS

To understand the impact that the NPA changes had on pipelines, it is helpful to understand how pipelines are installed at watercourses. During construction, there is some temporary disturbance to the water body, from both an environmental and navigation perspective. CEPA members employ world class watercourse crossing methodologies that combine safety, engineering and environmental expertise. Project proponents use the latest available technologies to minimize adverse effects and avoid any disruption during construction, and where necessary, employ mitigation measures that are grounded in science to address any remaining residual effects caused by the water crossing.
When a pipeline is installed at a watercourse, qualified professionals determine the best crossing point using a variety of criteria. Specific soil conditions, timing windows for construction and the presence of aquatic species, among other criteria, influences the location and method used to construct a pipeline crossing.

There are two main methods used by the pipeline industry to cross watercourses:

- **Trenchless pipeline crossing methods (including horizontal directional drilling or microtunnelling)** involve no direct excavation to the banks or bed of a watercourse. They minimize or eliminate any impacts to the water body and to navigation. In certain circumstances, site-specific geotechnical conditions may prohibit the use of trenchless crossing techniques.

- **Trench methods of crossing watercourses** involve the excavation of a trench through the banks and bed of a watercourse. This can be done during dry or frozen conditions, or when water is flowing.

In very unique circumstances aerial installations may also be used to minimize effects to a watercourse. In these instances, the pipeline is carried across a structure above the high water mark, much like bridge supports. Aerial installations are not commonly used.

While crossing a watercourse, it may be necessary to install a temporary bridge, culvert, or ice, snow or log fill in the channel to allow construction vehicles a safe place to cross and to minimize disturbance to the bed or banks of the waterbody. These are removed immediately after construction is complete.

Consultation with Indigenous groups, communities and stakeholders that could be affected by these temporary impacts will provide information to help project proponents mitigate concerns.

While temporary impacts on navigation may occur during the construction of a pipeline crossing, it is not common for there to be long term impacts on navigation.

### 5. HOW THE CHANGES HAVE IMPACTED PIPELINES

Given the manner in which pipelines are constructed beneath navigable waters, CEPA believes that the NPA, together with the current regulatory framework, provides appropriate regulatory oversight of pipeline projects. The changes to the NPA focus on navigation, leaving other legislation to concentrate on environmental impacts. Through the NEB process and processes for provincially regulated pipelines, all pipeline projects undergo an assessment process that includes safety, environmental and public consultation aspects before they can be constructed.

The changes under the NPA have been positive for the pipeline industry in minimizing duplication and delay, without compromising environmental protection or impacts to navigation. Specific changes and their impact on the pipeline industry are discussed in further detail below.

#### a. Delegation to the NEB

An important element of minimizing duplication was delegating certain NPA assessment accountabilities to the NEB. Under the 2012 changes, the NEB was given responsibility to assess navigation-related impacts of pipeline watercourse crossings during federally-regulated pipeline reviews. Previously there had been overlapping authority between the NEB and Transport Canada which resulted in increased complexity and duplication. The 2012 changes consolidated that authority by placing the responsibility for assessing project impacts to navigation with the NEB as the single, best placed regulator. This avoids using duplicate government resources, conflicting guidance and additional delays.
This was a positive step that not only created a more efficient permitting process, but also created a better outcome by reinforcing accountability with a single regulator, building on the industry's record of safety and performance. An integrated approach, including the assessment of navigation, takes into account the full range of safety and environmental concerns and allows both industry and the regulator to work together more effectively in achieving better results, all while ensuring federal objectives are met.

The NEB takes navigation and navigation safety into account with the same rigor as previously carried out by Transport Canada and can call upon the expertise of Transport Canada where needed. The NEB conducts an independent, fair and publically accessible regulatory review processes. It can impose or recommend terms and conditions on project approvals, as well as inspect and verify compliance in order to protect the safety of Canadians and the environment. The NEB employs experts who are experienced with pipeline construction and operations. They have the expertise to not only assess impacts on navigation, but also to identify safety and environmental effects. Although other federal government departments have expertise specific to their areas, it is the NEB, with nearly 60 years of experience as a full life cycle regulator that has the expertise specific to pipelines.

The delegation of responsibilities to the NEB has not weakened navigation protection associated with pipeline projects under federal jurisdiction. In fact the NEB does not restrict itself to looking at navigation only on the watercourses listed in the Schedule in the Act. The NEB is a full life cycle regulator that takes all impacts of a pipeline into account from design to construction and operation. The NEB is able to bring specific expertise with respect to pipelines into its analysis and by doing so, government resources can more effectively focus on areas of concern regarding pipelines. Prior to the delegation of permitting under the Act to the NEB, applications were often being processed by departments with heavy workloads and without the same specific knowledge of pipelines as the NEB. As a result, the reviews could be prolonged without any corresponding environmental benefits.

The NEB process is more transparent and information related to project decisions is available to project proponents and the public. Under the NEB process, all watercourse crossings are evaluated and public and Indigenous consultation is carried out. This openness and transparency is not necessarily mandated to other government departments.

Since the new NPA came into force and the NEB has been given responsibility for the approval of pipelines that are installed at navigable waters, pipeline companies have seen an improvement in timelines and improved certainty related to the timing of decisions.

b. The Schedule

Having a schedule reduces regulatory burden and focuses government resources on projects on waters where regulation is warranted and appropriate to protect navigation. This provides a degree of certainty to proponents about which works and waters are designated as requiring approval.

There has been some criticism, including by some Indigenous groups, suggesting that the current approach to scheduling water bodies has been too narrow and has resulted in water bodies being left off the list. CEPA is not opposed to a review of the current schedule to determine if other water bodies should be included. To that extent, the current legislation, under, 29(2) already gives the Minister the authority to amend the schedule and add lakes and rivers to it at any time by regulation. This allows the new water bodies to be added without changes to legislation.

c. Provincially Regulated Pipelines

Pipelines that are regulated by provincial regulators have mixed experiences when applying for authorizations under the NPA. In cases where a pipeline activity meets the requirements of the Minor
Works Order, projects have been constructed with no delays in approvals. Crossings of scheduled watercourses using trenchless construction methods such as horizontal directional drilling have been carried out with no impact on navigation or the environment. Trench crossings of watercourses not on the schedule have also been constructed, again with only temporary impacts on navigation and no permanent environmental effects.

6. CONCLUSIONS

When pipelines are installed at waterbodies, the effects to navigation and to the environment are almost always temporary in nature. CEPA recognizes that keeping our lakes and rivers protected during these crossings is important to Canadians, and is a priority for pipeline operators. Pipeline companies take care to protect the environment during all stages of the pipeline’s life cycle, from planning, construction and operations to maintenance and decommissioning or abandonment. Each phase of the cycle bares close scrutiny by regulators, and the industry uses established practices and procedures for water crossings to protect not only navigation, but also wildlife, vegetation and water quality. The NPA provides appropriate regulatory oversight with a risk-based framework that focuses on Canada’s busiest waterways. Environmental oversight is accomplished by a robust framework for project reviews under the Canadian Environmental Assessment Act, the National Energy Board Act and other provincial legislation.

The most effective and efficient regulatory framework for all stakeholders is one that is clear, efficient and comprehensive. In particular, the process should avoid duplication, outline clear accountabilities, contain transparent rules and processes, allow for meaningful participation from those who have valuable contributions to make and balance the need for timeliness with other objectives. CEPA supports any efforts the government makes to achieve this outcome.

To this end, CEPA strongly recommends that key changes to the NPA, including delegating authority to the NEB for federally regulated pipelines, creating a Schedule of Canada’s busiest water bodies and implementing the Minor Works Order regulation remain in place.
Appendix 1: Stories from the Right-of-Way

CEPA member companies have provided several case studies illustrating projects that were constructed under the new Navigation Protection Act, including the Memorandum of Understanding (MOU) between Transport Canada and the National Energy Board, and the Minor Works Order criteria for pipelines.

CEPA members employ world class watercourse crossing methodologies that combine safety, engineering and environmental expertise. While temporary impacts on navigation may occur during the construction of a pipeline crossing, companies consult with watercourse users and minimize any disruption time. Pipeline crossings of waterbodies are not likely to cause a permanent adverse impact to navigation or navigation safety.

Since 2013, CEPA members have experienced increased approval process efficiencies as projects that do not have any impact on navigation have been dealt with without lengthy delays. As a comparison, examples of similar projects that fell under the prior regulatory regime have been included to demonstrate where delays in receiving ancillary permits resulted in significant project delays.

PROJECT EXPERIENCE UNDER NEW NAVIGATION PROTECTION ACT

Case Study 1 – NGTL (TransCanada PipeLines Limited), Smoky River

The installation of four groyne structures was required in order to protect an operating pipeline exposed during the 2013 floods. The project had the potential to impact navigation and navigation safety and met Transport Canada’s Minor Works Order criteria for pipelines. A Notification of Operations and Maintenance (O&M) activity was submitted to the NEB and the NEB requested that NGTL provide a Navigational Safety Assessment for the project to satisfy the requirements under the MOU. The NEB determined that, after mitigation, the project did not result in any residual adverse effects related to navigation or fisheries. This is demonstrated in the project photos, provided by TransCanada PipeLines.

Timeline

July 7, 2015 – NGTL files O&M Notification with the NEB

July 21, 2015 – NEB referred the project to Fisheries and Oceans Canada (DFO) to assess the potential for the project to cause serious harm. The project was scheduled inside the Alberta Environment and Parks Restricted Activity Period for Fish Species (August 1 – July 15), but during low flow.

July 30, 2015 – Navigational Safety Assessment filed

August 6, 2015 – DFO confirmed that an authorization under the Federal Fisheries Act was not required

September 1, 2015 – original construction date, delayed due to provincial permitting delays

September 10, 2015 – construction start

September 24, 2015 – project completion
Photo 1: NGTL Smoky River project, pre-construction 2015
Case Study 2 – Pembina Pipelines Corporation, Sturgeon River

Pembina Pipelines installed 24-inch and 16-inch pipelines under the bed and banks of the Sturgeon River using an isolation (dam and pump) crossing technique. The Sturgeon River is not a scheduled waterbody under the NPA and meets the Minor Works Order.

Regulator: Alberta Energy Regulator

Approvals required:

- Province of Alberta, Water Act and Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body. 14-day Code of Practice Notification to work within the stream given February 11, 2014 and approved 14 days later.

Approvals not required:

- Transport Canada Navigation Protection Act – The Sturgeon River is not a scheduled waterbody under the NPA and the project meets the criteria set out in the Minor Works Order.
- Fisheries and Oceans Canada – No approval was required as standard mitigation practices avoided any serious harm to fisheries.

Construction started on June 22, 2015 and was completed on October 27, 2015. As observed in the photos, the construction technique used required disruption to the river at the crossing location. Public consultation was carried out and signs were installed upstream and downstream of the crossing location to notify users. A portage route was provided to allow access around the site during construction.

These photos show the crossing site before, during and after construction. Pembina Pipeline, as do other CEPA member companies, mitigates any adverse effects and restores the construction area. Without seeing the permanent signs that are installed, it would be difficult to pinpoint the crossing location.
Photo 4: Pembina Pipelines, Sturgeon River Crossing, Pre-construction
Photo 5: Pembina Pipelines, Sturgeon River Crossing, Upstream Dam Installation

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KP 20+301 Sturgeon River isolation
Photo 6: Pembina Pipelines, Sturgeon River Crossing, Installation of pipes (17 hours in-stream)
Case Study 3 – Enbridge Pipelines Inc., North Saskatchewan and Athabasca River Crossings

Enbridge Pipelines constructed two crossings of NPA scheduled watercourses of its provincially regulated pipeline system in Alberta. The crossings of the North Saskatchewan River and the Athabasca River were carried out using horizontal directional drilling (HDD). Both rivers are substantial watercourses that do have public navigation on them. As the crossing method was HDD, Transport Canada determined that navigation and navigation safety were never threatened, and the crossing method was unlikely to cause any adverse effects.

Regulator: Alberta Energy Regulator

Approvals Required:

- Transport Canada reviewed the crossings as both rivers are listed as NPA scheduled watercourses. Transport Canada determined that the work was not likely to substantially interfere with navigation and granted approval.

Applications date: April 24, 2014
PROJECTS UNDER PRIOR NAVIGABLE WATERS PROTECTION ACT (NWPA)

Under the prior NWPA, CEPA members experienced regulatory hurdles associated with NWPA and DFO permits and authorizations during the construction of major pipeline infrastructure in Canada. A few of these are being provided to you to provide some context and demonstrate the challenges and delays faced under the prior NWPA in contrast to the case studies provided above.

Case Study 4 - Oldman River Crossing Replacement, Alberta (ATCO Pipelines)

The project required the replacement of a pipeline river crossing using a horizontal directional drill method and removal of a short segment of exposed previously-abandoned pipeline in the river sub-channel. Capital Cost: $3 million

Key Regulatory Trigger
- Approval required by Transport Canada - Navigable Waters Protection Program

Expected Timing of Regulatory Review Process – 3/4 months

What Really Happened
- April 28th 2010 confirmation by Transport Canada – Navigable Waters Protection Program (NWPP) that application is required for project
- May 19th, 2010 ATCO Pipelines files application with NWPP
- End of July 2010, expected NWPP exemption letter for project
  Message from regulator to August 20, 2010: minimum review for project - three months
- September 15th, 2010 ATCO Pipelines receives confirmation from NWPP that the technical review has been completed, but the application has now been sent to Transport Canada’s Aboriginal Review Office
- November 2010, ATCO Pipelines confirms with Alberta Environment that no Aboriginal consultation is required
- November 17th, 2010 through March 2011 ATCO Pipelines and Transport Canada worked on Aboriginal consultation
- March 31, 2011 NWPP grants project approval but addressed the correspondence to the wrong ATCO operating companies
- April 18th 2011 Revised approval granted

Consequence
There was almost a one-year delay.
- ATCO Pipelines missed construction period in late summer and early fall of 2010 to complete the tie-ins prior to the cooler anticipated weather in late October.
- Work was re-scheduled for August 2011, after the Alberta Environment’s Restricted Activity Period

Case Study 5 - Keystone Pipeline – Navigable Waters Protection Act

The construction of the Keystone Pipeline through Alberta, Saskatchewan and Manitoba involved crossings of waters which were clearly navigable within the meaning of the Navigable Waters Protection Act (NWPA) and s.108 of the National Energy Board Act (NEB Act) – for example, the South Saskatchewan River. Crossings were also required of waters that were not so obviously "navigable.” The Boyne River and Tobacco Creek crossings fell in the latter category.
The water depth of the Boyne River at the proposed crossing site is 8-18 inches.

Transport Canada, as part of the Environmental Assessment Working Group, became aware of the Keystone Pipeline project in September 2006, and by August 2007 had indicated that:

a. Approval would be required under either s.5 of the NWPA or s.108 of the NEB Act, and
b. Transport Canada had an interest in the environmental assessment to be conducted under the Canadian Environmental Assessment Act. It is important to note Transport Canada’s determination that the requirement of an approval applied equally to open cut trench crossing procedures as well as horizontal directional drilling (HDD) methodologies. The application was based, to the best of TransCanada Keystone’s knowledge, on the inclusion of the word “under” in both s.5 of the NWPA and s.108 of the NEB Act.

Section 5(1) of the NWPA says “no work shall be built or placed in, on, over, under, through or across any
navigable water without the Minister’s prior approval of the work, its site and the plans for it.” When the NWPA was written, the option to directionally drill a crossing was not available, so “under” likely implied making a trench, placing something in it, then covering it over.

It took almost one year between the time of application (October 2007) to the issuance of crossing approvals under s.108 of the NEB Act (September 2008) for the Boyne River and Tobacco Creek. From a TransCanada Keystone perspective, the delay resulted from a number of factors, including:

- The need for and time required to make a determination of “navigability” by Transport Canada
- Uncertainty about the interaction between s.108 of the NEB Act and s.5 of the NWPA, and
- Delay in initiating and uncertainty with the process for Crown consultation with First Nations.

The delay in the issuance of s.108 approvals had immediate, direct and material consequences for the project by increasing construction costs of approximately $6 million dollars and extending construction into the winter months under suboptimal conditions. These costs were incurred with no apparent corresponding benefit to the public interest in maintaining navigability, Aboriginal use for traditional purposes, or, more generally, protection of the environment.