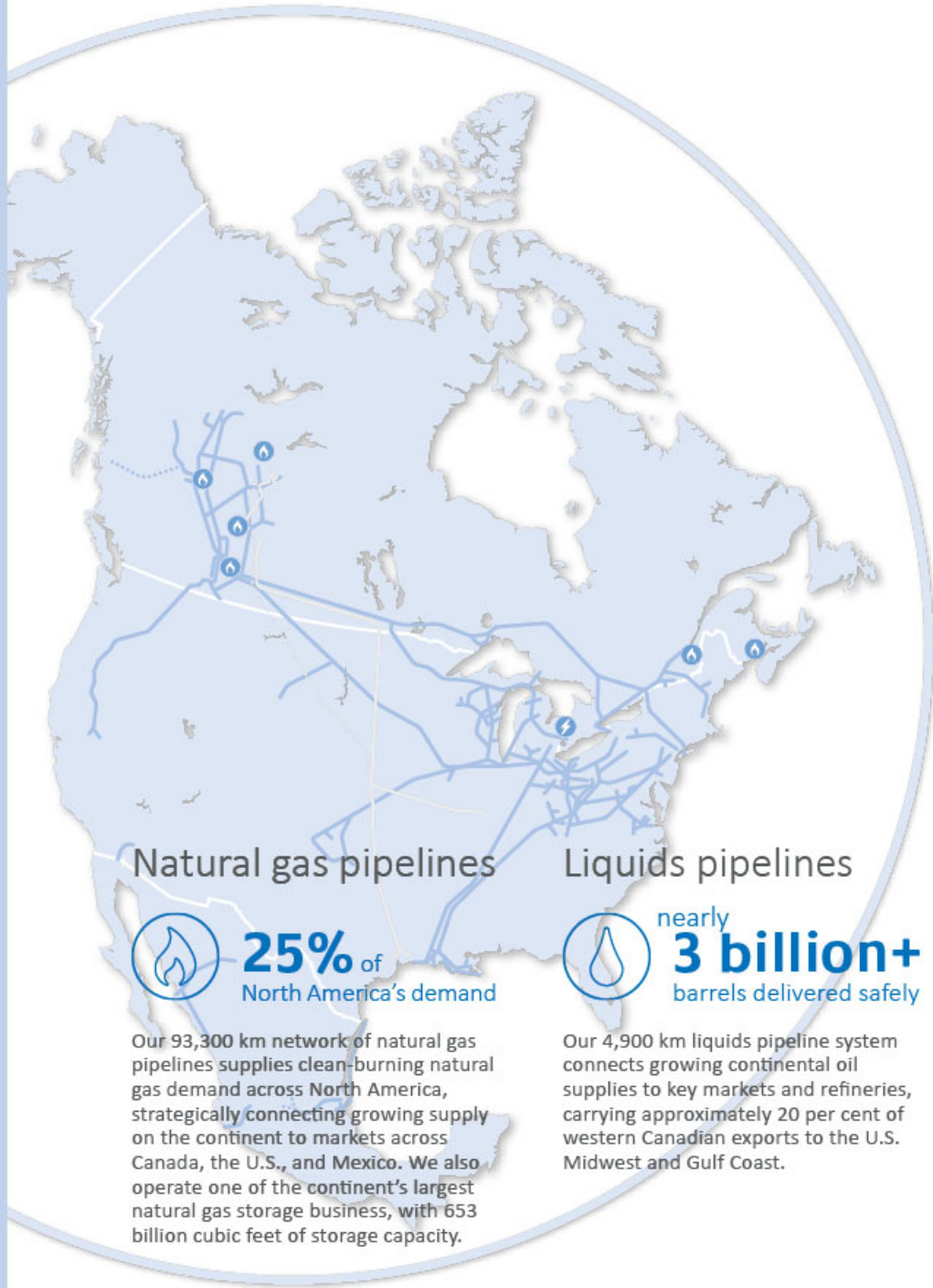


Comments on the Onshore Pipeline Regulations Review Discussion Paper

TC Energy Submission (via email) | June 29, 2022



Natural gas pipelines



25% of North America's demand

Our 93,300 km network of natural gas pipelines supplies clean-burning natural gas demand across North America, strategically connecting growing supply on the continent to markets across Canada, the U.S., and Mexico. We also operate one of the continent's largest natural gas storage businesses, with 653 billion cubic feet of storage capacity.

Liquids pipelines



nearly **3 billion+** barrels delivered safely

Our 4,900 km liquids pipeline system connects growing continental oil supplies to key markets and refineries, carrying approximately 20 per cent of western Canadian exports to the U.S. Midwest and Gulf Coast.

Power and storage



4 million+ homes powered

We own or have interests in seven power generation facilities with combined capacity of approximately 4,200 megawatts, roughly 75 per cent is emission-less energy.

General Comments to the Canada Energy Regulator

TC Energy Corporation (TC Energy) is writing to provide comments to the Canada Energy Regulator (CER) as it engages with Indigenous groups, regulated companies and other interested parties on the *Onshore Pipeline Regulations Review – Discussion Paper*. TC Energy supports the continuous improvement of the *Onshore Pipeline Regulations* (OPR) and appreciates the opportunity to provide comments to contribute to refinement of the OPR.

With more than 65 years of experience, TC Energy is a leader in responsible development and reliable operation of North American energy infrastructure. As a highly regulated enterprise, TC Energy has experience working within the existing regulatory frameworks in Canada and elsewhere in North America. With over 41,000 km of CER regulated pipelines, TC Energy is well positioned to inform changes to the OPR.

TC Energy offers the following overarching comments regarding the OPR Review.

Maturity of Existing Industry Systems

TC Energy recognizes the CER's objective to deliver, through the OPR review, regulations that support the highest level of safety, security and environmental protection, advance Reconciliation with Indigenous peoples, address transparency and inclusive participation, provide for predictable and timely oversight, and encourage innovation. When assessing potential revisions to the OPR, it is important for the CER to recognize that regulated companies have carefully designed, established and implemented comprehensive, documented systems to enable compliance with all applicable Canadian Energy Regulator Act (CER Act) requirements, regulations, standards referenced in regulations and company specific CER orders and certificates. TC Energy's management system is designed to meet or exceed the current OPR requirements and is the product of years of continuous improvement, through both internal processes and CER compliance activities. This ongoing iterative process has led to the development of an increasingly effective and mature management system and extensive time has been invested by regulated companies in effectively establishing and implementing these systems. As it is reviewing and updating the OPR, we request that the CER consider the time and effort it has taken to evolve company management systems to maturity, and where it is possible to achieve a desired outcome through current management systems, to rely on these current systems.

Global Competitiveness

The CER aims to be a regulator that enhances Canada's global competitiveness.¹ Competitiveness is one of the CER's strategic priorities identified in its [Strategic Plan](#)² to help the organization better deliver on its mission and reach its vision. Through this strategic priority, the CER aims to improve transparency, predictability and efficiency throughout the regulatory

¹ [CER – Onshore Pipeline Regulations Review Discussion Paper \(p. 3\)](#)

² [CER – Who we are and what we do – Our Strategic Plan \(cer-rec.gc.ca\)](#)

lifecycle, while facilitating the innovation that will support the transition to a low-carbon economy. TC Energy would like to emphasize the importance of considering potential effects on global competitiveness of Canada's oil and gas industry when assessing any revisions to the OPR. TC Energy notes that imposing more onerous regulatory requirements does not always result in improved outcomes, particularly if objectives are considered in isolation. As such, regulations will more fully reflect the broader public interest when all four of the CER's strategic priorities are considered in their development.

The addition of more onerous regulatory requirements that impact the cost, predictability, or will contribute to higher costs and schedule uncertainty for infrastructure companies, will result in a direct and corresponding reduction in the relative attractiveness of investment in Canadian pipeline infrastructure and ultimately of Canada's global competitiveness. Canadian pipeline customers, from whom the pipelines recover their costs, see their competitiveness erode compared to companies in other jurisdictions when they face higher transportation costs. Canadian energy infrastructure development has already experienced a loss of global competitiveness due to unpredictable and lengthy review processes, with applicants unable to provide predictability on anticipated in-service dates and corresponding costs to potential shippers. The introduction of new requirements that impact the cost, predictability or efficiency of energy infrastructure development or maintenance in Canada will further reduce Canada's global competitiveness.

In conducting the OPR Review, TC Energy strongly encourages the CER to assess the effects of any changes being considered on all four of its identified strategic priorities, including global competitiveness, and to give equal weight to each strategic priority as part of its assessment. TC Energy has provided specific comments regarding the detrimental impact of the lack of regulatory predictability and timeliness on global competitiveness in response to Question 11 of the Discussion Paper.

Further Engagement and Implementation

As TC Energy indicated in its submission on the Regulatory Framework Plan in October 2021, changes to the OPR, depending on their nature, will significantly impact TC Energy as the majority of its extensive Canadian infrastructure is subject to the OPR. TC Energy notes that the public engagement timelines set out for the OPR review in the CER's Regulatory Framework Plan: 2022 to 2025, indicate two further engagement periods after this early engagement on the Discussion Paper. It appears from the plan that further engagement will occur during development of the draft regulations, however it is not clear at what stages during development the engagement will take place and in what format.

To ensure the revised regulation is effective in achieving the CER's objectives, it is imperative that industry, rightsholders and other interested parties have multiple meaningful opportunities to provide input into the draft regulations throughout the process, starting early on. In conjunction with facilitating written submissions, TC Energy requests the CER use engagement methods that promote collaborative dialogue among industry, rightsholders, other interested parties and the CER regarding proposed changes. Promoting more fulsome dialogue between these groups and the CER will allow them to understand the CER's views on their comments and give them an opportunity to provide further clarification or explanation. This engagement approach will

ultimately give industry, rightsholders and interested parties a better understanding of the regulations and help expedite implementation.

Once OPR revisions are finalized, TC Energy recommends providing early visibility on final amendments and allowing an appropriate transition period for companies to ensure compliance with the revised regulations. Any revisions requiring changes to TC Energy's management system, which governs every aspect of the company's construction and operation activities, will take significant time and resources to implement, as they could require the development of new processes and procedures as well as undertaking the steps required to establish and implement new procedures (e.g., communication and training to TC Energy and third-party personnel). To foster industry compliance with any changes to the OPR, TC Energy requests that the CER provide industry with notice of any changes to the OPR well in advance (at least 12 months) of their effective date.

In addition to these overarching comments, attached are responses to each of the questions posed in the Discussion Paper.

TC Energy appreciates the opportunity to provide feedback on the CER's *Onshore Pipeline Regulations Review – Discussion Paper*, and the wide range of topics it includes, and looks forward to further discussion regarding OPR and the CER's ongoing work.

██████████ – Vice President, Regulatory Strategy

E-mail: ██████████

Section: 1. OPR – Lessons Learned

Question 1: What’s working well in relation to the OPR, and its implementation, and what could be improved?

Response:

In TC Energy’s view the OPR and its implementation are working well overall. The OPR, in its current form, is generally effective in its regulation of the areas it covers (management systems, pipeline design, materials, joining, construction, pressure testing, operations and maintenance, abandonment, reporting, audits and inspections, and records retention). In TC Energy’s experience, OPR management system requirements achieve the desired result of ensuring companies anticipate, prevent, manage and mitigate conditions that could adversely affect the safety and security of pipelines, employees, the public, as well as property and the environment.

The effectiveness of the OPR’s management system requirements in protecting the safety and security of pipelines, employees, the public, as well as protecting property and the environment can be attributed to its performance-based approach, which allows companies the flexibility to design a management system that achieves the required outcomes in a manner that is most appropriate and efficient for their business. This performance-based approach acknowledges the vast differences among the many companies regulated by the OPR, including differences in size, types of facilities, geographical area and commodities transported. Regulated companies, with their depth of specific expertise regarding their unique business, are best suited to determine the most effective way to manage and reduce risk. A performance-based approach promotes accountability by putting the onus on companies to determine and implement the best approaches for their companies to manage risk.

To ensure the continued effectiveness of regulated company management systems, TC Energy recommends that the OPR continue to use a performance-based approach to require regulated companies to establish, implement and maintain management system and protection programs to manage and reduce risk. In TC Energy’s view, changing to a more prescriptive approach whereby regulated companies are required to undertake specific activities, rather than meet performance measures, will result in less effective risk management, as the prescribed activities might not be optimal for managing risks considering the unique circumstances under which each regulated company operates. Further, more prescriptive requirements could reduce the incentive for regulated companies to innovate, as they might no longer work to develop and continuously improve systems that optimally manage risk and instead, focus solely on activities that are prescribed.

TC Energy has found the CER’s audits of its management system to be helpful in assessing management system effectiveness and fostering continuous improvement. Please see TC Energy’s response to Question 28 of the Discussion Paper for additional comments on CER compliance activities.

Section: 2. Reconciliation with Indigenous Peoples

Topic: Working Differently

Question 2: How can the OPR contribute to the advancement of Reconciliation with Indigenous peoples?

Response:

TC Energy recognizes the significance of, and need for, Reconciliation with Indigenous peoples and understands that Reconciliation is key to the future of the country. In TC Energy's view, Reconciliation is the responsibility of every person, and requires broad long-term commitments.

TC Energy understands that the CER has already initiated several efforts to advance its commitments to Reconciliation, including through:

- establishing an Indigenous Advisory Committee to advise on overall strategy setting and program development across the CER
- developing an Indigenous Monitoring Program to support meaningful involvement in compliance and oversight activities
- improving employees' Indigenous cultural competency by providing cultural awareness training
- engaging earlier with Indigenous groups on project applications

TC Energy believes that Indigenous groups are best positioned to identify how the CER can continue to advance its commitment to Reconciliation with Indigenous people.

Similarly, CER regulated companies, including TC Energy, have also embarked on their own unique journeys toward Reconciliation with Indigenous peoples. For example, TC Energy works closely with Indigenous groups to establish and maintain positive relationships with the communities it affects through its projects and operations.

Building on its long history of engaging with Indigenous groups, TC Energy released its inaugural Reconciliation Action Plan (RAP) in 2021. The RAP outlines six measurable goals, including:

- establishment of an Indigenous Advisory Council to the Executive Leadership Team
- cultural awareness training for Board of Directors and personnel
- investment in Indigenous communities, contracting targets and framework for equity on new projects ¹

¹ [TC Energy — Journey Toward Reconciliation](#)

While TC Energy fully supports the advancement of Reconciliation, and the CER's commitment to advancing Reconciliation with Indigenous peoples, TC Energy is of the view that the OPR is not the appropriate place to include the CER's strategy or commitments regarding Reconciliation, nor set out specific prescriptive requirements for regulated companies regarding the advancement of Reconciliation, for the reasons outlined below.

First, TC Energy respectfully submits that Indigenous groups are the appropriate people to identify meaningful paths toward Reconciliation and evaluate the progress and effectiveness of its advancement. As such, the approach to and progress toward Reconciliation can vary across regulated companies, allowing each company to pursue the most meaningful path forward with the different Indigenous groups in the areas where they do business. Prescribing specific requirements related to the advancement of Reconciliation in the OPR risks inaccurately defining the scope or efforts toward advancement of Reconciliation by regulated companies.

Second, Reconciliation is often described as a process or journey, rather than an outcome. Adding specific prescriptive requirements to the OPR regarding the advancement of Reconciliation risks limiting the process of Reconciliation to certain outcomes and inadvertently limiting the broad nature of Reconciliation efforts to the specified requirements. In TC Energy's view, this would not be appropriate.

Third, the OPR is already broad enough to allow for the consideration of relevant approaches related to the advancement of Reconciliation within a company's processes and procedures. The purpose of the OPR, as currently set out in Section 6 of the regulations, is "to require and enable a company to design, construct, operate or abandon a pipeline in a manner that ensures (a) the safety and security of persons; (b) the safety and security of pipelines and abandoned pipelines; and (c) the protection of property and the environment." TC Energy interprets "persons" in clause 6a) to include the safety of potentially affected Indigenous groups and the "environment" in clause 6c) to include protection of environmental resources and sites of interest and importance to Indigenous peoples. As such, where the company's approaches, strategies and commitments around Reconciliation relate to improving environmental and safety outcomes through protection of Indigenous rights and interests (for example in relation to its corporate policy or vision, and engagement and communication with Indigenous groups), this is reflected in the company's processes and procedures, as developed in accordance with the current OPR requirements, as appropriate or applicable.

TC Energy recognizes that the CER aims to make meaningful change in the CER's requirements and expectations of regulated industry to advance Reconciliation and expects regulated companies to work differently to support Reconciliation with Indigenous peoples. Should the CER require information on a company's journey toward Reconciliation in its review of a project application, TC Energy suggests that the CER include requirements related to this information in applicable guidance documents, such as the CER Filing Manual, rather than the OPR. For example, the CER could require regulated companies to include information regarding their approach to Reconciliation with Indigenous peoples, including related to the Truth and Reconciliation Commission of Canada's Call to Action 92,

through the addition of a specific information requirement in an update to CER Filing Manual Section 3.4.1: Company-Wide Engagement Program.

TC Energy notes that to be effective, any requirements regarding Reconciliation, and its advancement, added to the CER Filing Manual must be flexible to allow each regulated company to pursue the path that is most meaningful to the Indigenous groups the company engages with, and be adaptable for each company's unique size and nature of business.

Section: 2. Reconciliation with Indigenous Peoples

Topic: Heritage Resources

Question 3: How can the OPR contribute to the protection of heritage resources on a pipeline right-of-way during construction, and operations and maintenance activities?

Response:

Existing CER guidance and practices ensure the protection of heritage resources on a pipeline right-of-way (ROW) during construction, and operations and maintenance activities, and reflect the appropriate level of oversight. As noted in the preamble to Question 3 in the OPR Discussion Paper, heritage resources are managed and protected through provincial, territorial and/or other federal jurisdictions. Each jurisdiction has its own robust regulations and guidance to screen, assess, mitigate and protect heritage resources, before and during construction as well as during operations and maintenance activities. The CER ensures that all companies and projects it regulates follow these requirements for heritage resources through the existing filing requirements and guidance provided in the CER Filing Manual (such as Table A-3) and the Operations and Maintenance Activities on Pipelines Regulated Under the National Energy Board Act: Requirements and Guidance Notes (O&M Guidelines).

Further, where applicable, the CER's oversight requires confirmation that all required archaeological and heritage resource clearances are obtained through specific project approval conditions. TC Energy also notes that while the current definition of "environment" in the OPR does not expressly include heritage resources, TC Energy interprets the protections in the OPR for the "environment" to also extend to heritage resources. Accordingly, TC Energy's environment program requires compliance with provincial, territorial and/or federal heritage resource requirements. Finally, Indigenous engagement required by the CER is comprehensive, as set out in TC Energy's response to Questions 7, 8 and 9, and includes the opportunity to identify and address issues or concerns related to heritage resources, as applicable, at the project-level.

If TC Energy's understanding that the protections in the OPR for the "environment" also extend to heritage resources is consistent with the CER's view, TC Energy recommends updating the definition of "environment" in OPR Section 1: Interpretation to clearly indicate that the term includes heritage resources. This will further demonstrate the CER's level of oversight over heritage resources and promote a uniform and explicit understanding that the protections in the OPR also apply to heritage resources, as applicable.

In TC Energy's view, any additional efforts by the CER to manage or regulate matters pertaining to heritage resources through specific prescriptions in the OPR would be inappropriate and inefficient, as it could create jurisdictional confusion, redundancy and/or conflicting requirements.

Section: 2. Reconciliation with Indigenous Peoples

Topic: Traditional Land and Resource Use, and Sites of Significance for Indigenous Peoples

Question 4: How can the OPR contribute to the protection of traditional land and resource use, and sites of significance for Indigenous peoples on a pipeline right-of-way, during construction, and operations and maintenance activities?

Response:

TC Energy recognizes the unique connection Indigenous peoples have to the land and resources, and a goal of its project specific Indigenous engagement programs is to anticipate, prevent, mitigate and manage conditions that have the potential to affect Indigenous groups, including, but not limited to, traditional land and resource use (TLRU) and sites of significance for Indigenous peoples.

TC Energy notes that extensive specifications and guidance throughout the CER Filing Manual currently require that available and known TLRU information for a project be incorporated and considered in the application and Environmental and Socio-Economic Assessment (ESA) to address its protection over the life of a pipeline, including construction, operations, and maintenance and abandonment. This includes identifying sites of significance for Indigenous peoples and outlining measures to mitigate project specific impacts on TLRU and sites of significance during construction and operations. Provincial/territorial permitting requirements also include provisions for protection of TLRU and sites of significance to Indigenous groups that companies must fulfill for construction, and operations and maintenance activities, as applicable.

OPR Section 6 outlines the Regulations purpose as “to require and enable a company to design, construct, operate or abandon a pipeline in a manner that ensures (a) the safety and security of persons; (b) the safety and security of pipelines and abandoned pipelines; and (c) the protection of property and the environment.” As TC Energy interprets (a) to include safety of Indigenous land and resource users and (c) to include protection of traditional resources (e.g., medicinal plants, harvested wildlife or fish, and water) and sites of interest and importance to Indigenous peoples, Company management systems and environmental protection programs developed in accordance with the OPR for pipeline construction, operations and maintenance already consider their protection, as applicable.

TC Energy notes that the current TLRU related requirements meet the objective of protection of TLRU and sites of significance for Indigenous groups while recognizing that different projects can affect TLRU differently and ensure that protection during pipeline construction and operations is appropriately assessed at a project level and addressed before approval. In addition, as noted in the CER Filing Manual, the CER’s requirements for engagement related to operations and maintenance activities on pipelines are provided in the Operations and

Maintenance Activities on Pipelines Regulated Under the National Energy Board Act: Requirements and Guidance Notes (O&M Guidelines).

As requirements and guidance regarding the protection of TLRU and sites of significance to Indigenous peoples are provided in the CER Filing Manual (and all phases of a proposed project are considered), TC Energy is of the view that the OPR is not the appropriate place to include specific prescriptive requirements regarding protection of TLRU and sites of significance for Indigenous peoples on a pipeline ROW during construction, and operations and maintenance activities.

Should the CER determine that additional information is needed to further outline general expectations regarding protection of TLRU and sites of significance to Indigenous peoples, TC Energy recommends that it be provided through an update to existing requirements in the CER Filing Manual and/or an update to the O&M Guidelines, rather than specific prescriptions in the OPR. TC Energy also recommends that any guidance be scalable to the scope, nature and complexity of a company's activities and to the hazards and risks (or potential effects on TLRU) associated with those activities and be flexible to account for the differences in circumstances affecting TLRU and sites of significance across pipelines and geographical areas.

Section: 2. Reconciliation with Indigenous Peoples

Topic: Indigenous Knowledge

Question 5: How can the use of Indigenous knowledge be addressed in the OPR?

Response:

TC Energy recognizes the importance of undertaking meaningful, effective and collaborative Indigenous engagement to receive traditional knowledge and Indigenous input, and the value of considering and incorporating available information in project planning.

TC Energy notes that the CER regulatory regime currently includes robust filing requirements and guidance on the use of Indigenous knowledge in several existing documents. For example:

- Section 3.4.2 of the CER Filing Manual specifies that relevant, available and applicable Indigenous knowledge “should be integrated, where appropriate, into the design of the project” and provides guidance on the collection and use of Indigenous knowledge
- Other sections of the CER Filing Manual (e.g., Guide A and Guide L) set out guidance and filing requirements regarding inclusion and consideration of Indigenous knowledge in the Environmental and Socio-Economic Assessment
- the CER Act includes provisions regarding the use of Indigenous knowledge by the CER
- the Government of Canada draft Indigenous Knowledge Policy Framework for Project Reviews and Regulatory Decisions (2021) articulates overarching principles that guide the work of federal officials when applying the provisions under the CER Act and provides the basis to develop policies and guidance tailored to the CER’s specific operational requirements.

Additional direct prescriptions in the OPR for the use of Indigenous knowledge could create redundancy and potentially conflicting guidance or unclear expectations, which would not be efficient nor appropriate.

Furthermore, TC Energy notes that no universal definition of Indigenous knowledge currently exists, nor is one provided in the CER Filing Manual. Knowledge shared by potentially affected Indigenous groups during engagement for a project can be diverse in nature, is provided at the discretion of Indigenous groups and requires the consideration of confidentiality protections.

Moreover, while all knowledge and input provided by Indigenous groups during engagement is considered in project planning, including in plans such as emergency response plans (as outlined in Guide L of the CER Filing Manual), the ability to incorporate the information in planning depends on the nature of the information provided, when it is received by the company and whether the proposed measures, recommendations or requests provided by Indigenous groups are within the scope of the project and the company’s role and

responsibilities. Without a clear definition, it is difficult to ensure a consistent understanding of the expectations for the requirements pertaining to use of Indigenous knowledge by, and across, companies and Indigenous groups.

As such, rather than the CER duplicating and potentially conflicting with existing requirements provided elsewhere and attempting to address the nuances surrounding availability and use of Indigenous knowledge in the OPR, TC Energy recommends that the CER outline any updated expectations regarding the use of relevant, available and applicable Indigenous knowledge through an update to the CER Filing Manual, including a definition of the term “Indigenous knowledge.”

Section: 2. Reconciliation with Indigenous Peoples

Topic: Involvement of Indigenous Peoples in Pipeline Oversight

Question 6: How can the OPR address the participation of Indigenous peoples in pipeline oversight?

Response:

Since the CER retains oversight of the pipelines it regulates, and the OPR is intended to provide the rules that companies with CER authorizations to build and operate pipelines must follow, TC Energy believes that the OPR is not the appropriate place to address participation of Indigenous peoples in pipeline oversight. Instead, participation of Indigenous peoples in pipeline oversight is best addressed through internal CER processes or programs associated with its activities related to oversight. An example of this oversight is the CER's Indigenous Monitoring Program, which provided opportunities for Indigenous involvement in CER oversight of a number of TC Energy projects, including the 2021 NGTL System Expansion, North Corridor Expansion and Edson Mainline Expansion projects.

With regard to any current or future initiatives to enhance involvement of Indigenous peoples in pipeline oversight, TC Energy emphasizes the importance of the CER maintaining efficient, predictable and timely oversight of pipelines. Accordingly, TC Energy recommends that any current or future CER initiatives, programs, or additional processes to enhance involvement of Indigenous peoples in CER oversight activities do not compromise timeliness of regulatory processes (e.g. delay of approval of condition filings). Additionally, to promote regulatory predictability, TC Energy seeks transparency regarding new or additional processes to increase Indigenous involvement in CER oversight.

- Section:** 3. Engagement and Inclusive Participation
- Topic:** Planning for Pipelines and Related Company Activities, Proactive Communication and Engagement, Trust and Confidence
- Question:**
7. How can the OPR support collaborative interaction between companies and those who live and work near pipelines?
 8. How could communication and engagement requirements in the OPR be improved?
 9. How could the CER improve transparency through the OPR?

Response:

TC Energy fully supports improving communication, transparency, and collaborative interaction among companies and those who live and work near pipelines and related assets. TC Energy notes that robust requirements and guidance on these matters are currently provided in several existing documents, including, but not limited to, the CER Act, CER Filing Manual (including Section 3.4: Engagement, Table A-2 and Table A-3 and Guide L: Early Engagement Guide), NEB Draft Expectations: Public Involvement Program, CER Pipeline Performance Measures (Liaison Activities Reporting Guidance), CER Damage Prevention Regulations, CER Land Matters Guide and CER Emergency Notification Fact Sheet.

TC Energy is of the view that it is not necessary to add more detailed prescription regarding communication and engagement in the OPR and would be concerned that to do so could create confusion. Specifically, adding prescriptive requirements on engagement to the OPR increases the risk of inconsistencies among the multiple guidance sources, reduces the flexibility to amend and update guidance as needed, and might lead to confusion as to where to find the most up-to-date engagement expectations and requirements.

TC Energy recommends that the CER instead clarify its guidance on collaborative interactions, communication and engagement, and transparency through updates to, or issuance of, additional guidance notes for the existing documents referenced above. For example, TC Energy suggests that the CER issue a separate technical guidance document dedicated to engagement, which i) includes a concordance table connecting all references to engagement activities and ii) outlines its expectations for how the management systems, processes or programs mandated under the OPR are to address engagement with potentially affected Indigenous groups and stakeholders.

One recommended revision to the OPR could include adding a definition in Section 1: Interpretation to assist in interpreting the requirements of s. 6.5 (1) m) of the OPR. Section 6.5(1)m) states “establish and implement a process for the internal and external communication of information relating to safety, security and protection of the environment.” TC Energy interprets “external” to include all relevant parties, such as Indigenous groups,

landowners, municipalities, first responders, among other stakeholders as applicable and appropriate. Communication and engagement requirements in the OPR could be improved by clearly defining the term “external.”

TC Energy also suggests CER communicate any new guidance to those who live and work near pipelines through a simplified reference guide or concordance table in the document The CER, Energy Projects, and You.

Examples of the multiple locations where engagement and consultation are referenced are provided in Table 1. This list is not exhaustive but is provided as an illustration of potential for confusion with overlapping, contradictory or multi-layered sources.

Table 1: Engagement and Consultation References

Guidance Document	Section	Comments
Filing Manual	3.4.1	Guidance for engagement requirements already exists and links to management systems. "The CER expects an applicant to have an Engagement Program to anticipate, prevent, mitigate and manage conditions which have the potential to affect persons and communities. An Engagement Program should be appropriately integrated into a company's overall management system to provide protection for the public, employees, property and the environment throughout the lifecycle (design, construction, operation, maintenance, abandonment) of a pipeline system."
Filing Manual	3.4.2 & 3.4.3	Provides additional guidance on expectations around information sharing, and the desired outcomes of an engagement program.
Early Engagement Guide (Guide L of Filing Manual)	3	The Early Engagement Guide appears to alternate between the terms “ <u>directly</u> affected persons and communities,” and “ <u>potentially</u> affected persons and communities.” This inconsistency, within a single document, demonstrates a risk that is only exacerbated when guidance is spread across multiple policies or guidance documents (such as with additions to the OPR).
Damage Prevention Regulations	16	Minimum Content – must include: a. an ongoing public awareness program to inform the public b. Emergency Management effective liaison activities and continuing education programs (ss. 34 and 35 OPR)
CER websites and links		Current CER web resources also lead to inconsistent results, further hampering transparency and informed engagement: <ul style="list-style-type: none"> • Cursory search for “CER damage prevention” leads the searcher to outdated versions of policies and guidance • “Ground disturbance” definitions and descriptions are inconsistent <p>Ground disturbance is defined in Section 2 of the CER Act, and then referenced in many other web pages and documents designed for landowner or stakeholder use and interpretation. Some, like the general CER Damage Prevention page, suggest that restrictions apply for any activity that disturbs soil near a pipeline. Elsewhere, such as the links on the same page for Commercial/Residential Landowners, it states that consent is required for activities 30 cm or deeper. Further down the same page are references to there being differences in restrictions/regulations between the ROW and the prescribed area. Then later still, a reminder that the restrictions apply to both the ROW and the prescribed area. All are technically true, but the multiple references create differences in interpretation, which ultimately results in lack of clarity of the rules, creating tension between companies and landowners and ultimately decreasing transparency and trust.</p>

Section: 3. Engagement and Inclusive Participation

Topic: Gender-based Analysis Plus (GBA Plus)

Question 10: Gender and other intersecting identity factors may influence how people experience policies and initiatives. What should the CER consider with respect to:

- a. those people implementing the OPR; or
- b. those people who are impacted by the operational activities addressed in the OPR?

Response:

TC Energy supports the use of Gender-Based Analysis Plus (GBA Plus) to assess how groups with different identity factors (e.g., gender, Indigenous identity, age) might experience project effects. TC Energy believes that with additional clarity on underlying objectives, GBA Plus can assist in the development of effective mitigation to address potential disproportionate effects on diverse groups of people.

While the OPR does not include requirements specific to GBA Plus, the CER Act, CER Filing Manual and CER Early Engagement Guide do outline GBA Plus requirements for project development and operations. These include:

- a requirement for the CER to take into account GBA Plus when assessing applications for new pipelines pursuant to s.183
- requirements for project proponents to include information regarding GBA Plus as part of the environmental and socio-economic assessment in an application for a new project pursuant to s.183 and s.214
- a requirement for project proponents to conduct engagement activities in a manner that facilitates the involvement of all relevant diverse groups of people, including groups identified by gender, as identified through application of GBA Plus
- requirements for project proponents to include information regarding mitigation measures for potential effects on groups with different identity factors.

The existence of substantive legislative requirements in Canada to protect people should also be noted, and TC Energy is compliant with these requirements through a framework of human resources policies which address harassment, discrimination and human rights.

TC Energy has incorporated GBA Plus in its effects assessments and engagement for multiple project applications since the requirements were introduced. While TC Energy supports the use of GBA Plus as a means of identifying and analyzing how sex, gender and other identity factors can result in different groups of people being affected by its projects in different ways, it has faced several challenges with regard to the applicability, methodology

and scope of GBA Plus in socio-economic effects assessments, socio-economic effects management and engagement.

TC Energy and third-party experts have had challenges differentiating pre-existing socio-economic issues across the population from potential effects from projects. In TC Energy's experience, stakeholders and Indigenous groups could be having similar challenges, as complex and numerous pre-existing socio-economic conditions in communities have been inaccurately attributed to a proposed project.

In TC Energy's view, establishing a baseline understanding that the socio-economic issues related to GBA Plus across Canada are multifaceted and cannot be linked to a single project would be helpful in appropriately focusing GBA Plus considerations in a project and allowing for effective mitigation to be designed and implemented.

The current GBA Plus requirements and guidance do not specify the methodology or best practices to assess the potential GBA Plus related effects of a project or pipeline system of varying scope and scale. This can create confusion regarding the expectations for GBA Plus and mitigation for different types of projects. GBA Plus considerations and measures required to mitigate effects for a larger scale project, for example, can be more involved than those that are appropriate for a smaller project.

The appropriate methodology and mitigation for the use of this tool also depend heavily on the socio-economic characteristics of people with potential project interactions (e.g., potential interactions with Indigenous groups versus no potential interactions with Indigenous groups). This highlights the need for clarity regarding the intention of GBA Plus requirements and any associated methodological guidance to be flexible, scalable and fit for purpose, and any further legislation or guidance regarding GBA Plus to explicitly incorporate this intention. Stakeholders and Indigenous groups might also be experiencing challenges understanding GBA Plus.

In light of these challenges, TC Energy strongly recommends that the CER initiate in depth engagement, through a separate process established specifically for GBA Plus, with industry, stakeholders and Indigenous groups before developing any further regulatory requirements or guidance, including any changes or addition to GBA Plus as part of the OPR review. Since establishment of GBA Plus implementation for CER regulatory applications, no forum or channel has been established for technical discussions on performance of this tool and how it is being used by the CER, proponents, stakeholders and Indigenous groups. As a result, there is a lack of information on strengths and weaknesses of current legislation and guidance.

In TC Energy's view, obtaining feedback on experience with implementation is critical to refining requirements or developing further guidance. Without consideration of experience with implementation thus far, including lessons learned and opportunities for improvement, further development of GBA Plus methodologies could exacerbate current challenges for all affected by GBA Plus, including stakeholders and Indigenous groups. Engagement will help

ensure that GBA Plus requirements are rooted in a common understanding of desired outcomes, are feasible for project proponents to implement and result in effective mitigation.

It would also be very helpful for the CER to educate the public, stakeholders and Indigenous groups about GBA Plus to foster development of a common understanding of the purpose and scope of the analysis and expected mitigation to manage potential project impacts. Several stakeholders and Indigenous groups have expressed to TC Energy their lack of understanding of meaning and purpose of GBA Plus, and confusion about how GBA Plus can be related to pipeline project development.

Additionally, stakeholders and Indigenous groups have attributed GBA Plus effects to a project without science-based evidence, and without differentiating between the numerous, complex and multifaceted pre-existing socio-economic issues, and potential effects from projects. This has created confusion, and at times, unsubstantiated project opposition.

A common understanding on the purpose and scope of GBA Plus will allow more efficient and focused engagement, and result in measures that effectively mitigate project effects, and which project proponents and the public, stakeholders and Indigenous groups support.

If the CER determines that it is appropriate to proceed with changes to the OPR or guidance documents before further in-depth engagement, TC Energy recommends that these changes are made through guidance documents (i.e., Guidance Notes for the Canadian Energy Regulator Onshore Pipeline Regulations (OPR Guidance Notes), CER Filing Manual or CER Engagement Guide), rather than in the OPR itself. This approach will allow for more flexibility for further future changes. TC Energy recommends caution regarding addition of any GBA Plus prescriptive requirements or guidance to the OPR, the CER Filing Manual or any guidance documents.

As indicated above, for GBA Plus to be an effective tool to mitigate the effects of projects or operations on people with different identify factors, any GBA Plus requirements and guidance must be flexible and fit for purpose to the scope and scale of each project or operations to which they apply. Creating prescriptive requirements considering only a pre-determined group or identify factor, for example, could create the unintended adverse effect of consideration related to other groups or identify factors being overlooked.

Section: 4. Global Competitiveness

Topic: Predictable and Timely Regulatory Oversight

Question 11: How can the OPR support a predictable and timely regulatory system that contributes to Canada's global competitiveness?

Response:

TC Energy supports improving the competitiveness of the Canadian oil and gas industry, including the portion of the industry regulated by the CER. Canada's oil and gas industry operates in a globally competitive environment where any additional costs have a direct and corresponding reduction in the relative attractiveness of investment in specific jurisdictions. Canada has seen a net withdrawal of foreign direct investment from its oil and gas sector¹ with the country now seen as a high-cost and unpredictable environment to develop and operate oil and gas resources, particularly compared with the U.S.²

A portion of the increased costs faced by Canadian oil and gas companies reflects a federal regulatory environment that involves longer timelines, while lacking needed process transparency and predictability compared with provincial or other international jurisdictions. Commercial customers on TC Energy's systems are often unable to justify the long lead times associated with new linear infrastructure under federal jurisdiction when planning their own upstream developments. Currently, the timeline from initiation of commercial discussions to placing a new asset in service can span four to five years depending on the type of regulatory application and review process, with no certainty of implementation, especially for larger projects. As a result, midstream operators no longer envision greenfield investments despite commercial support for these activities.

Canada's competitiveness gap is evidenced by both a lack of major investment in Canadian oil and gas pipelines and a lack of new major pipeline infrastructure despite several applications over the past decade. For example, the Trans Mountain Expansion was applied for in late-2013 and is only now under construction with a projected in-service date 6 years later than its applied-for in-service date³.

The project was purchased by the Government of Canada after the original proponent chose to step away from the project. This and other projects were victims of significant regulatory uncertainty despite the commercial need for these projects. The economic need of the project persists today, as demonstrated by the incremental growth of the liquids supply identified in CER's 2021 Energy Future, which identifies that Canadian oil production has risen 16% (1.832 mbpd) over the last decade (2012 to 2022).⁴ Egress from the Western Canadian

¹ [State of Trade 2021 - A Closer Look at Foreign Direct Investment \(FDI\) \(international.gc.ca\)](https://international.gc.ca).

² [Canada - Resources of the Future Economic Strategy Tables](#).

³ NEB Filing ID A3S0Q7, B1-1 Volume 1, p. 1-4: December 2017.

⁴ [CER. Canada's Energy Future 2021 \(cer-rec.gc.ca\)](https://cer-rec.gc.ca).

Sedimentary Basin is now effectively utilized,⁵ implying that any incremental liquid production growth will be moved by rail if no new greenfield projects are advanced.

If Canadian oil and gas producers are unable to cost-effectively access the global market, other jurisdictions will fill this gap. In particular, compared with the U.S., major greenfield investment in midstream assets regulated by the CER face significantly protracted review processes⁶ that result in higher tolls for shippers and reduce the value of oil and gas production in Canada relative to global markets.

Improvements to the OPR – Timeliness

TC Energy views revisions to the OPR as an excellent opportunity to help improve the transparency, certainty and timelines of the CER's process for applicants. Currently, the OPR imposes timelines on applicants only for certain activities.⁷ TC Energy notes that while the CER has established service standards⁸ to assist in meeting timelines for some application types,⁹ it has not done so for all application types. Further, many of the timelines established for Section 183 and Section 214 applications focus only on the hearing process after the CER deems an application complete and do not apply to regulatory activities that are required before or after the hearing process.

TC Energy strongly encourages the CER to establish service standards for all categories and all phases of an application. These service standards will support global competitiveness of the Canadian oil and gas industry by providing potential shippers with the critical timelines associated with regulatory review processes. While service standards are not legally binding in the same manner as regulations or legislation, they do encourage all parties to manage to specific timelines. In addition, while service standards have proven helpful to set expectations around timelines, it is also important that all parties adhere to those timelines.

Timelines that capture the entire review process better reflect actual review time faced by applicants and align with Section 31(3) of the Canadian Energy Regulator Act (CER Act). Providing clear timelines covering the period from pre-application to leave to open would significantly improve the transparency and efficiency of the CER's activities from an applicant's perspective.

In addition, TC Energy encourages establishing service standards specifically for the following categories of authorization:

- requests for variance of an existing order or approval
- requests for approval to decommission or abandon approved pipeline under OPR Section 45 or 50

⁵ [CER, Canada's Pipeline System 2021 – Crude Oil Pipeline Transportation System \(cer-rec.gc.ca\)](#), Figure 13.

⁶ CER Study 185 – Competitiveness of Canada's Regulatory Framework for the Oil and Gas Sector [[link](#)].

⁷ For example, Sections 6.1.2, 6.2.2, 43, 44, 45 and 50 of *Onshore Pipeline Regulations*.

⁸ CER Filing ID: C04046.

⁹ Such as applications made pursuant to Sections 183 and 214 of the CER Act.

- requests for changes to maximum operating pressure or change of service under OPR Section 43

Rightsholder and stakeholder engagement is another area that would strongly benefit from pre-established timelines that are adhered to. While TC Energy supports robust rightsholder and stakeholder engagement to allow interested parties sufficient time to prepare and provide comment on applications, these activities need to fit within prescribed timelines and a transparent process that enables the applicant (and its customers) to receive a timely application decision. In recent hearing processes, partial hearing orders¹⁰ were issued or timelines were extended to allow for additional evidence from interveners outside the established process. This leads to significant delay and uncertainty for applicants, investors and customers.

For example, since 2018, several TC Energy s.183 applications (or s.52 under the National Energy Board Act, as applicable) experienced process delays ranging from 45 to 229 days, with an average of 125 days. These delays were related to pauses or additional comment periods in the review process in response to intervenor feedback. Similarly, since 2017, several TC Energy s.214 applications faced process delays, averaging 40 days.

Impacts on a proponent's competitiveness are also felt when unexpected post-construction conditions are added, or when incremental associated consultation is required such that it might result in efforts to "re-litigate" issues previously heard and decided on by the CER. Incremental delays experienced during the regulatory review period and during post-approval condition compliance processes create process uncertainty and can culminate in projects requiring additional resources, resulting in higher costs to meet commercially required in-service dates, with a subsequent impact on customers.

TC Energy plans construction of projects based on seasonality to minimize potential environmental impacts, balance multiple restricted-access periods, maximize construction conditions and address workforce allocation needs. Delayed construction starts result in substantial impacts, including missing construction windows, and increased construction costs from additional resources and measures to work under adverse environmental conditions (RAPs and suboptimal seasons/weather conditions), and can affect other projects given the finite availability of construction resources. TC Energy estimates that the lack of a timely review process could increase the commercial costs associated with an approved application by as much as 15% of CAPEX¹¹ in the first year alone. Ultimately, TC Energy customers, who underpin and are dependent on construction of the project to transport their production, will face higher shipping charges, thereby reducing the relative competitiveness of TC Energy with companies in non-CER jurisdictions.

¹⁰ TC Energy notes that all four applications made under Section 183 of the CER Act (and as appropriate, under Section 52 of the NEB Act) advanced since 2018 that required a hearing had partial hearing orders, with the presiding panel making an average eight updates to the hearing order.

¹¹ CERI Study 185 – Competitiveness of Canada's Regulatory Framework for the Oil and Gas Sector [[link](#)].

TC Energy would also like to highlight the lack of transparency in the CER's post-approval condition compliance process, as identified in OPR Section 18. TC Energy's current experience is that while it files the required documentation for approval of a condition within the timeframe identified by a condition (e.g., 60 days before construction), it has experienced recent examples where CER approval is not issued within the timeframe specified.¹² TC Energy strives to schedule construction crews to mobilize in the field based on the timing associated with applicable condition compliance filing. When TC Energy is unable to start construction within a reasonable period, it faces significant financial penalties from its contractors.

Constructing pipelines and associated facilities involves a significant number of partners, making project management and scheduling crucial to completing the scope of work in a safe, efficient and timely manner. If TC Energy is unable to provide a firm construction schedule, its contractors might either increase their respective charges to TC Energy to account for this uncertainty or decline to participate in the project, given their limited resources.

In closing, TC Energy supports the identified goal of providing a timely, efficient and transparent regulatory process and encourages the CER to improve its processes by incorporating timelines in all aspects of its review process, not just limited aspects of the hearing process. The absence of timelines for a significant portion of the application review process has significantly affected the Canadian midstream industry regulated by the CER and has indirectly affected upstream oil and gas producers as a result of insufficient pipeline capacity.

¹² For example, on the 2021 NGTL System Expansion, Edson Mainline Expansion and North Corridor Expansion projects, TC Energy experienced instances where CER approval was issued anywhere between 18 and 113 days **after** timing of the condition had expired (e.g., 30- or 60-days pre-construction).

Section: 4. Global Competitiveness

Topic: Innovation and Flexibility

Question 12: How can the OPR support innovation, and the development and use of new technologies or best practices?

Response:

TC Energy is supportive of innovation and the development and use of new technologies and best practices. With innovation being one of TC Energy's core values, TC Energy is committed to creating and adopting new technologies and making investments to enhance energy sector sustainability and innovation.¹

TC Energy believes that the current performance-based management system requirements in the OPR support innovation and agrees that they provide companies with flexibility to innovate to meet regulatory requirements in a way that aligns with each company's unique size, and the scope, nature and complexity of its activities, as well as the hazards and risks associated with those activities.

Ensuring OPR management system requirements continue to be performance-based and allow companies flexibility to evaluate and implement new technologies will continue to encourage innovation, and as a result, foster continual improvement of company performance in all areas, including safety, integrity, environmental protection and competitiveness.

TC Energy also recommends that the CER continue to encourage industry collaboration to advance innovation, including through industry research associations. Industry participation in organizations such as the Pipeline Research Council International results in collaborative innovative research that improves pipeline systems. CER review of new technologies developed through industry collaboration, using its regulatory framework, will continue to encourage industry innovation collaboration and integration of new technology in industry.

¹ [tc-2021-ros.pdf \(tcenergy.com\)](#)

Section: 4. Global Competitiveness

Topic: Data and Digital Innovation

Question 13: What company-specific or industry-wide performance metrics could the CER consider to support enhanced oversight and transparency for CER-regulated facilities?

Response:

TC Energy will provide feedback on this topic through the CER's public engagement for the revised Pipeline Performance Measures rather than through the OPR review, as the CER has proposed several changes to performance metrics through that process.

Section: 4. Global Competitiveness

Topic: Data and Digital Innovation

Question 14: Are there opportunities within the OPR for data and digital innovation that could be used by the CER and by companies regulated by the CER?

Response:

Data and digital innovation in the OPR can help ensure that all CER regulated companies have access to incident data and trends so industry can collectively learn from incidents.

While data should be easily accessible for analysis, data must also be protected against disclosure of personal information and company confidential information to avoid breaches of privacy laws or creating competitive advantages.

Data can also be valuable to set benchmarks against which regulated companies can measure their performance. Making data available to third-party research associations (such as Pipeline Research Council International and American Society of Mechanical Engineers) ensures these associations can coordinate risk reduction techniques based on incidents and continue to encourage industry sharing of best practices. TC Energy believes the current level of data collection and management is appropriate to achieve these objectives. Any revisions to the OPR should maintain the existing flexibility in the OPR to allow for data and digital innovation.

Section: 4. Global Competitiveness

Topic: Change in Pipeline Use and Status

Question 15: How can the OPR be improved to address changing pipeline use and pipeline status?

Response:

Change in Service/Use (OPR S. 43)

TC Energy notes that when the OPR was last revised in 1999, the repurposing of existing facilities to facilitate transportation of a commodity different than that originally applied for was a relatively uncommon activity. However, as areas of upstream production evolve, existing linear infrastructure is increasingly being considered for repurposing to allow for transportation of commodities other than those originally applied for. TC Energy welcomes additional clarity from the CER to understand how the Filing Manual and OPR interact in these cases. For instance, the Discussion Paper states, “Changes in pipeline use could include change of product in the system or change of product flow direction,” whereas Guide F of the CER Filing Manual states “To clarify, a change in flow direction or pressure of the pipeline contents does not constitute a change in service.” How would proposed changes to the OPR reconcile pipeline “use” vs. pipeline “service”?

TC Energy also encourages the CER to develop additional guidance on the anticipated sequence of steps (including relief) sought by an applicant to facilitate these types of applications. For example, CER’s proposed wording in its revisions to Guide O of the Filing Manual, (marked-up existing Guide O – Filing Manual) would see a proponent file a variance to a pipeline’s Certificate or Order for a permanent or long-term decrease in maximum operating pressure (MOP), whereas proponents must file an application under OPR s. 43 for an increase to a pipeline’s MOP.

To help facilitate change in service applications, TC Energy encourages revisions to Guide F of the CER Filing Manual to provide additional guidance respecting the engineering and economic information that the CER would like to see filed to support these applications. TC Energy notes that neither CO₂ nor H₂ are listed commodities in the defined terms of the CER Act or OPR. Finally, TC Energy encourages the CER to consider how it will efficiently address applications to transfer federally regulated pipelines and facilities to provincial regulators, as many alternate uses of existing linear infrastructure are likely to operate within a single provincial jurisdiction with different regulatory requirements.

Decommissioning (OPR s. 45.1) and Abandonment (OPR s. 50)

As it relates to pipeline status changes (decommissioning/abandonment), TC Energy suggests the requirement to hold a public hearing for all abandonment applications be changed from mandatory to discretionary and a streamlined process be developed to account for the scope and scale of the proposed abandonment. The current requirement for a hearing can be a

process- heavy exercise with little value for participants. TC Energy proposes that thresholds be set based on length of pipeline proposed to be abandoned (e.g., 40 km or longer), length of pipe to be physically removed, and potential impacts on the environment based on triggers such as protected lands, environmentally sensitive areas, potential impacts on rightsholders and stakeholders or future development requirements.

Finally, TC Energy encourages the CER to establish timelines for these application types to improve review transparency and regulatory efficiency, which would support the CER pillar of maintaining natural justice for all participants and regulatory efficiency and competitiveness.

Section: 5. Safety and Environmental Protection

Topic: Management Systems

Question 16: What further clarification, in either the OPR (e.g., structure or content), or in guidance, would support company interpretation and implementation of management system requirements?

Response:

TC Energy does not recommend any additional clarification through the OPR or currently available guidance materials to support company interpretation and implementation of management system requirements.

Section: 5. Safety and Environmental Protection

Topic: Human and Organizational Factors

Question 17: How should information about human and organizational factors, including how they can be integrated into a company's management system, for both employees and contractors, be provided in the OPR, and/or described in related guidance?

Response:

TC Energy does not recommend any additional clarification through the OPR or currently available guidance materials to support integrating human and organizational factors in a company's management system.

Section: 5. Safety and Environmental Protection

Topic: Programs and Plans for Safety

Question 18: How can the OPR improve the connection between company safety manuals and the overarching Safety Management Program, for both employees and contractors?

Response:

Section 20 of the OPR requires that a company develop a construction safety manual. No additional clarification on the key components of a construction safety manual is provided and the terms manual and procedure are not defined in the OPR. Clearly defined terminology helps clarify expectations for both the company and the regulator. TC Energy recommends that the key components of a construction safety manual be specified to give regulated companies an outline for construction safety manuals, while continuing to allow companies the flexibility to develop manuals that are suitable to the nature, scope and scale of each project. In addition, TC Energy recommends that the terms manual and procedure be defined.

Section: 5. Safety and Environmental Protection

Topic: Respect and Workplace Safety

Question 19: How can respect and personal workplace safety be assured at CER regulated sites?

Response:

TC Energy understands that the new stand-alone Workplace Harassment and Violence Prevention Regulations (Regulations) are intended to apply to all federal workplaces covered under the Canada Labour Code Part II, including the federally regulated private sector, the federal public service and parliamentary workplaces. If the CER determines that further requirements or guidance are required, TC Energy would suggest refining existing legislation already in force rather than introducing new legislation.

TC Energy is compliant with the requirements established by the Regulations under Part II of the Canada Labour Code. TC Energy has completed a Workplace Assessment to identify risks of harassment and violence in the workplace, including any required preventive measures, and reviews and updates this assessment as required by the Regulations.

TC Energy's Harassment-Free Workplace in Canada Policy (Policy) is available on TC Energy's external and internal websites and strictly prohibits harassment and violence in every location where work is performed on behalf of TC Energy. The Policy establishes behavioural expectations for all employees and contract personnel and is attached to all Master Services Agreements with prime contractors. The Policy includes how to report concerns and provides protection from retaliation for individuals who report concerns in good faith.

The Policy includes a designated recipient for all notices of occurrences of harassment and violence, allows for anonymous reporting of concerns via TC Energy's Ethics Help-Line and outlines a robust resolution process that meets legislated and best practice benchmarks. TC Energy maintains a list of qualified investigators to ensure that complaints are addressed and resolved within the timeframes established by the Regulations.

Through TC Energy's Learning Management System, all employees, contingent workforce contractors and excluded contractors receive mandatory annual training on the Policy, aimed at preventing harassment and violence in the workplace. Training is also provided on emergency procedures that must be followed should an occurrence pose an immediate health and safety risk.

TC Energy also offers an anonymous third-party Employee and Family Assistance Program that connects employees with support services available in their geographical area.

TC Energy has filed the required annual report to the Head of Compliance and Enforcement and maintains records of occurrences and resolutions as required by the Regulations.

Implementation of the above ensures personal workplace safety at TC Energy's CER regulated sites.

Section: 5. Safety and Environmental Protection

Topic: Contractor Management

Question 20: How should the CER be more explicit about requirements for contractor management?

Response:

TC Energy does not recommend any further clarification on contractor management requirements. Currently, several clauses of the OPR outline that a company must ensure those working on their behalf or contracted for the provision of services must meet OPR requirements. In addition, the CER Management System Requirements and CER Management System Audit Guide provides additional guidance on expectations for contractor management.

Section: 5. Safety and Environmental Protection

Topic: Process Safety

Question 21: How should the OPR include more explicit requirements for process safety?

Response:

TC Energy does not recommend any additional clarification through the OPR or currently available guidance materials to explicitly state process safety requirements.

Section: 5. Safety and Environmental Protection

Topic: Programs and Plans for Environmental Protection

Question 22: How can the OPR drive further improvement to the environmental performance of regulated companies?

Response:

TC Energy believes that the requirements under the current OPR effectively require companies to prevent, manage and mitigate adverse effects on the environment and drive companies to make proactive improvements to environmental outcomes. Specifically, OPR Section 6.5 (1) includes requirements for a company to develop performance measures for evaluating the company's success in achieving its goals, objectives and targets, and to establish and implement a process for inspecting and monitoring the company's activities and facilities to evaluate adequacy and effectiveness of the programs referred to in Section 55 and for taking corrective and preventive actions if deficiencies are identified.

To meet requirements under the current OPR to review the environmental performance of its systems, TC Energy reviews performance of its Environment Program by measuring performance relative to its established Environment Program goals, objectives and targets (GOTs):

- compliance with environmental legal requirements (including compliance with multiple federal and provincial emissions and waste related requirements)
- closure of all audit findings pertaining to environment
- reducing incidents with environmental impacts
- completion of environmental training

Environmental performance is measured relative to these GOTs through regular inspections and audits of activities and facilities to identify deficiencies and establish corrective and preventive action plans. Environmental performance reviews are completed annually to determine if objectives were achieved or if additional actions are required to improve performance.

This process to monitor Environment Program performance against the established GOTs, developed pursuant to current OPR requirements, results in action plans to ensure continual improvement.

The current OPR requirements for companies to review the environmental performance of their systems, while effectively fostering continual improvement, allow companies to develop methods for reviewing their environmental performance that are appropriate for their business. TC Energy is supportive of the flexibility provided by the current requirements and believes more prescriptive metrics or methods for measuring environmental performance

would not be effective, as this could result in metrics that are not relevant for a company's assets or activities.

TC Energy notes that the CER currently has its own measures of environmental performance of regulated companies, outside the OPR, through the Pipeline Performance Measures. Companies report annually on the performance of systems they have in place to protect the public and the environment and it is TC Energy's understanding that the CER uses the information gathered to inform their approach to regulating pipeline operations.

TC Energy understands that the CER is currently reviewing these measures and has provided feedback for consideration. TC Energy believes that the Pipeline Performance Measures can be a useful tool for regulated companies and the CER to measure environmental performance and drive continual improvement across industry. To ensure environmental performance metrics are meaningful to the work of regulated companies and effectively drive performance improvements, TC Energy recommends further engagement on the metrics, including the opportunity for regulated companies to share information regarding best practices.

Section: 5. Safety and Environmental Protection

Topic: Programs and Plans for Environmental Protection

Question 23: How can the connection between the Environmental Protection Plan, specific to an individual pipeline, and the company's Environmental Protection Program, designed for a company's pipeline system, be improved?

Response:

In TC Energy's view, environmental protection is currently effectively managed through the full lifecycle of a project, including during operations and maintenance activities, without an Environmental Protection Plan (EPP) applying to the full lifecycle of a project. As described below, while TC Energy believes there might be an opportunity to improve the connection between environmental management during construction (including reclamation and post-construction monitoring), as governed by the EPP, and environmental management through a company's environmental protection program after construction is completed, TC Energy is opposed to a requirement that an EPP apply to the full lifecycle of a project.

In TC Energy's current approach, the company's Environment Program governs environmental management for the entire lifecycle of company assets. The EPP forms part of the Environment Program and sets out requirements for environmental protection specifically during construction. After construction of a project is complete, TC Energy's Environment Program continues to govern environmental protection and ensures there is continuity of environmental protection from the project-specific EPP to operational environmental management. Specifications for how environmental protection is carried out throughout an asset's lifecycle, including operations and maintenance activities, are applied broadly through TC Energy's Environment Program standards, processes and procedures.

The connection between the project-specific EPP and the operational environmental management set out in the Environment Program is driven by and is consistent with the OPR requirement for companies to develop, implement and maintain an environmental protection program with components that anticipate, prevent, manage and mitigate conditions that could adversely affect the environment, throughout the lifecycle of a pipeline.

TC Energy's Environment Program explicitly states that the requirements set out in the program must be achieved throughout the lifecycle of the Company's assets, and specifically requires projects to align to the Environment Program through the Project Delivery Standard (PDS). Transition of environmental protection from the construction phase of an asset to the operations and maintenance phase is ensured through the PDS requirement to develop a transition plan. This plan outlines environmental and related regulatory conditions, applicable project and site-specific requirements and commitments, as well as ongoing environmental monitoring requirements applicable to an asset.

TC Energy strongly opposes any requirements for EPPs to govern environmental protection for the lifecycle of a pipeline. This approach would not be workable for TC Energy as its pipeline system consists of an interconnected network, with new pipeline construction often taking place contiguous to and/or in the same ecological region as existing pipelines. Following construction, TC Energy's pipelines are operationally managed holistically as a system, and not as individual pipelines. Managing environmental protection through individual project-specific EPPs following construction would result in significant inefficiency and confusion, as multiple EPPs would be applicable in many areas and duplication would arise from common elements among EPPs. A single system-wide approach for managing environmental requirements for all operational assets, as TC Energy currently has in place, is more efficient and ensures best practices across TC Energy's entire footprint.

Section: 5. Safety and Environmental Protection

Topic: Management of Contaminated Sites

Question 24: How can contaminated site management requirements be further clarified, in the OPR or in guidance?

Response:

In TC Energy's view, the 2020 CER Remediation Process Guide (RPG) provides clear expectations for contaminated site management, including framework element requirements for system-based environmental protection programs and related plans to address contamination. TC Energy supports clarification of contaminated site management requirements in the OPR or in OPR-related guidance to the extent that it reflects what is currently in the RPG.

TC Energy notes the following points where additional clarity would be helpful with regard to the guidance provided in the RPG:

- Section 14.2 of the RPG states that a Closure Report must be accompanied by a Declaration Letter signed by the accountable officer of the company. TC Energy suggests the RPG be updated to allow the accountable officer to assign a representative who can sign on their behalf
- Section 9 of the RPG requires companies to report third-party contamination to the CER by submitting a Notice of Contamination (NOC). TC Energy seeks clarity around this requirement, including how reported information regarding third-party contamination will be used, and the purpose/necessity of assigning a remediation (REM) number to the company submitting the NOC. TC Energy notes that the REM numbers generated for submission of an NOC are linked to the company making the submission and are publicly available. REM numbers assigned to a company for reporting third-party contamination could publicly create the appearance that the reporting company is responsible for the third-party contamination it has reported

Section: 5. Safety and Environmental Protection

Topic: Emergency Management Program

Question 25: Are there any matters related to the Emergency Management Program in the OPR that require clarification? If so, what are they? Are there any matters for which further guidance is required?

Response:

Clarify Definition of “Emergency Procedures Manual”

The OPR Sections 32–34 and Annex A of the OPR Guidance Notes (OPR Guidance Notes – Annex A) directs a company to develop, implement and maintain an Emergency Management Program, and to develop and submit to the regulator an Emergency Procedures Manual. NEB Orders MO-006-2016 and AO-001-MO-006-2016 require companies to publish their emergency procedures manual. NEB Order AO-001-MO-002-2017 requires companies to publish their Emergency Management Program information.

We suggest the OPR provide clarity on what the CER expects to be contained in an Emergency Procedures Manual and/or an Emergency Response Plan, as well as provide clarity as to which documents must be submitted to the regulator, which documents must be publicly posted, and which documents require public consultation and awareness.

These matters could be addressed by including detailed definitions in OPR Section 1.

Clarification on CSA Z246.2

Canadian Standards Association (CSA) Standard Z246.2 is not listed in OPR Section 4, but is referenced in NEB Order MO-006-2016 and OPR Guidance Notes – Annex A. We recommend the OPR clarify whether CSA Z246.2 is a mandatory or discretionary requirement.

Update References to Manual Distribution List

The manual distribution list is referred to in Guidance Notes – Annex A, 2. Emergency Procedures Manual. We recommend the CER clarify whether manual(s) that are accessible electronically meet the intent of distribution, whether written hard copy documents are required to be distributed to individual plan holders or whether the preferred format to receive the documents it is a recipient’s choice as to.

Clarify Definition of Emergency Planning Zones

Emergency Planning Zones (EPZ) are referenced in Guidance Notes – Annex A, 1. Hazard Assessment, 2. Emergency Procedures Manual, 4. Liaison with Agencies Involved in Emergency and 6. Providing Continuing Education for Emergency Response.

Across industry, there is lack of consistency on how EPZ are determined. Providing clear criteria for designating an EPZ would create consistency in the industry and clarity for the regulator, regulated companies and the public.

The term could be added to OPR 1. Interpretation. Including a description or examples of how to calculate EPZ distances/areas or specific thresholds/assumptions to be used would also add clarity.

Annual Reports

The CER requests companies file multiple report types annually, such as the Annual All Company Access Letter and the Pipeline Performance Measures Report. These reports are not referenced in the OPR. In addition, the CER issues information requests for a variety of information types and also requests updates if any of the information changes throughout the year. Information types requested include the following:

- total exercises completed by type
- total exercises completed by pipeline
- total planned exercises by type
- planned or prospective dates and locations
- attendance – virtual, in person or combination
- location (specific, not region or nearest office location)
- number of external agencies that participated, role in exercise
- number of Indigenous communities that participated and role in the exercise
- number of external agencies and Indigenous communities invited and number that declined the invitation
- number of internal personnel that participated in an exercise
- number of personnel assigned in a response role
- exercise scope and objectives for each planned exercise
- applicable Emergency Response Plan used for the exercise

Compiling information and reports on planned exercises can be especially challenging as exercises are often still in the planning process at the time the request is made with many of the details not yet determined.

TC Energy recommends the OPR clarify the annual reporting requirement for the Emergency Management Program to help ensure consistency and accuracy of the information requested and ensure that it can be provided in a timely manner. This will also help companies understand the reporting requirements in advance, which will in turn allow TC Energy to effectively document and implement processes to support these reports.

Section: 5. Safety and Environmental Protection

Topic: Quality Assurance for Pipeline Materials

Question 26: How could the requirement for a Quality Assurance Program be improved or clarified in the OPR?

Response:

In TC Energy's view, the current OPR requirements for a Quality Assurance Program for pipeline materials, and criteria set out in the OPR Guidance Notes, effectively ensure that pipe and components are appropriate for their intended service. TC Energy believes the requirements for Quality Assurance Programs do not need to be improved or clarified.

The current requirements for quality assurance for pipeline materials require companies to develop their own specifications for pipe and components to be used in a pipeline, and to develop a Quality Assurance Program to ensure pipe and components meet their specifications. The OPR Guidance Notes provide specific items to be included in a company's specifications and Quality Assurance Program. The OPR Guidance Notes also set out conformance with reference standards.

TC Energy supports the approach of regulating quality assurance for materials by requiring companies to develop their own specifications and Quality Assurance Program, with specific criteria set out in the OPR Guidance Notes. This approach allows for the flexibility required for the diverse companies regulated by the CER, which vary in size and business type. Allowing regulated companies to develop an approach to quality assurance that is appropriate for the scope and scale of their business fosters efficiency and in turn promotes competitiveness, while still ensuring quality of materials.

TC Energy recommends that this flexible approach of requiring that each company develop their own specifications and quality assurance be maintained, as more prescriptive requirements might not be appropriate for all regulated companies, and, for some regulated companies, could result in increasing burden without the commensurate improvement in quality or quality assurance.

In TC Energy's experience, CER assurance activities effectively ensure quality specifications are appropriate, and quality assurance programs developed by regulated companies appropriately test the implementation and conformance to OPR quality assurance requirements.

TC Energy is also supportive of CER initiatives to improve quality assurance programs. As standards evolve, CER initiatives help create industry awareness on new quality issues and help drive continuous improvements. In addition, through these initiatives, the CER encourages and facilitates dialogue with industry and manufacturers, raising awareness of best practices and innovative technologies.

Section: 5. Safety and Environmental Protection

Topic: Strength of Steel Pipe Relative to Welds

Question 27: How can the OPR incorporate the key issues identified in the Safety Advisory regarding the strength of steel and the relative strength of the weld area?

Response:

TC Energy believes that the CER should not incorporate in the OPR the key issues identified in the Safety Advisory regarding strength of steel and relative strength of the weld area. CSA Z662 contains requirements for weld joints to ensure the welds are acceptable for the service life of a pipeline.

Changes to CSA Z662 to address the girth weld issues raised in the CER Safety Advisory have been proposed through the CSA Z662 Technical Committee. The proposed changes include additional controls on materials used for welding procedure qualification, stricter weld tensile testing requirements to prevent significant weld strength undermatching, and extensive informative notes and commentary cautioning users about the potential for weld strength undermatching and how to avoid it.

The most effective venue for communicating technical requirements aimed at preventing excessive girth weld strength undermatching and strain concentration is in industry standards such as CSA Z662. Keeping technical requirements in industry standards ensures there is a clear single point of reference for industry compliance. Imposing supplementary prescriptive technical requirements or duplicating requirements in regulations such as the OPR can result in confusion and be less effective than requirements set out in industry standards, particularly if the regulatory requirements are of a one size fits all type that does not allow companies to evaluate risks and choose the mitigating strategies most appropriate for each situation. In addition, TC Energy notes that industry standards, such as CSA Z662, are reviewed and updated regularly, at prescribed intervals.

In TC Energy's view, the CER has effectively taken a proactive approach to addressing girth weld strength issues by notifying industry. TC Energy supports the practice of issuing Safety Advisories, as they ensure public safety through industry awareness. TC Energy also encourages the CER to continue participation in the CSA Z662 Technical Committee and Technical Subcommittees to ensure technical welding requirements and informative guidance are appropriate for addressing these potential issues.

Section: 6. Implementation Objectives

Topic: Provide a Compliance Promotion Function

Question 28: What are your recommendations for compliance promotion at the CER?

Response:

TC Energy agrees with the CER that compliance promotion is an important tool for the effective implementation of regulation and appreciates the opportunity to provide recommendations for compliance promotion at the CER.

To improve compliance promotion at the CER, TC Energy suggests that the CER examine approaches and tools that are being utilized for compliance promotion by other regulators, such as the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the U.S. TC Energy has observed, through the regulation of its American assets by PHMSA, that PHMSA utilizes a variety of tools which effectively promote compliance by regulated entities and the public. These tools include detailed guidance relevant to compliance through FAQs, advisory bulletins, interpretation and guidance manuals, and technical resources (related to pipeline integrity). In addition, PHMSA committees schedule and host several public forums annually to review proposed regulatory initiatives to assure the technical feasibility, reasonableness, cost effectiveness and practicability of each proposal and to provide education and training to industry and the public. In TC Energy's view, a similar approach would be helpful to promote compliance within CER regulations.

TC Energy also encourages the CER to be mindful that it takes regulated companies time to update their internal processes and procedures to effectively implement regulatory changes. To allow for company systems to be ready for effective and efficient implementation, TC Energy recommends that a grace period be given between the publishing and the effective date of new regulations.

Compliance Verification Activities

Compliance can also be promoted by ensuring that Compliance Verification Activities (CVAs) and enforcement processes are effective. TC Energy believes that in combination with more effective compliance promotion activities, improvements to the CER's CVA and enforcement processes will help to promote compliance. TC Energy provides some suggestions for improvements in the CER's CVAs and enforcement processes below.

In TC Energy's view, there is currently a lack of clarity and consistency in the CER's CVAs, which results in inefficiencies and decreased effectiveness. TC Energy has found that the scope for CVAs is often not clearly defined and there is a lack of advance planning for CVAs. TC Energy notes, for example, that multiple different CVAs may occur on a project within a short time frame, without advance notice or detailed scope. This lack of advance planning as well as defined scope creates challenges for TC Energy, as it does not allow for

an accurate forecast of workload, resulting in reduced opportunities for resource optimization or efficiencies.

TC Energy recognizes the CER provides guidance on compliance and enforcement on its website. TC Energy recommends improvements to this guidance to promote compliance. Specifically, TC Energy recommends establishing a CVA manual or revised guidelines. TC Energy notes that these suggest:

- Guidance on the purpose and expected outcomes of each type of CVA (i.e., implementation assessments, information exchanges, inspections, audits), as well as established timelines for each type of CVA.
- A requirement for the CER to provide, and industry to complete, a screening tool (e.g., questionnaire) in advance of a CVA, to allow the CER to collect and review pertinent material and facilitate the CER's understanding of the topic or facility to be reviewed or inspected prior to the CVA. This will enable CVAs to progress more effectively and efficiently.
- CVA planning protocols including information on how the CER plans for CVAs. TC Energy recommends these protocols include requirements for the consideration of emerging trends, risk-based inspection and assessment priorities and historical assessment data in CVA planning. TC Energy recommends these planning protocols also include provisions to coordinate CVAs among CER departments to support resource efficiencies in both regulated companies and the CER. To achieve this, guidelines regarding the grouping of CVAs on a project, topic or program occurring within a short time frame could be included, with the objective of reducing overlapping assessment activities on the same project, topic, or program area during the same timeframe.
- Standardized inspection protocols to ensure consistency among inspectors.
- Communication requirements that provide for advanced notice to regulated companies of the total number, timing and geographic location (where applicable) of CVAs within a general location and period (e.g., three to six months prior notice), as well as provisions for formally notifying companies of planned inspections, including general scope, time, location, required resources and duration.
- A policy for the CER's Indigenous Monitoring Program that clearly outlines the role, expectations and authorities held by CER Indigenous Monitors during the inspection process and provides for adequate training, mentorship and resources for monitors. This policy would enhance transparency and understanding of the program for all parties involved with inspections (e.g., CER staff, Indigenous Monitors and regulated companies) as well as Indigenous groups and the general public.
- Communication processes for communication between the CER and regulated companies during CVAs, including the process for responding to Information Requests and filing supplementary information.
- Requirement for CER Inspectors and Indigenous Monitors to adhere to company safety requirements while onsite, including company guidelines for fatigue management and

safe journey management. TC Energy recommends establishing a requirement that CER staff, Indigenous Monitors, contractors and guests participate in regulated company onsite health and safety training - including site specific orientations - to ensure visitors are informed on what to do in the event of an emergency, as well as any other site-specific conditions.

Data Driven Regulatory Management

TC Energy understands that the CER endeavors to undertake a risk-based approach to determine company compliance with regulatory requirements using CVAs. Currently, it is unclear how the CER identifies and assigns risk or risk consequences and how it incorporates these assessments into the development of its CVAs. For example, TC Energy has observed that inspection activities may focus on issues that are low risk and low impact rather than focusing on the stated scope of the inspection. TC Energy recommends that CVAs be designed to assess compliance in higher-risk areas, as determined through analysis of available data.

The CER currently collects data annually from operators through CVAs, surveys, pipeline performance data, annual reports, and other sources; however, not all data collected is published. TC Energy supports the publication of data driven advisories, trends and lessons learned from across industry to help improve safety and promote compliance.

Incident Review and Order Compliance

TC Energy would also like to provide suggestions for improvement to the CER's incident review and CER order compliance processes. TC Energy's current experience is that while there are timing requirements for industry compliance filings, timelines for the CER to review this information or assess formal requests are not clearly set out. To better promote compliance in this regard, TC Energy recommends the establishment of guidance on the CER's compliance process as it relates to incident reporting and order compliance, including expected timelines for CER review and assessment. Guidance could include:

- establishing service standards for incident review, investigation and subsequent compliance processes (i.e., incident closure)
- establishing service standards for review and closure of CER and Inspection Officer Orders.

Event Reporting Guidelines

Lastly, improvements related to the CER's Event Reporting System (ERS) and Event Reporting Guidelines (ERG) would also be helpful in promoting compliance. Specifically, TC Energy notes that periodic updates are made to ERS (i.e., additional questions are added) without prior notice to regulated companies. TC energy is not aware of any standard CER process which sets out the frequency of review and update of the ERS or how industry and other stakeholders, or rightsholders, are engaged or informed. TC Energy sometimes learns of updates to ERS when populating reports in ERS, which may require further internal

follow-up to be conducted in a short timeframe for reporting to be compliant. TC Energy recommends that the CER develop a process for updates to the ERS, including timelines for review and engagement and notification of stakeholders prior to changes being implemented.

With regards to the ERG, TC Energy notes that there seems to be a discrepancy between the effects-based definition provided for significant adverse effects and the examples provided. The examples, such as frac-outs, may not result in any adverse effect. TC Energy recommends that the definition and examples be reviewed and revised to ensure the examples are consistent with the definition.

Section: 6. Implementation Objectives

Topic: Support the Regulations with Technical Guidance

Question 29: How do you want to be engaged by the CER in the development of technical guidance?

Response:

TC Energy appreciates the opportunity to engage with the CER on technical guidance development. TC Energy believes industry engagement throughout the development process is critically important as regulated companies are the primary users of technical guidance and the objective of the guidance is ultimately to assist industry in understanding and applying regulations. Meaningful and in-depth engagement of regulated companies in the development of technical guidance facilitates industry understanding and implementation of the guidance and the regulations, which is consistent with the intended objectives.

In TC Energy's experience, industry input to technical guidance provides the best value when industry is engaged early in development, when the objectives of the guidance are being considered. This early engagement allows for industry to understand the background and context of the development, and provide input to the objectives, fostering the development of guidance that addresses the needs and objectives of the CER, as well as reflecting the experience and technical knowledge of industry. After this early engagement, it is important that companies are provided with opportunities to provide input to draft technical guidance language. At this stage, TC Energy requests that the CER provide multiple opportunities to engage throughout draft guidance development, rather than a single opportunity near the end of the drafting period.

From TC Energy's perspective, the most effective form of engagement with industry would be having a two-way dialogue with the CER. Industry is well positioned to provide input/feedback to the CER on potential changes/improvements and would appreciate the opportunity to fully explain the rationale behind these suggestions. Industry would also appreciate the opportunity to hear back from the CER with regards to why a particular suggestion is not being considered. Workshops and meetings are ideal venues for such a two-way dialogue.