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March 31, 2025

Filed Electronically

Canada Energy Regulator
Suite 210, 517 Tenth Avenue SW
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Attention: [redacted]

Dear [redacted]

Re: TC Energy Corporation (TC Energy)
Canada Energy Regulator (CER) *Onshore Pipeline Regulations* and Filing Manual Review Comments of TC Energy

Enclosed are TC Energy's comments on the CER's Onshore Pipeline Regulations (OPR) and Filing Manual Review – Phase II Engagement.

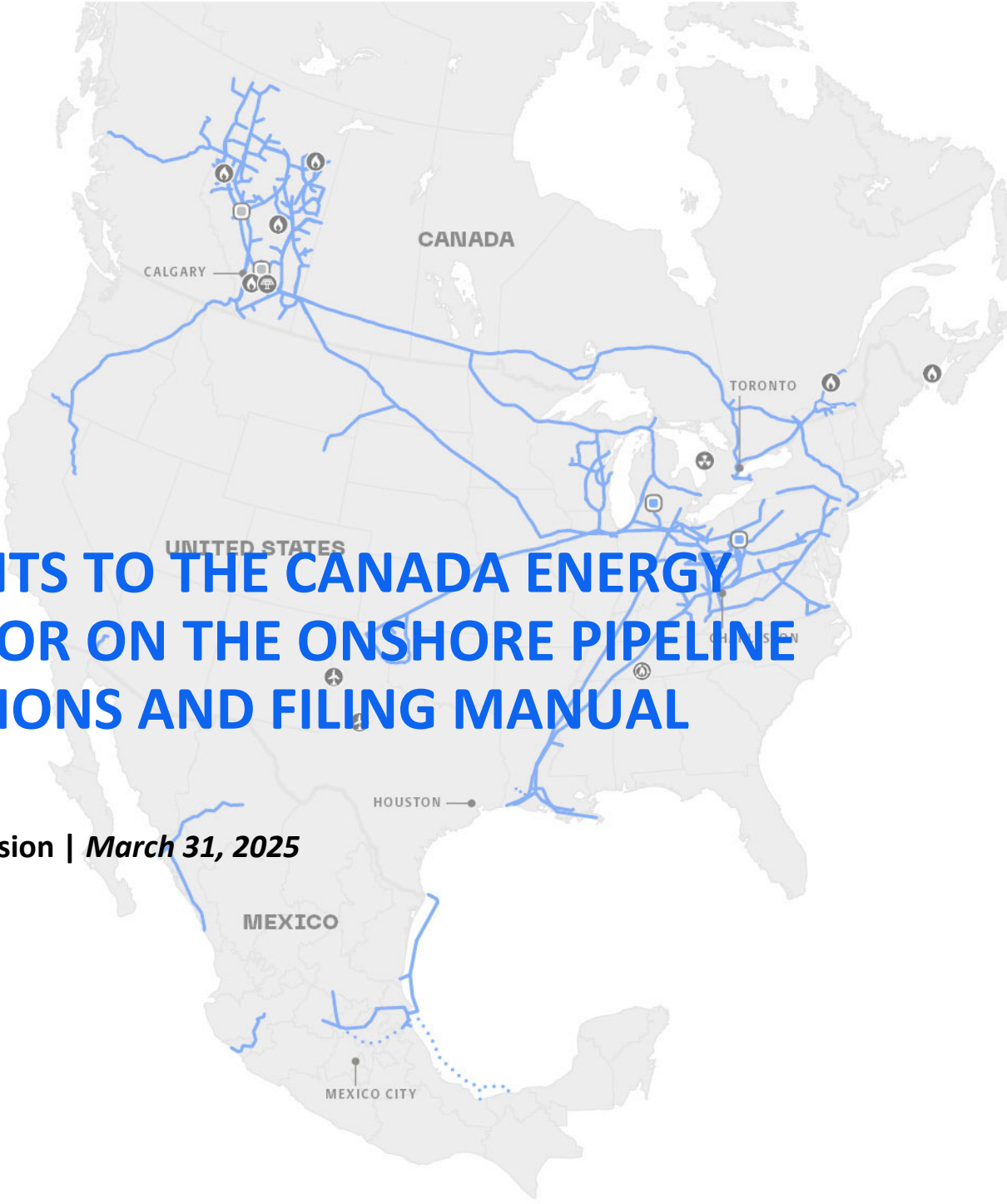
If the CER requires additional information with respect to this submission, please contact me at [redacted] or [redacted]

Yours truly,

Original signed by

[redacted]

Enclosure



COMMENTS TO THE CANADA ENERGY REGULATOR ON THE ONSHORE PIPELINE REGULATIONS AND FILING MANUAL REVIEW

TC Energy Submission | *March 31, 2025*

NATURAL GAS PIPELINES

75 %

of Canada's demand

Our 93,600-kilometre pipeline network connects the most competitive, low-cost natural gas basins to premium value markets in Canada, the U.S. and Mexico. In Canada, we have completed construction of the Coastal GasLink pipeline, enabling the first direct path between Canada and global LNG markets to deliver responsibly produced natural gas to the world.

POWER AND ENERGY SOLUTIONS

30 +

years of experience

We own or have interests in facilities that generate approximately 4,600 megawatts of power-generation capacity, over 75 per cent of which is emissions-less. To backstop the forecasted growth in renewable power generation by 2050, our strategy in Power and Energy Solutions focuses our portfolio on world-class nuclear power generation and pumped hydro opportunities, critical for maintaining grid reliability.

TC Energy

Introduction

TC Energy Corporation (TC Energy) appreciates the opportunity to provide comments to the Canada Energy Regulator (CER) as it engages with Indigenous groups, regulated companies and other interested parties as a part of the Canadian Energy Regulator Onshore Pipeline Regulations (OPR) and Filing Manual Review – Phase II Engagement (collectively, OPR Review). TC Energy supports the continuous improvement of the OPR with a focus on regulatory efficiency and competitiveness. The OPR Review presents a meaningful opportunity for the CER to drive the necessary change to optimize its day-to-day function as a trusted and efficient regulator, while fostering a competitive pipeline industry that strengthens Canada's energy security.

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 contribute our experience to the OPR Review and to provide valuable insight for consideration.

Energy Security & Global Competitiveness

Energy security and economic opportunity are key priorities for many Canadians. A predictable and efficient regulatory system is essential to attracting investment and ensuring the timely development of critical infrastructure projects. The current regulatory framework lacks the timeliness and predictability required to maintain investor confidence and deliver projects that support energy security, and many of the proposed changes to the OPR further exacerbate these issues. Increasingly complex operational requirements reduce the attractiveness of the Canadian market to investors, making it less competitive compared to other jurisdictions. TC Energy emphasizes the importance of considering the potential effects on global competitiveness of Canada's energy industry when assessing any revisions to the OPR and Filing Manual. Proposed changes being explored by the CER during the OPR Review reflect a predominantly additive approach to regulatory requirements, which runs counter to the pressing need for regulatory efficiency and predictability. A streamlined approach to regulation can strike the appropriate balance between providing a predictable and competitive regulatory system while continuing to meet the high standards of safety and environmental protection that the CER has established.

Key Themes

TC Energy provides the following overarching comments regarding the OPR and Filing Manual Topic Papers, supplemented by individual appendices addressing each Phase II Topic Paper.

Regulations such as the OPR need to remain general and flexible, anchored in a goal-based management approach (see responses to Topic Papers: A, B, C, D, E, F, G, H, I, J, K). Incorporating the prescriptive content presented in the various Topic Papers into the OPR will undermine the OPR's intended function and performance-based foundation. The OPR's goal-oriented approach has remained balanced and scalable to

pipeline systems of various sizes, geographic scopes and complexities. An increase in prescriptive or rigid requirements hinder regulated companies' ability to effectively apply a risk-based approach.

Instead of embedding more prescriptive content in the OPR, supplemental resources such as the OPR Guidance Notes, Filing Manual and technical bulletins provide a more appropriate mechanism for expanding on goals and objectives. These documents can be updated more readily as experience and emerging issues prompt change and improvement, ensuring that regulatory expectations evolve without compromising efficiency and flexibility.

Updates must avoid duplicative requirements (see responses to Topic Papers: B, C, D, F, G, H, I, L, K). The CER's Phase II Topic Papers introduce multiple requirements, that are captured elsewhere, whether in federal or provincial/territorial legislation, existing guidance documents, or within the OPR itself. Duplicative requirements introduce confusion and can lead to contradictions when minor wording changes undermine existing requirements and will not ultimately improve outcomes. Duplicative requirements should not be incorporated into the OPR.

A minimalist update to the OPR and Filing Manual is more appropriate than the significant changes and additions proposed in the Topic Papers (see responses to Topic Papers: A, B, C, D, F, G, H, I, K, L, M). The CER's Phase II Topic Papers introduce numerous potential changes with broad reaching implications for CER regulated companies. However, the proposals lack validation, as concerns with the current version of the OPR are not supported or substantiated with quantitative or qualitative data. Updates to the OPR and Filing Manual should be focused on actual gaps or issues and avoid making minor or inconsequential updates.

Proposed changes cannot be practically implemented (see responses to Topic Papers: A, D, E, G, I, J, K, M). The Topic Papers do not address how regulated companies could practically demonstrate compliance with the proposed changes or what compliance would look like in practice. A practical lens is essential to effectively assess the proposed changes and to consider how they could be implemented and verified by the CER consistently across different regulated companies whether Group 1 or Group 2.

Proposed changes to the OPR undermine competitiveness (see responses to Topic Papers: A, D, G, H, I, K, L, M). There are limited proposed changes that focus on improving the competitiveness of CER regulated facilities in relation to other jurisdictions. Potential CER regulated facilities commonly compete for capital with other projects outside of the CER's jurisdiction, whether provincially/territorially regulated or outside of Canada. Several proposed changes will increase regulatory complexity, lengthen project schedules, and will incrementally increase costs, all of which will further erode the competitiveness of CER regulated companies and projects.

Proposed changes are not appropriate throughout a pipeline facility's life cycle (see responses to Topic Papers: A, B, D, K, M). The OPR applies to the entire lifecycle of pipeline assets, yet many of the proposed changes presented in the Topic Papers either focus on the construction of new facilities or can only be practicably applied to newly constructed facilities. The level of oversight and intensity of activities during construction differs significantly from what is required during ongoing operations. Expanding such oversight and activities to operations activities where the underlying risks do not apply adds complexity and costs without benefit.

During the application stage, potential impacts and proposed mitigation are assessed by the CER as a part of the application review process. However, a Commission decision to approve a project does not solely approve construction; it also authorizes the operation of the facility. Overly prescriptive operational requirements can contradict issued approvals and work to undermine the flexible and risk-based decision-making framework provided by a comprehensive management system.

Key Recommendations

TC Energy has noted several recommendations to the CER throughout the detailed Topic Paper responses. Substantive recommendations are captured below.

Management Systems (see responses to Topic Paper F and I)

Over the past few years, TC Energy has been transforming its management system. Through this process, the company has identified several concepts within the OPR regulations that, if revised, could significantly reduce confusion and improve clarity regarding protection program requirements and their relationship to the broader management system. To enhance clarity and align with the industry best practice, TC Energy recommends the following:

- Reframe Section 55 programs as risk areas that are embedded within the management system rather than treating them as independent systems to which the management system merely "applies"
- Streamline Section 6.5 (1) to narrow or group the processes outlined in a way that reflects the element-level structure of an integrated management system
- Add language that explicitly outlines the desired outcomes of a management system.

See the detailed response to Topic Paper F for more information.

Incorporation of the Rights and Interests of Indigenous Peoples (see responses to Topic Papers B, I, and M)

TC Energy acknowledges the need to align the OPR with evolving regulatory contexts that were not envisioned when the OPR was brought into force, including advancing reconciliation and implementing the United Nations Declaration on the Rights of Indigenous Peoples. However, the proposed updates are overly prescriptive and impose expectations and requirements that do not account for the range of activities undertaken by regulated companies throughout the lifecycle of a regulated facility. Many of the proposed updates are more suited to large-scale developments, already subject to the Indigenous rights and interests requirements within the Filing Manual, rather than smaller-scope or routine activities commonly carried out under the OPR. Rather than embedding rigid requirements in the regulations, TC Energy recommends a more flexible approach that allows companies to consider Indigenous rights and interests in a manner appropriate to their activities. This would ensure alignment with the CER's stated objectives while avoiding prescriptive requirements that may not be relevant across different operational contexts.

To achieve this, TC Energy proposes the following updates to Section 6.5(1) of the OPR (proposed changes in bold) as an alternative to the measures proposed within the Topic Papers:

6.5(1) (i): establish and implement a process for identifying and managing any change that could affect safety, security, the protection of the environment**, or the exercise or practice of rights of Indigenous Peoples**, including any new hazard or risk, any change in a design, specification, standard or procedure and any change in the company's organizational structure or the legal requirements applicable to the company

6.5(1) (q) establish and implement a process for coordinating and controlling the operational activities of employees and other people working with or on behalf of the company so that each person is aware of the activities of others and has the information that will enable them to perform their duties in a manner that is safe, ensures the safety and security of the pipeline, protects the environment **and respects the exercise or practice of rights of Indigenous Peoples**;

These proposed revisions embed the consideration of the exercise or practice of rights of Indigenous Peoples within management system requirements while maintaining flexibility in how companies fulfill these obligations. Note that TC Energy has proposed emphasis on the exercise or practice of rights, in alignment with the Filing Manual requirements. This approach avoids a one-size-fits-all regulatory framework and ensures that engagement efforts remain appropriate for different operational scales and contexts. It would also highlight the exercise or practice rights of Indigenous Peoples on a similar level as environmental protection, safety and security.

Indigenous Engagement Requires Flexibility (see responses to Topic Papers B, C, D, I, K, and L)

The CER has proposed substantive changes to how regulated companies engage with Indigenous groups within the Topic Papers. In order to reflect the broad range and diversity of Indigenous groups, engagement with Indigenous groups should be based on the specific needs, interests and capacity identified by the Indigenous group, and as relevant to the activities TC Energy is undertaking. Any addition to the OPR should remain goal-based to allow for each regulated company to develop and evolve engagement activities based on the uniqueness of each Indigenous group, individual relationships and commitments, as well as the scale, location and nature of a regulated Company's assets and the corresponding potential impacts of these activities on Indigenous groups. Creating and enforcing prescriptive uniform engagement requirements will not further the CER's strategic priority of Indigenous reconciliation, but rather undermine the effective approaches that TC Energy currently use.

Indigenous knowledge, laws, policies, practices and protocols can vary widely between and within Indigenous groups, are proprietary to Indigenous Peoples, and may not be shared with regulated companies despite early engagement efforts. Indigenous laws and policies are not commonly provided to proponents, and it is not appropriate to make companies responsible for obtaining permissions and access to Indigenous proprietary governance materials. Nor is it appropriate to include this expectation in the OPR or other CER guidance documents. TC Energy engages with over 550 Indigenous groups across the collective footprint of its CER regulated pipeline systems. Even if access could be consistently obtained, it is not practicable for companies to attempt to identify, reconcile and incorporate unique, evolving and potentially contradictory laws, protocols and

policies from hundreds of different Indigenous groups into management systems or programs in an effective or meaningful way.

Compounding this concern, companies engage with multiple Indigenous groups at any given time, and the groups engaged changes based on project location and overlap with Indigenous groups' traditional territory. Indigenous groups have varying interests, capacities, and processes for participation, and may desire differing outcomes. Careful and clear definitions of terms, objectives and requirements will be needed to recognize the large numbers of unique Indigenous groups involved in any given project and their unique perspectives and capacity to avoid conflict and stymied processes.

TC Energy does not support the broad-reaching and prescriptive engagement requirements proposed by the CER as they risk negatively impacting relationships and engagement outcomes and eroding Indigenous reconciliation efforts. A one-size-fits-all regulatory approach does not account for the diverse ways in which Indigenous groups choose to engage. Instead, TC Energy recommends that a new clause be established under the "General" section of the OPR to direct regulated companies to appropriately engage with potentially impacted Indigenous groups as required when the regulated company contemplates undertaking activities that might impact an Indigenous group.

Furthermore, TC Energy emphasizes that the development and implementation of systems and programs to incorporate Indigenous inputs and involvement are actively evolving. What is considered best practice today may not be relevant in the near future. Capturing prescriptive requirements within regulation does not accommodate evolving considerations.

Closing

TC Energy's recommendations and detailed feedback on the Topic Papers are included in the sections that follow. While TC Energy is supportive of efforts to improve the OPR and Filing Manual, TC Energy sees the approach that the CER is pursuing in the OPR Review as burdensome and unnecessary, given the comprehensive nature of the current OPR. TC Energy anticipates the proposed changes will impact regulatory efficiency, competitiveness, and in many cases will undermine Indigenous reconciliation efforts. The proposed changes will create delays to already challenging timelines, increase uncertainty in the regulatory process and increase costs for TC Energy, its customers and therefore energy affordability generally across Canada. TC Energy encourages the CER to refocus its efforts to update the OPR with a strong emphasis on Canada's energy security, which will require flexibility, predictability, and efficiency. TC Energy looks forward to continued engagement on the OPR and Filing Manual updates.

Topic Paper A: OPR – Damage Prevention

The goal-oriented approach of the OPR is scalable for pipeline systems of various sizes, geographic scopes and complexities. Where the CER contemplates adding express requirements or expectations to the OPR, they should remain consistent with the OPR's outcomes-based foundation.

TC Energy offers a number of concerns in response to Topic Paper A – Damage Prevention. The key themes reflected include the importance of flexibility in the OPR, implications for competitiveness, the importance of a minimalist approach to the OPR update, the practicality of changes, and appropriateness throughout the asset lifecycle.

Proponents Require Flexibility

TC Energy believes that any additions to the OPR, Damage Prevention Regulations, or other CER guidance materials addressing depth of cover management must allow companies the flexibility to allocate resources to the highest-risk areas, relying on their internal management systems to reduce risk and improve processes holistically. Adding a requirement for depth of cover monitoring to Section 39 of the OPR places disproportionate emphasis on one component of a company's broader surveillance and monitoring programs regardless of actual risk, without adding incremental value. Depth of cover monitoring and maintenance are best managed through a risk-informed approach that enables meaningful engagement with landowners, occupants and other stakeholders to determine the most appropriate strategy for managing incremental risk associated with a pipeline's depth of cover.

Financial and Operational Impacts of Depth of Cover Monitoring

Adding a requirement for depth of cover monitoring to section 39 of the OPR could have significant financial and operational impacts on pipeline companies, depending on the specific expectations for monitoring (whether outlined directly in the regulations or indirectly in CER guidance materials). Of particular concern is the potential imposition of prescribed monitoring methods and frequencies. Proponents are best positioned to determine the appropriate methods and frequencies of depth of cover monitoring for each of their pipeline assets based on risk factors such as class location, land usage, and evidence of activities and conditions that may affect depth of cover over time.

While many pipeline companies already have depth of cover monitoring programs in place, prescriptive requirements for monitoring methods and frequencies would remove the ability for companies to apply a risk-based approach. This could lead to significant cost and capacity implications should higher-accuracy and higher-resolution monitoring methods be required frequently across all pipelines.

Consideration of Operating Status

TC Energy is also concerned about the potential application of a depth of cover monitoring requirement to all pipeline systems, regardless of operating status. For instance, abandoned pipelines present negligible risk to people, property and the environment. The costs and resources required to monitor depth of cover beyond existing programs would be disproportionate to the risk reduction achieved.

Specifying a Minimum Depth of Cover

Discussion question A4 raises the issue of whether a minimum depth of cover requirement should be added to the OPR. TC Energy does not support implementing a minimum depth of cover requirement for existing pipelines, as doing so would introduce unnecessary regulatory, environmental and operational burdens.

A specified minimum depth of cover would result in increased environmental impacts and potential strain on relationships with landowners along pipeline rights-of-way if extensive depth of cover remediation projects were mandated. If substantive remediation projects are required this will also lead to higher operating costs, a cost that will ultimately be recovered from Canadian pipeline customers, further eroding the competitiveness of CER regulated pipeline assets.

Rather than enforcing a minimum depth of cover on operating pipelines, TC Energy applies a risk-based management approach to determine preventive and mitigative measures when areas with low depth of cover are identified. For example, site-specific assessments may determine that low depth of cover presents minimal safety and environmental risk in certain locations - such as remote locations with no public access, or within a private fenced property with no structures or vehicle traffic. In such cases, measures such as landowner or land user notification and increased monitoring frequency may be sufficient measures to ensure pipeline safety and integrity

In addition, TC Energy continues to safely operate hundreds of kilometres of pipelines that were constructed in accordance with historical depth of cover design standards. If a minimum depth of cover requirement were imposed based on current design standards, the costs and potential environmental impact associated with increasing depth of cover on historical pipelines would be prohibitive, with near zero risk reduction. It is also important to note that in certain locations, such as areas with drainage issues, increasing depth of cover is neither technically feasible nor advisable in some circumstances.

Topic Paper B: OPR – Deactivation and End of Lifecycle

TC Energy supports the current framework employed by the CER with respect to the operation and end of life aspects of facilities regulated by the CER Act. As such, TC Energy would like to express a number of concerns in response to Topic Paper B – Deactivation and End of Life Cycle. The key themes reflected include the need to keep the OPR general and goal-based, the importance of a minimalist approach to the OPR update, addressing duplication, the appropriateness of proposed changes throughout the asset lifecycle, as well as recommending how updates to the OPR reflect the rights and interests of Indigenous Peoples and that Indigenous engagement is effective.

Subtopic 1 – Definitions

TC Energy notes the CER's proposed amendment to the existing definition of decommission, and specifically its express applicability in instances "where the pipeline, or part of one, is located in a shared right-of-way, with other pipelines in active flowing service". Should the amendment occur as proposed, then for regulatory purposes, TC Energy plans to apply this definition in a manner that incorporates the broad definition of "pipeline" within the CER Act and with the effect of including co-located pipeline facilities and potentially within land dispositions other than rights-of-way.

Subtopic 2 – Duplication with Filing Manual Guide K

The objectives identified in subtopic 2 are already sufficiently addressed under the CER's Guide K filing requirements. Incorporating additional requirements in the OPR would be duplicative and increase regulatory complexity rather than improve functionality. For example, an objective included under subtopic 2 of the Topic Paper is to plan "decommissioning activities in a manner that is safe and restores the environment appropriately, recognizing there are other active pipelines in the right-of-way". Guide K of the Filing Manual outlines three key goals, two of which are "the proposed decommissioning will be carried out in a safe manner" and "potential environmental, socio-economic, lands, economic and financial effects are identified", and then goes on to outline detailed requirements to achieve those goals.

With respect to impacts to the rights and interests of Indigenous Peoples, TC Energy recommends introducing language to incorporate the consideration of the exercise or practice of rights and interests of Indigenous Peoples into section 6.5(1) of the OPR (see comments in cover document), and to introduce a new clause under the "General" section of the OPR to direct regulated companies to appropriately engage with potentially impacted Indigenous groups as required. This approach would be preferable to incorporating requirements throughout the various aspects of the OPR, as is proposed in multiple Topic Papers, including Topic Paper B.

Subtopic 3 – Management System Incorporation

TC Energy believes that incorporating changes to section 6.5 of the OPR to explicitly include decommissioned and abandoned pipelines is unnecessary. OPR Section 2 already indicates that the OPR applies to abandoned pipelines. Consequently, the Management System established under 6.1 applies throughout the entire lifecycle of a pipeline up to and including abandonment, noting that under appropriate circumstances, decommissioning

precedes abandonment. Additional wording would not improve the functionality of the OPR or enhance a regulated company's performance.

Subtopic 4 – Deactivation Notifications

TC Energy is generally supportive of transitioning deactivation from an application to a notification process.

Subtopic 5 – Surveillance and Monitoring

As noted in feedback on Topic Paper A, adding explicit references to Section 39 places disproportionate emphasis on a single component of a company's broader surveillance and monitoring programs. Given the l negligible risk posed by abandoned and decommissioned assets compared to operating assets, an explicit mention in Section 39 is not appropriate.

Additionally, surveillance of decommissioned and abandoned pipelines is already intrinsically included within Section 39 as abandonment is included in the scope of the Management System as per Section 2 of the OPR, negating the need for explicit reference.

Topic Paper C: OPR – Emergency Management

Effective emergency management requires clarity, consistency, and a strong focus on life safety. With this in mind, TC Energy would like to express a number of concerns in response to Topic Paper C – Emergency Management. The key themes reflected include the need to keep the OPR general and goal-based, the importance of a minimalist approach to the OPR update that avoids duplication, as well as the importance of flexibility and scalability with respect to Indigenous engagement.

Subtopic 1 – CSA Z246.2 — Incorporation by Reference

TC Energy recommends that if incorporation of CSA Z246.2 is advanced within the OPR, it should be incorporated by single reference akin to CSA Z662 rather than incorporating specific CSA Z246.2 clauses. This approach would allow for future updates to CSA Z246.2, without creating the risk of contradictory language within the OPR.

Subtopic 2 – Priorities to be Considered within the Emergency Management Program

TC Energy emphasizes the importance of clearly defined and widely understood terminology within the emergency management space. Any terminology adopted by the CER, whether through guidance documents or the OPR, should align with the terminology used more broadly within the Incident Command System (ICS) and by other regulators to ensure consistency and avoid confusion.

Specifically, TC Energy is concerned about the proposed modification of the term “safety of workers or the public” to “peoples” identified in subtopic 2. This proposed change could impact the prioritization of objectives during an emergency incident and the management of the response. Emergency response efforts must remain focused on life safety first, over the broader impacts that could result from an incident such as financial impacts. The existing terminology is well understood and ensures clarity in response prioritization, while the proposed change introduces ambiguity regarding the scope of protection and may create inconsistencies in risk assessment and decision-making processes.

Furthermore, TC Energy does not support the inclusion of historic and/or cultural sites to subsection 32(1) of the OPR. Emergency response already considers adverse environmental effects, which include potential impacts to known heritage or cultural resources. Singling out heritage and cultural resources within the OPR has the potential to skew the relative weighting of the factors considered when responding to an emergency, placing disproportionate emphasis on one consideration at the expense of others even where damage to others is a substantially greater risk.

Subtopic 3 – Consolidation of Current Regulatory Framework Requirements within the OPR

TC Energy encourages the CER to use the full range of regulatory tools available to provide guidance to regulated companies. While TC Energy supports consolidation and incorporation of existing emergency management program information (i.e., related regulatory requirements established through Commission directions and Miscellaneous Orders) into the OPR for ease of access and reference, TC Energy does not support incorporation

of guidance-based content currently contained in advisories, best practices and technical guidance into the OPR. TC Energy recommends that best practices and procedural details continue to be addressed through guidance documents and advisories, which can be updated more efficiently in response to industry advancements and evolving risks.

Moreover, and to the extent possible, existing requirement consolidation in the OPR should strive to avoid new prescriptive requirements and ensure that the OPR remains predominantly outcome-based, setting clear expectations for regulatory compliance while allowing regulated companies the flexibility to determine how best to meet those expectations relative the scope, scale and complexity of their operations.

Subtopics 4 – Liaison Activities and the Continuing Education Program

TC Energy finds that OPR sections 33-35 are already clear, well-structured, effective and concise, in outlining requirements for liaison activities, public awareness, and continuing education programs. TC Energy does not see the need for additional regulatory clarification, as the existing language supported by extensive content within the current OPR Guidance Notes already supports effective engagement and education initiatives. Furthermore, updating terminology without a substantive change in requirements will not enhance emergency preparedness or public awareness outcomes.

Subtopics 5 – Involvement of Indigenous Peoples in Emergency Management

TC Energy notes the proposed option in the subtopic does not clearly articulate its intent or how new requirements for Indigenous involvement in emergency management would be introduced –whether within the OPR or through a best practices document. There is concern regarding potential prescriptive requirements for engagement activities with Indigenous groups in the context of emergency management.

Prescriptive language reduces a regulated company's flexibility to address the specific circumstances of an incident response, taking into consideration the company’s established engagement processes and understanding of Indigenous group-specific interests and constraints. For example, an incident that could impact a nearby watercourse should trigger a different level of Indigenous involvement, than an incident that is confined to a facilities footprint with minimal environmental implications. Emergency management needs to provide process structure to facilitate appropriate incident response across a range of land uses and environments (for example an emergency response in a city or private agricultural land may involve different engagement considerations than an incident in accessible Crown land that Indigenous groups actively use). Introducing prescriptive requirements for engagement run counter to this need for adaptable, scalable process.

Prescriptive requirements can become administrative exercises rather than functional response processes, increasing the complexity of emergency response efforts. Emergency management must remain focused on ensuring efficient and effective response, while prioritizing safety and environmental protection. TC Energy engages with over 550 Indigenous groups across the collective footprint of its CER regulated pipeline systems and maintains a unified corporate wide Emergency Management Program. Efforts to incorporate Indigenous engagement into the Emergency Management Program must consider the practicability of the proposed requirement whether for small scale or large scale CER regulated systems.

TC Energy recommends that if deemed required, any considerations related to Indigenous involvement in emergency management be incorporated into guidance documents rather than the OPR itself.

Topic Paper D: OPR – Environmental Protection

TC Energy has a number of concerns in response to Topic Paper D – Environmental Protection. The key themes reflected include the need for the OPR to remain general and predominately goal-based, implications for competitiveness, the importance of a minimalist approach to the OPR update, the importance avoiding duplicative requirements, the practicality of the proposed changes, the appropriateness throughout the asset lifecycle, and the importance of maintaining flexibility with respect to Indigenous engagement requirements.

Subtopic 1 – Duty to Report and Manage Contamination

Upon review and discussion with CER staff, TC Energy understands that there is no regulatory gap with respect to contamination within the existing regulation or guidance documents that requires further amendment. While the existing OPR does not specifically use the term "contamination", the CER Remediation Process Guide clearly outlines the framework, elements and requirements for contamination management across the lifecycle of facilities and explains how these requirements align with the OPR. The CER Remediation Process Guide provides clear objectives and process for the management of contamination over the lifecycle of regulated facilities, promotes a precautionary approach and includes clear requirements for reporting contamination (Section 6) to address the content raised in subtopic 1.

Furthermore, it appears that the preamble content inaccurately identifies that there is no requirement to report contamination unless it is caused by a reportable incident, as the CER Remediation Process Guide provides clear requirements in section 6.1. In addition, regulated companies remain obligated under provincial or territorial legislation to report incidents of contamination within their respective jurisdiction.

TC Energy believes that regulations should remain general and goal-oriented; with guidance documents such as the CER Remediation Process Guide serving as the appropriate mechanism for imparting objectives and requirements.

Subtopic 2 – Section 21 of the OPR: Reclamation, Vegetation Management, and Restoration

TC Energy recognizes the need to reclaim disturbances that result from its activities and manage vegetation within the footprint over the lifecycle of all facilities. However, it emphasizes the importance of keeping OPR requirements goal-oriented and flexible, while providing direction through guidance documents. TC Energy believes that the proposed options for revising Section 21 are far too detailed to be incorporated into a goal-oriented regulatory instrument, such as the OPR. If there is a current gap the CER is trying to address in terms of compliance, this gap should be addressed through guidance documents developed collaboratively with industry and other stakeholders.

TC Energy notes that engagement, for both Indigenous groups and landowners, is already required for facilities that require a formal application, including abandonment applications. This engagement influences the setting of reclamation targets, activities and locations, as applicable. Engagement is a key element of the regulatory process and informs the environmental and socio-economic assessment and resultant environmental protection plan (EPP). However, engagement for planned activities needs to be project specific and focused on the

approach to achieving the goals set out in the OPR. It is not possible nor appropriate for the OPR to provide overarching and functional detailed goals and objectives applicable to all potential facilities, locations, and affected parties over the lifecycle of a regulated facility. Further, it is important to distinguish that on privately owned land, landowner rights and interests in the use of their property must also be considered, which may influence the objectives and criteria applied on their land and could conflict with the detailed requirement proposed by the CER. For example, if a landowner did not want a ROW through treed areas to be replanted with trees because they use it for access, or where they wish a meter station graveled pad to remain as is so they can make use of it, such interests may conflict with CER requirements.

Regarding the suggested use of the term "restoration" relating to abandonment, TC Energy has concerns with the definition provided by the CER. In practice, restoration is typically associated with critical habitat, as defined in approvals or permits conditions. At abandonment, the majority of areas of disturbance are reclaimed and allowed to naturally revegetate. Post-construction monitoring is undertaken per normal practice. Restoration would be limited to a more active method such as tree planting and would be reserved for areas such as caribou critical habitat. If the intent is to increase the expectation of active restoration of full rights-of-way at abandonment, this would represent a significant shift from current practice, substantially increasing abandonment costs that would ultimately impact shippers, and the public. TC Energy recommends maintaining the term reclamation for general use and reserving use of the term restoration for that which pertains to active measures for critical habitat or other site-specific applications of enhanced recovery measures.

While only noted in the preamble for the subtopic, TC Energy stresses that regional cumulative effects cannot and should not be addressed through site-specific reclamation goals and objectives. Restoring land to current land use in respect of a single asset should not be expected to address cumulative effects that multiple projects may have had over long periods of time. Managing regional cumulative effects is the jurisdiction of the appropriate regulatory body or government to address and is not the responsibility of individual regulated companies whose contribution to cumulative effects, and ability to address them through restoration of its assets, is negligible. Similarly, reclamation of a facility footprint to historical land use without regard for current adjacent land use would not be effective, practical or achieve the intended results in the absence of government-led regional efforts and programs. Fragmented efforts will not be effective. Further, it is not logical to set reclamation targets based on pre-facility land use and assume that over the life of a facility that land use remains consistent; given a typical 30-year, 50-year or longer lifecycle, it is possible that surrounding land use will have changed. Reclamation upon abandonment must reflect adjacent land use at the time of abandonment, and where applicable, reflect landowner interests.

Subtopic 3 – Section 21 of the OPR – Participation in Development of Environmental Monitoring by Indigenous Peoples

While TC Energy acknowledges Indigenous groups' interests and unique perspectives compared to conventional Western science, it maintains that Indigenous involvement in monitoring activities should focus on key activities or stages in a facility life-cycle (for example post-construction reclamation) and should be determined on a case-by-case basis, depending on the project being reviewed through a CER filing application, and negotiated between Indigenous groups and regulated companies. It is not appropriate to introduce requirements or

guidance pertaining to Indigenous participation in monitoring into the OPR or to assume universal applicability of Indigenous monitoring through CER guidance materials.

Involvement is best developed as an extension of project engagement activities which reflects the interests and capacities of the Indigenous groups engaged, as well as the nature, scope, and location of the project in question. Not all projects necessarily warrant Indigenous monitoring, such as projects within existing facilities, brownfield locations, or in an urban setting. In TC Energy's experience projects on private land do not support extensive Indigenous participation opportunities due to landowner access concerns and TC Energy does not have the right to grant such access. Similarly, Indigenous monitoring within existing facilities, would not be appropriate due to the typically altered and unvegetated conditions, as well as concerns relating to safety. Given that pipelines are generally maintained without modification during operation, there is limited opportunity for Indigenous involvement. In the absence of changing conditions, monitoring is not warranted during operation and should not be mandated in guidance or conditions from the CER.

TC Energy has explored many means of including Indigenous interests in construction and is actively involved with Indigenous post-construction monitoring efforts on some projects. It is important to recognize that Indigenous involvement is evolving and will continue to evolve. It does not and should not look the same for every regulated company, every project or for every Indigenous group.

TC Energy's experience with Indigenous post-construction monitoring activities is that self-directed opportunities provide the level of independence and focus that many Indigenous groups prefer. It remains the prerogative of Indigenous groups to share information with the proponent and the CER as they deem appropriate. This separation between company and Indigenous groups allows a balance between what a proponent must achieve in terms of technical parameters which must be reported to CER and what is of importance to Indigenous Peoples, which may or may not be shared with the company and/or the CER. Where Indigenous inputs are shared, ongoing engagement can develop appropriate responses and actions.

It is also important to note that there are substantial costs associated with funding and facilitating Indigenous monitoring programs, costs that are not imposed under other regulatory regimes, making CER regulated pipelines less competitive compared to those under other jurisdictions. Extensive participation by Indigenous people in monitoring activities may not be reasonably practicable under some circumstances and may not be possible at all under others. Participation of dozens of unique groups, sometimes with different and opposing interests and concerns, in the development, implementation and monitoring of reclamation activities is not realistic. A large number of Indigenous groups are typically engaged on any given project (typically TC Energy sees between 20 to 50 groups identified by CER). While in recent years TC Energy has engaged dozens of Indigenous groups on numerous projects, funding monitoring programs for all Indigenous groups on all projects would be cost prohibitive. Funding ongoing monitoring of operational assets, which remain static in condition over decades, would similarly be cost prohibitive while also providing no demonstrated benefit. Further, reclamation monitoring or other monitoring programs that have large numbers of groups conducting independent ground studies increases traffic, creates safety risks, and the associated risk of physical and sensory disturbance would be counterproductive to reclamation targets and conflicts with access control measures implemented. Reclamation monitoring is intentionally designed to have a low impact in order to effectively monitor reclamation success without causing disturbance.

Subtopic 4 – Environmental Protection Plan Required for Construction and Operation and Maintenance Activities

TC Energy is concerned with the proposed shift in focus away from the lifecycle based environmental protection found in the Environmental Protection Program (EP Program) and onto an operation phase Environment Protection Plan (EPP) with this subtopic. While EPPs are an important work aid under an EP Program, they are not an appropriate tool, nor the only tool, available during the operations phase. An appropriately developed EP Program, as required under Section 48 of the OPR, already includes the necessary tools and systems to manage environmental protection through the lifecycle of facilities, accounting for a wide variety of assets and diverse geography. TC Energy does not see a regulatory gap in the existing framework that needs to be addressed.

At TC Energy, operations and maintenance entails a range of activities for a large number of assets located across the country. Environmental operating procedures and guidelines exist and include a range of scalable work aids to ensure planning and execution of operations and maintenance activities in compliance with provincial/territorial and federal legislation, as well as enduring commitments and best practices. Where activities of appropriate scope or scale are planned, such as integrity programs, a specific EPP is prepared as one of the available work aids reflective of the scale and detail warranted. Where tasks do not warrant a full EPP, other tools compliant with the EP Program such as checklists are leveraged.

Due to the number of facilities, range of activities, breadth of regions, overlapping provincial/territorial jurisdictions and available established work aids compliant with TC Energy's EP Program, the development of a comprehensive operations EPP would be costly, inefficient, and challenging to manage while not adding anything new to what TC Energy already does. Companies must have the flexibility to determine within the scope of their operations and maintenance activities which environmental protection tools best maintain compliance with their EP Program and, by extension, Section 48 of the OPR, while providing effective direction to personnel engaged in operations and maintenance activities.

For additional feedback on this subtopic, please refer to TC Energy's response to the changes being proposed in Topic Paper K, subtopic 2.3.

Subtopic 5 – Construction to Operations and Sale or Transfer of Assets Transition Plans

A legislated process requirement to ensure regulated companies transfer relevant information, environmental or otherwise, either between construction and operations or upon the sale or transfer of an asset is not needed. With respect to the transfer of information from construction to operations, the OPR already requires, under *S*ection 6.1 – Management System, that a management system be comprehensive, apply to all company activities involving a pipeline, and ensure coordination between programs. TC Energy has well-established processes to transfer key information and enduring commitments from construction to regional teams responsible for operations and maintenance.

There is a significant concern that additional prescriptive requirements for information transfer, particularly if not carefully worded, will result in precautionary retention of large volumes of non-relevant data, such as routine emails or outdated documentation.

With regards to asset sales, guidance on the information that needs to be transferred between parties engaged in an asset sale is already found in Guide R of the Filing Manual. Furthermore, OPR Section 6.5 outlines key information that supports the transfer of asset information internally and can also be leveraged in sales or transfers. These requirements include:

- subsection (m) that specifies the need for a process to communicate key information,
- subsection (n) that specifies a process for identifying key documents,
- subsection (p) that requires a process for retaining and maintaining records, and
- subsection (q) that requires a process to coordinate and control operational activities.

Subtopic 6 – Climate Resiliency

TC Energy's pipelines are already designed and engineered to applicable standards to maintain resiliency against external forces, including extreme weather events. Facilities are continually monitored throughout their operation, and asset inspections are conducted following extreme events such as floods or fires to ensure ongoing integrity and safe operation.

The CER is introducing an undefined and unlimited concept in the requirement by proposing that companies "assess climate related risks on a continual basis". The nature of these continual assessments are not defined and as result, this requirement could impose significant costs, negatively impacting the competitiveness of CER regulated companies and their customers**.**

It should also be noted that many climate resiliency measures require larger footprints, such as expanded tree clearing around compressor stations to act as fire breaks or wider construction rights-of-way to accommodate the excavation of deeper trenches for pipeline installations. Climate resiliency awareness is important, but the magnitude and likelihood of risk needs to be considered when determining the chosen response. Depending on what actions may be required in terms of design, construction, maintenance, inspection and continual assessment, there could be increases to the potential adverse effects of a project and substantial costs associated with these measures.

Subtopic 7 – Incorporation of ISO Environmental Standards

TC Energy has a well-developed and mature EP Program that is tailored to its specific assets, regulatory requirements and operational experience. It is unclear why ISO 140001 standards would be an appropriate framework for guiding the development of CER regulated EP Programs. If CER has identified consistent and material gaps in the EP Programs of regulated companies, it would be more appropriate to clearly address those gaps through clarification within CER guidance materials. A wholesale rework of management programs that have been developed over decades, and which embody substantial investments by TC Energy and other regulated companies, is not warranted. Any investment to realign existing programs and the ongoing cost of recurrent audits by ISO to maintain certification could be onerous and would impose unnecessary changes and risks to systems that are functioning well.

Also of note, while environmental hazards, risks and impacts are one aspect of a comprehensive management system, ISO 140001 is not reflective of all of the elements covered by a comprehensive management system Refer to TC Energy's response to Topic Paper F for additional context on management system requirements.

Topic Paper E: OPR -Human and Organizational Factors

The key themes reflected in Topic Paper E comments include the need for the OPR to remain general and flexible, and questioning the practicability of the proposed changes.

Workplace System Understanding and Improvement

TC Energy supports the evolution of safety to include Human and Organizational Factors (HOF) to improve continual learning and develop a more holistic understanding of workplace systems, contributing factors, and their intersections in preventing harm, though feels its incorporation into the OPR is premature. While TC Energy supports the inclusion of HOF, it is recognized that this evolution requires raising awareness, education, leadership support, and a significant mindset change before aligning existing processes to include HOF as the proposed options would require.

The meaningful integration of HOF into organizational practices is a complex and gradual process that demands significant investment of time and resources, as well as fundamental shift in organizational mindset. Raising awareness and educating personnel on HOF is a critical prerequisite to implementation, which would include aligning existing processes to HOF. It's crucial to acknowledge that this new approach may not garner universal agreement across all levels of an organization, and there might be initial resistance or lack of understanding, potentially slowing adoption.

TC Energy suggests the proposed changes and introducing HOF inclusions be made through guidance, as opposed to through regulation, similar to the approach taken with CSA EXP16:22 Human and Organizational Factors for Optimal Pipeline Performance. Many companies, including TC Energy, are already progressing along their HOF journey and a gradual, guidance-based approach will allow companies to develop their HOF capabilities over time. This approach will help ensure a more thoughtful, effective and sustainable integration of HOF principles across the industry.

Strengthening Organizational Learning

TC Energy does not support including facilitated organizational learning as an outcome for multiple protection programs without a clear understanding of what compliance would entail. Demonstrating effectiveness and documenting progress will be challenging, if not unachievable, as human factors and safety culture are not always tangible or quantifiable, and socio-technical hazards are difficult to observe as compared to physical hazards.

TC Energy does support learning from external industry events to prevent harm, however and suggests that the CER could play a central role in facilitating these learning opportunities and sharing materials effectively across the industry.

Topic Paper F: OPR – Management System and Contractor Management

Topic Paper F comments include TC Energy's recommendations related to Management Systems, as well as themes including the need for the OPR to remain flexible and predominately goal-based, avoids duplicative requirements, and the importance of a minimalist update to OPR.

Management System

The CER has requested feedback on proposed changes to the management system and protection program requirements in sections 6.1 through 6.6 of the OPR.

Over the past few years, TC Energy has been transforming its management system. During this process, the company identified several concepts within the OPR that, if revised, could significantly reduce confusion and improve clarity regarding protection program requirements and their relationship to the broader management system.

As a company that has addressed many related questions from stakeholders and has an evolving management system aligned with industry best practices, TC Energy can provide valuable insights in response to the Topic Paper's discussion questions.

F1. Industry Best Practices

The International Association of Oil and Gas Producers (IOGP) Report No. 510 – June 2014 – Operating Management System Framework

The IOGP Operating Management System Framework provides a structured and systematic approach to managing operational risks and enhancing performance in the energy sector. It is built on the core principles of leadership, risk management, continuous improvement, and implementation, and consists of ten key elements. Together, these principles and elements form the foundation of an effective management system, enabling companies to proactively identify and control risks while ensuring safe, reliable, and environmentally responsible operations

IOGP Report No. 511 – June 2014 – OMS in practice

As a supplement to the Operating Management System Framework, the IOGP Report No. 511 provides real-world applications and case studies, demonstrating how companies can develop, implement, and sustain an effective management system.

While this framework does not explicitly include protection programs, it fully incorporates the fundamental considerations of OPR section 55 programs within its elements. This approach leads to a more coherent and cohesive management system, enabling scalability and allowing organizations to apply it seamlessly across various jurisdictions and operational contexts.

The cross-jurisdictional and contextual adaptability of this framework is a key reason why many integrated energy companies adopt the concepts outlined in the IOGP framework to manage the differences between their lines of business and operating locales.

F2. Opportunities to Improve Alignment

Management System vs. Programs

Section 6.1 (1) of the OPR states that "*A company shall establish, implement and maintain a management system that […] applies to the company's activities involving the design, construction, operation or abandonment of a pipeline and to the programs referred to in section 55".*

The wording of this requirement may be interpreted as indicating that the OPR section 55 programs exist as standalone entities, independent from the management system, and that the system merely "applies to" these programs rather than fully integrating them as inherent components of a unified and cohesive management system framework. The potential misinterpretation stems from the phrase "applies to", which could be read as implying a top-down application of the management system onto pre-existing programs rather than treating them as fundamental elements within the system itself.

For greater clarity and alignment with the industry best practice, as outlined in the response to question F1, OPR section 55 programs could be reframed as risk areas that are embedded within the management system rather than as independent systems. From a risk management perspective, this proposed reframing is based on the understanding that the OPR section 55 programs function as preventative and mitigative barriers within a management system. Integrity, damage prevention, environmental protection, and safety serve as preventative barriers that help minimize the likelihood of incidents occurring. Meanwhile, security is best understood as a risk area because a security event is not inherently harmful itself but may lead to another event that causes harm (e.g., vandalism leading to a leak). And lastly, emergency management serves as a mitigative barrier, designed to respond to and minimize the impact of incidents when they occur.

To reframe the concept of programs as integrated risk areas, would shift the focus from the mere requirement to have "programs" toward emphasizing the intended outcomes of these programs. Rather than simply mandating that companies establish distinct programs; the requirement could instead highlight the need for proper risk controls that anticipate and manage internal and external integrity of the pipe.

Asset Lifecycle vs. Programs

Section 6.1 (1) of the OPR states that "A company shall establish, implement and maintain a management system that […] applies to the company's activities involving the design, construction, operation or abandonment of a pipeline and to the programs referred to in section 55".

The current wording differentiates the section 55 programs from the asset lifecycle, implying that program-related activities are separate requirements rather than integral considerations within the key lifecycle stages of design, construction, operation, and abandonment. This distinction may lead to the misinterpretation that companies must implement program-specific actions in addition to lifecycle activities, rather than embedding program requirements within the lifecycle process.

To ensure alignment with the industry best practice, as outlined in response to question F1, there may be an opportunity to explicitly state that the management system should inherently integrate the risk considerations associated with the current section 55 program areas at all stages of the asset lifecycle.

Definition of a Program

The CER through the OPR Guidance Notes defines a program as "a documented set of processes and procedures designed to regularly accomplish a result. A program outlines how plans, processes, and procedures are linked, and how each one contributes toward the result. Program planning and evaluation are conducted regularly to check that the program is achieving intended results."

This definition closely resembles the accepted industry definition of a management system. The IOGP Operating Management System Framework defines a management system as "a structured and documented set of interdependent practices, process and procedures used by the managers and the workforce at every level in a company to plan, direct and execute activities."

The similarity between these definitions creates ambiguity regarding the relationship between programs and the overarching management system. Historically, this lack of clarity has resulted in programs evolving into standalone management systems, rather than serving as integrated components within a unified OMS framework. This fragmentation undermines the efficiency of risk management by creating parallel systems rather than a cohesive structure.

To resolve this confusion, there may be an opportunity to reframe the OPR section 55 programs as risk areas within a management system, rather than treating them as independent systems. This shift in perspective aligns with the industry best practice by ensuring that programs function as embedded components within a holistic, integrated management system rather than operating in silos.

Management System Processes

Section 6.5 (1) of OPR provides a list of processes that a company must establish as part of its management system and section 55 programs. However, many of the listed processes are not independent processes but rather components of broader, integrated processes.

For example, several of the requirements in section 6.5 (1) are actually sub-components of a higher-level risk management process and should be viewed holistically rather than in isolation:

- […] **(c)** establish and implement a process for identifying and analyzing all hazards and potential hazards;
- **(d)** establish and maintain an inventory of the identified hazards and potential hazards;
- **(e)** establish and implement a process for evaluating the risks associated with the identified hazards and potential hazards, including the risks related to normal and abnormal operating conditions;
- **(f)** establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards, potential hazards and risks and for communicating those controls to anyone who is exposed to the risks […].

To enhance clarity and alignment with the industry best practice, there may be an opportunity to narrow/group the processes outlined in section 6.5 (1) in a way that reflects the element-level structure of an integrated management system, as described in the response to question F1.

F4. Provisions in the OPR that Require Clarification

Use of the Term Programs

The OPR refers to multiple "programs" beyond those listed under "section 55 programs", including "training program", "quality assurance program", "joining program", etc. This inconsistency in terminology may create ambiguity about whether these programs function independently, fall under the management system's scope, or require separate compliance approaches.

Reframing the OPR section 55 programs as risk areas within an overarching management system will help address the confusion as it pertains to the OPR section 55 program language. See the F2 response for more information on the proposed solution.

F5. Feedback on maintaining an up-to-date list

In section 6.5(1)(n) of the OPR, there is an existing requirement to establish and implement a process for identifying the necessary documents to meet obligations under section 6. Rather than adding new prescriptive requirements, such as a static list, TC Energy recommends that the CER maintain the current performance-based requirement. This approach allows companies the flexibility to adopt solutions that are fit-for-purpose based on their scale and complexity.

F6. Alternatives to a list

As an alternative, TC Energy suggests allowing flexibility so that companies can adopt solutions that are fit-for-purpose. A large, regulated company, such as TC Energy, can meet this requirement through a structured, up-to-date document management system that includes clear hierarchical parent-child relationships between policies, processes, and procedures, and ties to relevant elements of the overarching management system framework.

For smaller companies, flexibility should be provided to adopt solutions that ensure they can effectively meet the requirement without undue burden.

F7. Opportunities to Improve Scalability

To improve scalability, OPR section 55 “programs” could be integrated into the management system as risk areas, rather than being treated as separate systems. See the F2 response for more information on the proposed solution.

F8. Any other suggested additions, deletions, or other changes

TC Energy recommends strengthening the language to more explicitly outline the desired outcomes of a management system. The current requirements in section 6.1 focus on establishing, implementing, and maintaining a management system but do not explicitly state the purpose and intended impact of such a system in mitigating risks.

An integrated management system should be designed to anticipate, evaluate, and mitigate potential harm to people, assets, the environment, and communities throughout all phases of pipeline activities, including design, construction, operation, and abandonment. By incorporating clear language that reinforces these objectives, there is an opportunity to provide stronger guidance on how a management system should function as a proactive risk management tool, rather than just a compliance requirement.

This addition would align with the industry best practice, ensuring that companies integrate risk-based decision-making and continuous improvement into their management systems. It would also promote a more holistic and outcome-driven approach, emphasizing that the goal of a management system is to systematically prevent harm while supporting operational excellence and regulatory compliance.

F9. Use of “Quality assurance program”

Yes. The use of the term "quality assurance program" in two different contexts within the OPR creates ambiguity and potential confusion.

On a broader level, the confusion arises because the term “program” is used as a broad catch-all phrase, without clear differentiation between its specific applications.

To eliminate confusion, there is an opportunity to move away from using the term "program" as a generic label and instead clearly define the intended outcome of each requirement.

See the F2 response for more information on the proposed solution for reframing the program language as it pertains to the section 55 programs.

F10. Alignment of Programs to the Management System

As noted in response to question F2, the existing wording implies that the OPR section 55 programs are separate or distinct from the management system, rather than being seen as integrated components within it.

To resolve this confusion, reframing programs as risk areas within the management system would provide a clearer and more structured approach. See the F2 response for more information on the proposed solution.

Summary

TC Energy believes the most significant opportunity to improve sections 6.1 - 6.6 of the OPR is to clarify the intent of the OPR section 55 programs and reframe them as risk areas within the overarching management system, rather than as independent systems that the management system merely "applies to."

This proposed reframing aligns with the industry best practice and would help ensure these risk areas are effectively managed and integrated within the management system The current structure can undermine the efficiency of risk management by creating parallel systems rather than a cohesive, integrated framework. It is this inefficiency which is perceived as burdensome to companies, regardless of the scope and scale of their operations. It also reflects the concern about the potential addition of new programs, because of the perceived administrative burden that accompanies the associated organizational structures. Considering additional “risk areas” vs. programs allows for the inclusion of additional areas of potential impact of a company’s operations and requires them to adequately assess and mitigate those risks within their already established processes.

By reframing the section 55 programs as embedded risk areas within an overarching management system, the regulations would better reflect a holistic, risk-based approach to managing pipeline activities. This shift in perspective is based on TC Energy’s own experience navigating a similar transformation as part of its management system evolution.

Contractor Management

TC Energy does not support adding an explicit requirement for a contractor management process within the OPR.

Currently, Section 5 of the CER Management System Requirements and CER Management System Audit Guide provides companies guidance on the obligations under Sections 18, 20, 54, 29 and 30 of the OPR and the expectation to “establish clear and explicit roles and responsibilities for both its employees and those working on behalf of the company”.

In addition, TC Energy believes that the requirements referenced in CSA Z662:23 Clause 3.1.2 c) iii) provide the flexibility for companies to identify the applicable and appropriate elements that need to be considered for contractor management based on the scale, scope, complexity and associated risks of the work being performed or services provided, as follows:

> *“The safety and loss management system shall cover the life cycle of the pipeline system and shall include the following elements: c) a process for the management of resources, including iii) contractor selection and performance monitoring that ensures services are performed in a manner that conforms to the requirements of the safety and loss management system.”*

Developing technical guidance in alignment to the guidance in CSA Z662:23 Annex A.4.2.2 Contractor Services would allow companies and their contractors to develop a consistent and repeatable multi-jurisdictional approach, given that certain jurisdictions (e.g., BCER) specify that Annex A is a mandatory requirement.

Risk-Based Contractor Oversight

TC Energy does not support defining prescriptive elements of an effective contractor management process, as contemplated in the Topic Paper. While minimum standards for contractor management are well established under TC Energy's existing internal processes and procedures, TC Energy maintains that the degree of contractor oversight should be fit-for-purpose and commensurate with the type, frequency, duration and risk associated with the work being performed or service(s) provided.

Overly prescriptive contractor oversight requirements or extensive requirements for low-risk activities can limit the ability to include local and Indigenous contractors in projects. These contracts can form an integral component of economic reconciliation efforts, providing significant benefits to local communities through job creation and economic development. By allowing for flexibility in oversight based on risk, proponents can ensure that local and Indigenous contractors are not unduly burdened, enabling their participation and supporting broader economic and social goals.

Topic Paper G: OPR – Pipeline Integrity

TC Energy has a number of concerns in response to Topic Paper G – Pipeline Integrity. The key themes reflected include the need for the OPR to remain general and predominately goal-based, the importance of a minimalist approach to the OPR update that avoids duplication, implications for competitiveness, and the practicality of the proposed changes.

General Concern: OPR, CSA Z662 and the Filing Manual

TC Energy is concerned that the CER is proposing to introduce prescriptive requirements within OPR that could supersede and/or contradict the requirements of the pipeline industry's consensus standard CSA Z662 *Oil and Gas Pipeline Systems*.

Similarly, TC Energy is concerned that the CER is proposing to introduce specific project-related requirements within the OPR that would be better suited for the existing Filing Manual that already contains numerous requirements of similar magnitude and importance.

TC Energy recommends that the CER assess whether any of the proposed options are better suited to CSA Z662 or the Filing Manual, particularly those that introduce prescriptive requirements. Additionally, TC Energy urges the CER to minimize duplication and potential contradiction or inconsistency across the three regulatory documents. While the OPR expressly governs its inconsistency with CSA Z662, any actual or apparent inconsistency between requirements and the extent of such inconsistency, risks resulting in confusion, uncertainty, and ultimately, inefficiency, which TC Energy submits is preventable.

Subtopic 2 – Use of Technologies for Which No Standard is Set Out in the OPR

The proposed addition, as described, could ultimately decrease the safety of the pipeline industry by hindering and restricting innovation and creating an administrative burden for both regulated companies and the CER.

Concern 1: Lack of Clarity and Regulatory Uncertainty Around Notification Requirement

The proposed notification process for new technologies, outlined in the first bullet of the proposed option, lacks certainty regarding timelines and process. TC Energy is concerned that a lengthy or uncertain notification process could hinder the adoption and testing of new technologies.

TC Energy believes that the second bullet of the proposed option presents a more reasonable and practical approach to ensuring that regulated companies consider new technologies within their operations while keeping pipeline integrity at the forefront of any decision-making process. This approach avoids introducing an unnecessary notification period yet helps ensure rigour in the decision-making process.

If the CER's concern is staying informed on new technologies, there are already established mechanisms to achieve this without introducing a notification process. Currently, all large, regulated companies hold an annual information exchange meeting with the CER. The use of new technologies could be formally added as a standing agenda item to these meetings. TC Energy supports this approach and would be willing to share insights on new technologies and other innovative approaches with the CER during these meetings.

Concern 2: Minimal Limitations on Which New Technologies Would Require Notification

The proposed option does not clearly define the scope of new technologies subject to notification, potentially covering even new technologies that has no impact on pipeline integrity. For example, a Regulated Company implementing a new human resources software, which qualifies as a "new technology" could be required to submit a notification to the CER. TC Energy believes this is not the CER's intent.

Similarly, the proposed option does not define "new technology". In many cases, technology improvements are incremental to existing processes and technologies. Without a clear definition of "new technology" that contemplates small incremental improvements vs. large step changes, the proposed option will result in confusion and administrative burden.

At minimum, TC Energy recommends that additional limitations be added such that the scope of the requirement is limited to: 1) situations where new technologies are being relied upon to make an integrity decision, and 2) situations where a failure of the new technology could result in the loss of containment or other significant event (e.g. new technology is relied upon as primary barrier). These limitations would promote the development and implementation of innovation by allowing regulated companies to trial new technologies where there is no material consequences should the technology fail or not operate as intended.

Subtopic 6 – Definitions Connected to Operating Pressures

At this time, TC Energy believes that the current OPR definitions associated with MOP are appropriate and clear, and do not require amendment.

Contrary to the CER's stated objective, the proposed definitions of Maximum Operating Pressure (MOP) will likely introduce significant confusion, as they overlap with or contradict well-established pressure definitions established in pipeline standards, codes and regulations from other jurisdictions. Without careful alignment with the requirements of CSA Z662-23 the proposed option could lead to unintended consequences that could negatively impact pipeline safety. TC Energy urges the CER to remain consistent with existing proven definitions and standards.

Concern 1: Potential for Confusion Between Approved and Amended Operating Pressure

Across North America, all jurisdictions require a pipeline or facility (asset) to have a documented MOP[1]. The introduction of an Amended Maximum Operating Pressure could result in pipelines or facilities having two "maximum operating pressures".

From a human factors' perspective, it is conceivable that an individual familiar with other jurisdictions (e.g. Alberta, BC, USA, etc.) could mistakenly utilize an asset's Approved Maximum Operating Pressure, instead of the asset's Amended Maximum Operating Pressure. This mistake could have material safety consequences given that the Approved Maximum Operating Pressure would always be higher than the Amended Maximum Operating Pressure. TC Energy strongly recommends that the CER not change the well-established industry definition around an asset's maximum operating pressure to avoid introducing unnecessary complexity and risk.

[1] Referred to as Maximum Allowable Operating Pressure (MAOP) in USA regulations and standards.

Concern 2: Potential Compliance and Safety Issues for Qualified Maximum Operating Pressure

TC Energy is unclear on what would constitute a Qualified Maximum Operating Pressure. During the CER's OPR Review Industry Technical Engagement Workshop on January 9, 2025, CER staff indicated that a short-term pressure restriction due to a reported inline inspection (ILI) feature or potential line strike would be considered the Qualified Maximum Operating Pressure.

If this is the case, the proposed option must carefully account for the relationship between the Qualified Maximum Operating Pressure and the requirements of CSA Z662-23 Clause 4.18 for pressure control and overpressure protection.

If short-term pressure restrictions are considered Qualified Maximum Operating Pressures and are not exempt from CSA Z662-23 pressure control and overpressure protection requirements, regulated companies would be non-compliant when implementing needed pressure restrictions. This is because there would be a significant time lag between implementing the pressure restriction and altering pressure control and overpressure protection.

Attempting to put prescriptive timelines on this time lag would be fraught with difficulty as lead times for pressure relief valves and other overpressure protection devices vary from weeks to many months.

Stocking the range of overpressure protection devices would be impractical as regulated companies would need to stock a unique device for each diameter and potential pressure, which would result in the need to manage an inventory of tens of thousands of overpressure protection devices.

Furthermore, introducing requirements that introduce constraints around implementing immediate or short-term pressure restrictions could result in disincentives for regulated companies to implement such pressure restrictions, which could in turn have a negative impact on pipeline safety.

Topic Paper H: OPR – Reporting Harm

TC Energy views the majority of the proposed changes in Topic Paper H as unnecessary and administratively burdensome for both the CER and regulated companies. In general, definitions and reporting requirements are clear, and gaps or deficiencies are not evident to TC Energy. In fact, the CER very recently released its updated reporting guidelines after lengthy and detailed consultation with industry and stakeholders. TC Energy asks that the CER maintain the existing guidelines that it just released rather than engaging in another round of reviews, consultation and changes without allowing the new guidelines to be tested.

The Topic Paper does not provide quantitative or qualitative evidence to support the increased reporting requirements being contemplated and does not demonstrate how these proposed incremental reporting requirements would improve either the CER's oversight of regulated companies or the safety of regulated company activities. TC Energy's feedback on the subtopics area are as follows, and reflect the key themes of taking a minimalist approach to the OPR update, avoiding duplicative requirements, impacts to competitiveness, and the importance of keeping the OPR general and flexible:

Subtopic 1 – Definition of Incident — General

While subtopic 1 proposes to amend the definition of "incident" in the OPR, TC Energy finds the existing OPR definition to be clear, appropriate, inclusive and not requiring revision.

Subtopic 2 – Environmental Effects

TC Energy has experienced interpretation challenges where effects-based environmental incidents are treated as being occurrence-based within accompanying reporting guidelines. To the extent clarity on this and other related issues is pursued through a risk/decision matrix for environmental effects TC Energy would encourage the CER to work with industry in developing this tool to ensure it is scalable and adaptable enough to account for the variability among companies, assets, regions and potential scenarios. Establishing a tool that lacks necessary and practical flexibility will ultimately not add the intended value.

Subtopic 3 – Definition of Incident — Loss of Operational View and Control

TC Energy is not opposed to the introduction of notification to the CER for security related incidents as contemplated in subtopic 3. TC Energy notes however that clear definitions or guidance for what constitutes "loss of operational view" as contemplated in the Topic Paper will be necessary to ensure reporting requirements focus on incidents with high potential consequences.

Subtopic 4 – Definition of Incident — Release of Substance Thresholds

Subtopic 4 contemplates changing reporting thresholds on Low Vapor Pressure (LVP) and High Vapor Pressure (HVP) within OPR. The current reporting thresholds for LVP and HVP are already very low (1.5m^3 for LVP and in the case of HVP includes any unintended or uncontrolled release). It is unclear what lowering the thresholds would achieve given lower volumes represent even lower potential consequences of the release to people, property, the environment and a reduced probability of escalation.

Subtopic 5 – Reporting — High-Potential Near Misses

With regard to subtopic 5, suggesting an OPR requirement to report high-potential near misses is problematic because: 1) the OPR is not an appropriate mechanism for CER to gain visibility for "learnings"; 2) perceptions of high-potential near misses can vary and arguably all near misses would then be required to be reported, and 3) this would create a substantial administrative and cost burden to both regulated companies and the CER.

Subtopic 6 – Reporting — Information Sharing

If the CER wishes to develop a safety forum outside of regulations to promote shared learnings between regulated companies, that initiative could leverage voluntary participation and information sharing in keeping with subtopic 6.

Subtopic 7 – Reporting — Sites of Historic and Cultural Significance

With respect to subtopic 7, the Topic Paper is vague about adding new reporting requirements relating to the damage of sites of historic or cultural significance. In parallel with the OPR Review, CER hosted a virtual industry workshop on February 14, 2025, expanding on the concepts suggested in subtopic 7. Workshop materials provided a more detailed perspective of the topics and scope CER was considering in relation to heritage resources and Indigenous sites of significance.

Regarding the Topic Paper's express objective, TC Energy confirms that its CER regulated companies –- are sensitive to, aware of and strive to take all reasonable steps to be protective of historic or cultural sites of significance to Indigenous Peoples.

TC Energy notes that the management of heritage resources falls under provincial/territorial jurisdiction, except when sites are located on federal land. The latter circumstance is rare and is typically addressed through engagement with Parks Canada, which serves as an advisor to federal agencies. Indigenous ceremonial or culturally significant sites may be viewed separately or as a subset of heritage sites but are generally addressed through a combination of Indigenous engagement and/or provincial/territorial heritage resource management agencies.

TC Energy firmly submits that oversight and management of heritage resources should remain with the appropriate provincial/territorial jurisdiction and that additional CER oversight is not appropriate. Inclusion of any requirements pertaining to heritage resources do not belong in the OPR, nor should prescriptive guidance be provided through the Filing Manual or other guidance documents. TC Energy has experience with recent Projects that were issued conditions requiring repetitive update reporting to the CER during construction regarding the status of provincial/territorial heritage approvals. These filings have been time consuming and resource intensive for TC Energy. On a single project, TC Energy filed upwards of 20 update reports, yet this reporting burden demonstrated no added compliance value. TC Energy sees this as duplicative and inefficient, with a corresponding impact on the relative competitiveness of regulated companies. Adherence to provincial/territorial requirements and approvals, entrenched through Environmental Protection Plans and reinforced by contingency plans are sufficient to address planning and construction phases, while the environmental protection program and associated processes address heritage resources during operations.

With respect to reporting harm, unauthorized impacts by regulated companies to recorded heritage sites would be a reportable significant environmental effect under the OPR as currently defined and no further revision is necessary. If definitions of significant environmental effects were to be spelled out in the OPR there is the risk that any scenarios not explicitly identified would be excluded, and this would defeat the value of the general and encompassing content of the OPR.

The workshop also introduced topics related to Indigenous heritage permits and best practices for Indigenous engagement relative to heritage and culturally significant sites. These are dynamic topics that are experienced and managed differently by CER regulated companies and Indigenous groups. While there is value in forums that allow information sharing between parties, the OPR is not the appropriate mechanism for exploring rapidly evolving relationship building nor should any concepts around these topics be entrenched in regulations.

Topic Paper I: OPR – Rights and Interests of Indigenous Peoples, Socio-economic Effects, and Engagement

TC Energy would like to express a number of concerns in response to Topic Paper I – Rights and Interests of Indigenous Peoples, Socio-economic Effects, and Engagement. The response to Topic Paper I includes recommendations related to the streamlined incorporation of Indigenous Rights and flexible engagement requirements in the OPR and the key themes reflected include the need for the OPR to remain general and goal-based, implications for competitiveness, the importance of a minimalist approach to the OPR update that avoids duplication, and the practicality of the proposed changes.

Subtopic 1 – Preventing and Addressing Impacts to the Rights and Interests of Indigenous Peoples

TC Energy recognizes that the consideration of potential impacts to the rights and interests of Indigenous groups is an area that has undergone significant evolution since the original implementation of the OPR in 1998 and continues to evolve today.

Any potential changes to the OPR in this context should account for this evolution and likely continued progress by avoiding prescriptive requirements that dictate how regulated companies address potential impacts across all of its activities. Furthermore, the CER's reconciliation efforts need to remain focused on those activities undertaken by the Crown with Indigenous groups.

As identified in TC Energy's overarching comments on the OPR Review, TC Energy is recommending that the proposed changes to the OPR regarding Indigenous rights be made in a succinct and strategic manner, as opposed to the broad revision of the OPR currently being contemplated. TC Energy does not support the proposal of creating a separate protection program to prevent and address potential impacts to rights and interest of Indigenous groups.

Aligning with TC Energy's perspective of potential improvements to the OPR described in Topic Paper F, the prevention of potential impacts to rights and interests of Indigenous groups is a potential risk that is best integrated into existing and discreet management system and programs/risk areas where appropriate. TC Energy believes that creating a separate protection program under Section 6.5(1) would fail to integrate protection against this risk within existing management system processes identified in Section 6.5(1). Separating the protective elements of this risk within the OPR from those management system processes or programs that might see it materialize creates unnecessary administrative burden by increasing the complexity of delivering on the outcomes desired (e.g., protecting rights and interests of Indigenous groups during the conduct of activities by regulated companies).

Furthermore, the act of assessing potential impacts to rights and interests is always context specific in relation to the proposed activity and is informed by engagement with identified Indigenous groups. How this engagement should be undertaken should be left with the regulated company, to reflect the company's Indigenous engagement program, the nature of the regulated company's proposed activities but also the ongoing nature of the relationships between the regulated company and the potentially impacted Indigenous

group. For this reason, a generic requirement to engage with Indigenous groups without any context for this engagement as implied by the second bullet of the proposed options is not appropriate. Instead, TC Energy recommends that guidance currently provided in Section 3.4.1 of the Filing Manual regarding the expectation to have a company-wide engagement program to anticipate, prevent, mitigate and manage conditions which have the potential to affect persons and communities represents a more appropriate approach than the prescriptive regulatory framework being proposed.

TC Energy has significant concerns with bullet three of the proposed options, which proposes requiring the establishment of a process to identify and incorporate Indigenous laws and policies and demonstration of how they are addressed in existing protection programs. This proposed option ignores the complexity, dynamic nature, evolution and richness of Indigenous laws and policies and implies they are static and can be "addressed" and measured. There are over 600 Indigenous groups in Canada. There is a significant diversity amongst Indigenous Peoples, and Indigenous law is complex, subjective and not uniform. Including prescriptive requirements of companies with respect to Indigenous law and policies in regulation is impracticable. Indigenous law is often kept in confidence, not codified, or is kept through oral traditions. Even within communities there can be disagreement on what is considered Indigenous law or how a law is interpreted. It is not appropriate for the CER to require regulated companies to adjudicate and determine the content of Indigenous law, nor is it feasible for the CER to assess compliance with Indigenous law. It is also not practical to require Indigenous groups to assess compliance with their individual Indigenous laws, creating a pantheon of adjudicators, each using their own metrics and methodologies to assess compliance.

It is relevant to note that Indigenous law may be inconsistent with the very business of the companies that the CER regulates. For example, Indigenous law has been cited as justification to oppose oil and gas development and pipelines, including the banning by Indigenous groups of oil tankers on the British Columbia coast.

Additionally, TC Energy disagrees with the proposed competency training outlined in bullet four of the Proposed Options, as cultural competency training is context specific tied to both the unique Indigenous groups as well as the role and responsibilities of the individual working for or on behalf of the regulated company. The creation of a generic competency training requirement could have the unintended consequence of over-generalizing training content and thereby limiting the value of the training to the individuals who would be required to undertake said training.

The OPR already requires the reporting of significant environmental effects as defined incidents and an unauthorized impact to a heritage site is a significant environmental effect and is a contravention of legislation in all provinces and territories. No additional content is needed. It should be noted that specific reporting requirements associated with sites of historical or cultural significance are matters of provincial/territorial jurisdiction and subject to the applicable statutes and regulations of each province or territory. Reporting to the CER should be summary in nature and defer to the appropriate jurisdiction process as heritage information is confidential and held by the province involved. It should be further clarified that this relates only to unauthorized impacts as a direct result of activities of a regulated company. Companies cannot be responsible for the protection and integrity of heritage resources on or adjacent to their assets, as it relates to third parties. For additional feedback, please see TC Energy's response to Topic Paper H.

TC Energy has provided feedback in the response to Topic Paper D, subtopics 2 and 3, as it relates to Indigenous involvement in reclamation and monitoring.

Subtopic 2 – Managing Socio-Economic Effects

TC Energy does not support the introduction of a standalone Socio-Economic Protection Program. Socio-economic effects management should instead continue to be integrated within a broader framework that considers the valued components for Indigenous Peoples, non-Indigenous communities, and the environment.

Furthermore, TC Energy disagrees with incorporating socio-economic effects management requirements in the OPR for the entire lifecycle of projects, as socio-economic effects management is not applicable and not useful for every stage in the assets' life cycle. For example, for operations and maintenance or abandonment activities, TC Energy has observed negligible to low socio-economic effects, which does not warrant additional regulatory oversight.

TC Energy believes that the CER Act, OPR and Filing Manual already provide adequate regulatory requirements to advance evolving, goal-based, and tailored socio-economic effects management for projects.

TC Energy is concerned that prescriptive socio-economic effects management in the OPR, even if integrated within an environmental protection program, will create unfeasible, low value and resource intensive requirements that will negatively impact the competitiveness of regulated companies, and may prove impracticable in practice.

The Filing Manual and technical bulletins, as previously noted, are considered the most appropriate mechanisms to provide further guidance and clarification on socio-economic effects management for projects, especially given the evolving nature of the subject matter.

Subtopic 3 – Engaging with Potentially Affected People and Communities

The proposed option of creating explicit engagement requirements lacks details on what standardized engagement measures the CER aims to impose, creating uncertainty about its intent and scope. Additionally, TC Energy identifies a contradiction that is apparent in this proposed option, as imposing explicit requirements to drive consistency in engagement does not provide for the flexibility required to ensure engagement respects the unique interests and engagement preferences of potentially affected Indigenous groups and stakeholders.

Engagement activities should reflect the scope of the potential impacts of a project and/ or phase of the lifecycle, as opposed to an arbitrary standard of engagement. Prescriptive requirements for engagement introduce the risk that the key relationship building process be reduced to a standardized checklist approach which will serve none of the parties well.

TC Energy notes that footnote 7 (page 7 of the Topic Paper), is proposing consistent engagement requirements for a variety of groups all with varying existing engagement requirements, expectations, approaches, commitments, rights and legal obligations. Driving a consistent standard of engagement across these groups does not provide for the flexibility companies require to effectively adapt to varying needs and capacity considerations, nor does it reflect the distinct interests and concerns across a spectrum of people. In addition, it

would be inappropriate for the CER to set out engagement requirements for other government authorities, as implied by the footnote. This footnote further amplifies the concerns noted on subtopic 3.

Topic Paper J: OPR – Safety

Key themes raised in Topic Paper J include the importance of the OPR remaining general and flexible, noting that the changes are not practical, and further consultation with industry stakeholders is recommended.

Subtopic 1 – Process Safety Management

Including process safety requirements in the OPR, would deviate from the consensus-based standards identified in CSA Z662. The topic paper provides limited insight into the specific areas of facility operation and the associated equipment to which this new requirement might apply. Without a clear understanding of the potential scope of this requirement, it is difficult to assess whether this requirement is already addressed by current practices and would be duplicative in nature.

TC Energy recommends that additional dialogue with regulated companies and between the CER and CSA occur prior to the advancement of this item. If the CER determines that the incorporation of process safety is beneficial, upon further consultation, TC Energy recommends that this item be progressed through a guidance paper to regulated companies to allow for the incremental implementation of these requirements, as opposed to within the OPR.

Subtopic 2 – Safety Plans for Construction, Operations and Maintenance, and Abandonment Activities

TC Energy does not support introducing a definition for “construction” within the OPR. TC Energy notes that the term “construction” is used in multiple contexts across various CER approvals and other regulatory frameworks. By providing a definition within the OPR, the CER could inadvertently impact these other usages. TC Energy understands based on discussions during the January 2025 workshops, that the CER may have an interest in activities that commence prior to activities undertaken pursuant to a Commission approval (order or certificate). The CER certificates and orders approve the construction and operation of a project. If the OPR expands the definition of construction to include pre-construction activities, approvals could be required much earlier, potentially prior to field activities, which brings into question how a proponent would conduct an effects assessment and what they would include in their application. Expanding the definition of construction introduces confusion and is neither practical nor efficient. TC Energy notes that these types of activities are sufficiently covered within the existing Safety Management Program requirements of the OPR and these activities fall outside the Commission’s jurisdiction and are properly conducted in accordance with provincial/territorial requirements.

Topic Paper K: Filing Manual – ESA

TC Energy is generally not supportive of the proposed updates to the Filing Manual contemplated in Topic Paper K. Key themes discussed below include the importance of a minimalist update to the Filing Manual, considering the practicality of the proposed changes, the applicability of measures to the asset lifecycle, the importance of general and flexible guidance, implications for competitiveness, as well as the importance of flexibility in Indigenous engagement.

Subtopic 1 – Restructuring the ESA Section

The proposed split of the ESA section will not improve clarity for non-technical audiences and will instead result in duplication and cause confusion. Splitting the existing ESA section of the Filing Manual into two—with an amended ESA section and a new rights and interests of Indigenous Peoples section—assumes that all environmental and socio-economic valued components (VCs) can be classified as either Indigenous or non-Indigenous, when, in fact, many must be viewed through both lenses at the same time (e.g., heritage resources, social and cultural well-being, navigation and navigation safety).

Restructuring the ESA introduces an artificial distinction between Indigenous and non-Indigenous elements and inhibits the holistic assessment, the integration of traditional knowledge, and the integrated management of environmental and socio-economic relationships between Indigenous and non-Indigenous elements. This distinction could inadvertently result in the implicit prioritization or polarization of certain Indigenous or non-Indigenous interests at the expense of others.

For additional feedback pertaining to restructuring the ESA section, including elevating rights and interests of Indigenous Peoples to the same level as environmental protection, safety and security, please see TC Energy's response below to the changes being proposed in subtopic 2.2.

Subtopic 2 – Environmental and Socio-Economic Assessment

2.1 Valued component identification and selection for the ESA

TC Energy does not support the proposed option, as it would extend the timeline to develop new regulatory applications for submission to the CER. This incremental duration will further erode the competitiveness of the CER in relation to other jurisdictions and will increase the tolls that shippers face as a result of incremental regulatory costs, which includes delays in the timely construction of new facilities due to ever longer timelines associated with developing and filing project applications.

Currently, industry best practice is to use broad VCs that are well established and relatively consistent, for the very reason that there is continuity in potential effects and effect pathways for similar projects within similar settings. Project-specific considerations arise in the choice of indicators or the measurable parameters within a VC and are influenced by the experience of ESA practitioners and technical specialists.

This approach allows for the timely initiation of field assessments to support the commercial timelines associated with new facilities. The inclusion of Indigenous and stakeholder input into the exploration of VC indicators is achieved through project-specific engagement, which is variable and driven by the circumstances of the project. For this reason, TC Energy is opposed to develop a one-size-fits-all approach within the Filing

Manual. This variability is partly the result of the number of Indigenous groups typically engaged on a new project, which in TC Energy's experience can include between 20 and 50 individual and unique communities. Engaging with this number of Indigenous groups is a complex, costly, and lengthy process. Stipulating that feedback from all engaged Indigenous groups must be incorporated into the selection of VCs will cause significant delays in advancing new regulatory applications and ultimately may not align with the engagement approach preferred by each Indigenous group. This is not to say that there is no opportunity for Indigenous groups to provide input, but rather that a requirement to demonstrate how this feedback was incorporated cannot be assured nor achieved in reasonable timelines, further impacting competitiveness and regulatory efficiency. Furthermore, requiring feedback at the onset of the development of the regulatory application would likely privilege some groups over others, depending on relative interest and capacity to provide feedback. TC Energy continues to support the current approach of engaging with Indigenous groups and demonstrating how the VC indicators that were chosen for a project have been augmented or refined in response to the results of engagement, as well as how the resulting mitigation hierarchy has been implemented to address or resolve rightsholder and stakeholder concerns.

TC Energy does not see the need to expand the Filing Manual guidance, which already speaks to the identification and rationale behind VC and indicator selection, and that the methodology of each ESA should specify the process and the inputs that were used to select VCs and indicators.

2.2 Socio-economic valued components

Separating socio-economic VCs into distinct sections of the Filing Manual will not improve clarity. By shrinking the scope of the existing socio-economic VCs to focus solely on the health, social, and economic effects related to non-Indigenous Peoples, and by creating a new category of socio-economic VCs that focuses on Indigenous Peoples, the CER is ignoring the interrelationships that exist between Indigenous and non-Indigenous elements in the same communities and study areas. This will create significant duplication within ESAs and lead to inconsistencies in the way in which socio-economic effects on neighboring peoples and communities are both assessed and mitigated (or enhanced). For example, project effects on infrastructure and services would no longer be assessed at the population level, but at the racial level, which opens the door to inequitable treatment of population groups that are using the same infrastructure or services. Rather than restructuring the ESA, the CER can achieve an enhanced focus on the rights and interests of Indigenous Peoples by stipulating that Indigenous Peoples should be considered "throughout" each socio-economic VC, similar to the way in which GBA+ is applied. Consistent with this approach, the Filing Manual could further specify "Indigeneity" as a population identity factor for GBA+.

2.3 Mitigation and enhancement measures

TC Energy does not support a mandate requiring enhancement measures in all cases or revisions to the Filing Manual that imply enhancement measures are required wherever mitigation is proposed.

The appropriateness of enhancement measures is project-specific and is already well defined in the Filing Manual (e.g. the filing requirements for fish and fish habitat, employment and economy, and rights of Indigenous Peoples). The fundamental premise of the mitigation hierarchy is typically provided in the methods section of an ESA and is already well understood by ESA practitioners; it need not be expanded in the Filing Manual. While TC Energy seeks opportunities to maximize positive impacts, particularly with respect to socio-

economic matters, through its approach to local and Indigenous business contracting, mandating these efforts within the Filing Manual undermines the competitiveness of CER regulated companies, and does not respect the confidential nature of certain enhancement measures.

TC Energy's EP Program governs environmental protection and ensures continuity between the project EPP and operational environmental management. Specifications for how environmental protection is maintained throughout an asset's lifecycle, including operations and maintenance activities, exist within the corporate policies and operating procedures that underpin TC Energy's EP Program, consistent with the OPR requirement to "develop, implement and maintain an environmental protection program that anticipates, prevents, manages and mitigates conditions that could adversely affect the environment" throughout the lifecycle of an asset. It is these policies and procedures that ensure environmental protection measures are maintained and implemented after construction, at which point individual assets are incorporated into, and managed holistically as a component of TC Energy's interconnected pipeline systems. Managing environmental protection through site-specific EPPs during the operations phase would result in significant inefficiencies and duplication, as multiple EPPs would be applicable in overlapping areas (e.g., a right-of-way with four adjacent pipelines could have four differing EPPs), leading to inconsistency in mitigation across operating assets. A system-wide approach for maintaining environmental protection during operations, as TC Energy currently has in place and the OPR currently requires, is efficient, effective and practical, and it ensures the accurate and uniform implementation of environmental protection measures across TC Energy's entire Canadian pipeline network (41,121 km)[2] and over the entire lifespan of company assets (from 25 to 50+ years).

For additional feedback pertaining to EPPs for operations, please see TC Energy's response to the changes being proposed in Topic Paper D, subtopic 4. For additional feedback pertaining to a socio-economic EPP and the unlikely interaction of socio-economics during normal operations and maintenance activities, please see the response to Topic Paper D, subtopic 2.

2.4 Cumulative effects

The assessment of cumulative effects is an important aspect of ESAs, and the selection of the most appropriate baseline is a known point of contention and confusion. TC Energy has consistently maintained that the current condition baseline accounts for the effects of past and present impacts on the environment and, as such, they are included in the consideration of the impacts of the project. This does not disregard the cumulative state at present; it fully acknowledges it. The most appropriate baseline against which to consider cumulative effects is the one that is most certain or measurable—i.e., the current state. TC Energy cautions against the use of historical or pre-industrial baselines, which would be speculative in the absence of measurable data and would undermine the evaluation of cumulative effects assessments. It is for the same reason that the anticipated effects of future climate change cannot be relied upon. That is not to say that the effects of climate change could not contribute to cumulative effects, but that such future events cannot be reliably and quantitatively predicted or estimated and therefore cannot be relied upon for a formal assessment. However, the effects of environmental events that have taken place previous to or during the planning and development of a project

[2] TC Energy. 2024. *Annual Report*. https://www.tcenergy.com/siteassets/pdfs/investors/tc-annual-report.pdf.

could be considered as accurate data (e.g., the extent of recent wildfires, current weather conditions, natural hazards).

It would be beneficial to clarify in the Filing Manual that for VCs where a proponent demonstrates that there is no adverse residual effect, or if offsetting is expected to achieve no net loss for a specified VC, no cumulative effects assessment should be necessary.

2.5 Significance

TC Energy relies on internal and external ESA practitioner guidance to establish the criteria for evaluating the significance of residual and cumulative effects. It is important to recognize the need for flexibility to define significance criteria based on the specific VC and the circumstances of the project, and to be adaptable in order to evolve with applied experience and inputs. As a result, TC Energy is not opposed to the concept of a significance criteria framework in the Filing Manual, as an example not a template, and cautions that any requirements and guidance within the Filing Manual should still allow for flexibility in project-specific ESAs for an assessment expert to utilize assessment practices and expertise and not prescribe mandatory criteria or weightings that may result in unintended effects.

Topic Paper L: Filing Manual – Lands

TC Energy is generally not supportive of the added complexity proposed in Topic Paper L. Key themes discussed below include the importance of a minimalist update to the Filing Manual that avoids duplication, as well was implications for competitiveness, and the importance of flexibility in Indigenous engagement.

Subtopic 1 – Routing and Site Selection Process

TC Energy does not see the need for additional clarity or detail as the current edition of the Filing Manual includes many of the considerations identified in the proposed options. ESAs typically include routing criteria and reference to the different routing options that were considered, as well as how the relative and relevant criteria were considered in the assessment of the selected route and options. TC Energy would caution against explicitly requiring the inclusion of engagement feedback from Indigenous groups and stakeholders prior to submission of an application, as gathering fulsome stakeholder and rightsholder feedback is ongoing through the application process and cannot be guaranteed in the timeframe required to meet a project's application timelines, timelines that are already prohibitive for regulated companies.

TC Energy also recommends removing specific reference to “the protection of heritage and cultural resources”. Disproportionately weighting this criterion relative to others which may have as much or more bearing on routing, constructability and environmental sensitivity is not of value. Avoidance of heritage and cultural sites is typically a key routing criterion, but all criteria must be considered during a full routing evaluation, be they environmental, social, cultural, technical or physical.

For additional feedback pertaining to incorporating the results of Indigenous engagement, please see TC Energy’s response to the changes being proposed in Topic Paper K, subtopic 2.1.

Subtopic 2 through 6

Subtopics 2 through 6 represent additive requirements such that the proponent would provide the CER with increasingly granular information related to land and acquiring land rights. Compensation and land acquisition requirements for companies are already specified in the CER Act (sections 313-327), and the level of information required in the current Filing Manual is appropriate for the purposes of assessing a proposed application. In addition, there are a multitude of other factors which companies consider in developing their land acquisition processes across various jurisdictions to meet the requirements of the CER Act, and guidance within the existing Filing Manual. Topic Paper L does not articulate how the additional information will add value but rather represents an incremental increase in the complexity of the filing requirements, which will have a corresponding detrimental impact on regulatory efficiency as the Commission weighs more inputs. In addition, issues such as compensation methodology and the land acquisition process are matters of commercial sensitivity not just within companies regulated by the CER but by other jurisdictions as well. This information is consistently treated confidentially, and its potential release is problematic in that it undermines the competitiveness of regulated companies. These are the subjects of private contracts between parties with a process for adjudication for those rare situations where agreement cannot be reached. The information is not relevant to decisions of the CER except where there is a dispute and in such cases each party has opportunity to share relevant information through that process.

Subtopic 7 – Land Acquisition Notices and Agreements

TC Energy does not see the need for additional elements to be included in this section as the requirements for notices and agreements are specified in the CER Act (sections 321 and 322), and the level of information required in the current Filing Manual is appropriate for assessing a proposed application. TC Energy does not "permit" or facilitate access to lands for Indigenous groups to conduct Traditional Knowledge studies nor would it be typical for TC Energy have the right to grant such access. Unoccupied Crown land is accessible and does not require the permission of a proponent to access, and access to private/ freehold lands is suitably at the individual landowners' discretion.

Topic Paper M: Filing Manual – Rights and Interests of Indigenous Peoples

TC Energy is generally not supportive of the proposed updates to the Filing Manual contemplated in Topic Paper M. Key themes discussed below include the importance of a minimalist update to the Filing Manual, considering the practicality of the proposed changes, the applicability of measures to the asset lifecycle, the importance of general and flexible guidance, implications for competitiveness, as well as the importance of flexibility in Indigenous engagement and a streamlined approach to incorporating Indigenous rights and interests.

Subtopic 1 – Restructuring the Filing Manual

TC Energy does not support the restructuring of the Filing Manual as proposed within this subtopic. For further elaboration on this, please refer to TC Energy's response to Topic Paper K, subtopic 1.

Subtopic 2.1 – Rights and Interests of Indigenous Peoples

TC Energy does not agree with bullets 1 and 2 of the proposed options within this subtopic. With regards to bullet 3, TC Energy recommends it be explicit that describing enhancement measures should be "when appropriate". For further elaboration on this, please refer to TC Energy's response to Topic Paper K, subtopic 2.2.

Subtopic 2.2 – Integrating the Applicant's Assessment and Indigenous-led Assessments and Studies

TC Energy is supportive of the conduct of Traditional Land Use and Traditional Knowledge studies and Indigenous-led assessments to help inform a proposed project's ESA where there may be an actual or potential impact on the exercise or practice of Indigenous and Treaty rights, however, the conduct of these studies must be context and Indigenous group (interest and capacity) specific. A generic framework that can be applied to all proposed projects is not appropriate and will hinder the flexible approach required to ensure Indigenous groups are able to complete studies that are aligned to their needs. Furthermore, these studies are best conducted along a parallel path to help inform a proposed project's approach to mitigate identified potential effects, while continuing to be mindful of Indigenous group timelines and capacity considerations. TC Energy would caution against the addition of formal requirements for Indigenous-led assessments and studies within the Filing Manual, as such a requirement could ignore the context specific nature and applicability of these types of studies and create confusion or differing interpretations of expectations by Indigenous groups and companies as well as creating further potential for delays and increased costs.

Subtopic 2.3 – Clarifying the CER's Guidance for Assessing Effects on the Rights on Indigenous People

For further elaboration on the first bullet of this Proposed Option, please refer to TC Energy's response to Discussion Topic Paper K, subtopic 2.5.

TC Energy is concerned with the implied requirement of the second bullet of this proposed option that would require applicants to determine significance/ severity of potential effects on the rights of Indigenous Peoples. While the Crown can delegate procedural aspects of its duty to consult and accommodate, where appropriate, it is not appropriate for companies to be required to determine significance/ severity of potential effects on the rights of Indigenous Peoples. These are decisions for regulators and government. Companies can provide a characterization of the potential effects based on information available to them to inform the Commission's assessments, but the Crown may have access to information that the company is not privy to and must uphold the Honour of the Crown and its unique relationship with Indigenous Peoples, which cannot be delegated.

Subtopic 2.4 – Clarifying the CER's Guidance for Monitoring and Oversight by Indigenous Peoples

TC Energy believes that the need for Indigenous monitoring and oversight must consider the specific contexts of any proposed project and lifecycle phase, as well as the actual or potential impacts to rights and interests of Indigenous groups and the timing best applicable to address such effects. In considering involvement in Indigenous monitoring, proponents must also consider the suite of other engagement requirements, approaches for mitigating potential effects or individual interests, and needs or capacity of Indigenous groups. A generic requirement to require monitoring and oversight by Indigenous groups undermines the efforts of early engagement and the uniqueness of Indigenous groups by encouraging a presumptive, checklist approach or mindset to engagement. It also proves impractical and cost prohibitive to implement in consideration of the large number of Indigenous groups engaged on projects. For further elaboration on this, please refer to TC Energy's response to Discussion Topic Paper D, subtopic 3.

Subtopic 2.5 – Clarifying the CER's Guidance for Sites of Indigenous Significance

TC Energy is concerned that the concept presented as a proposed option is vague and relates to a broad range of heritage, cultural and environmental features, some of which (e.g., heritage sites) fall under provincial or territorial jurisdiction and legislation. The spectrum of sites of Indigenous significance could be interpreted to include a range of heritage and other tangible and intangible sites and features and is entirely subjective. TC Energy cautions that the oversight of heritage sites is not within the mandate of the CER as detailed in the feedback provided to Topic Papers H (subtopic 7), I (subtopic 1) and L (subtopic 1). There are suitable and effective processes in place relative to heritage sites without creating a new category. TC Energy notes the CER is proposing a new term, "Sites of Indigenous Significance", but has provided limited guidance on the application, scope and definition of this new term. The proposed term is concerning to TC Energy as it is too broad, open for differing interpretations, and potentially duplicative or will conflict with existing and established terms that cover various sites or areas of Indigenous interest and significance, such as Traditional Land and Resource Use, Heritage Resources and Traditional Knowledge. Expectations related to these existing terms and the types of sites they encompass are already integrated into the Filing Manual requirements and guidance related to the ESA and the assessment of VCs. As presented in the Topic Paper, this subtopic requires a great deal more investigation and discussion with various parties to understand the possible scope and ramification of any future guidance materials.