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10/04/2026

RE: Bruce C Assessment

Dear Kalena and Joanna,

We write in response to your letter dated April 2, 2026.

It is clear from your letter that Bruce Power continues to misunderstand the substance of the Saugeen Ojibway Nation's (SON) concerns regarding the Bruce C Project (the "Project") and the proposed approach to the federal impact assessment process.

Nature and Significance of Potential Impacts

As SON has repeatedly warned, the Project stands to result in significant adverse impacts, including but not limited to:

- the addition of a substantial stressor to an already stressed aquatic environment;
- the exacerbation of socio-economic impacts on the SON People; and
- the further magnification of the nuclear waste burden within SON Territory.

Despite the scale and significance of these potential impacts, Bruce Power has provided no substantive explanation as to how such impacts can be credibly studied, understood, and assessed within a compressed timeframe measured in months. Bruce Power has asserted that it possesses sufficient information from existing operations at the Bruce site to support the assessment of Project effects. SON does not agree.

SON has long raised concerns regarding the reliability, completeness, and applicability of existing data. The recent gizzard shad mortality event—in which approximately five million fish were killed—underscores these concerns. That event, together with the subsequent requirement by the Canadian Nuclear Safety Commission for Bruce Power to revisit conclusions in its environmental risk assessment, confirms SON's longstanding position and seriously calls into question the adequacy of the existing state of knowledge relied upon by Bruce Power.

SON's technical experts have unequivocally advised that, in the absence of additional systematic and long-term data collection, the Project's potential impacts cannot be accurately predicted.

Example of Critical Information Gaps

By way of illustration¹, there remain fundamental deficiencies in available information regarding the aquatic environment, including:

1. Fish Community Monitoring

Bruce Power does not have long-term, systematic fish community monitoring data sufficient to characterize baseline conditions. Existing data collection has been ad hoc, methodologically inconsistent, and of insufficient duration to support a defensible assessment. A credible understanding of the fish community requires multi-year, multi-season monitoring designed to capture interannual variability, including a minimum of four years of data across all seasons.

The current dataset is inadequate to distinguish natural variability from directional change, including shifts driven by existing Bruce Power operations and broader ecosystem stressors. As a result, present-day conditions cannot be assumed to represent an appropriate baseline. Rather, they reflect an already altered system.

Reliance on such conditions as a baseline risks normalizing prior impacts and underestimating the magnitude of incremental and cumulative effects. Without a clear and defensible characterization of current conditions, including variability, trends, and existing stressor contributions, it is not possible to quantify Project-related change, assess significance, or evaluate effects on the SON fishery and the exercise of established rights.

2. Artificial Ecosystem Conditions and Invasive Species Dynamics

The artificial thermal and hydrodynamic conditions associated with Bruce Power operations represent a significant and insufficiently understood pathway of aquatic impact. By altering temperature regimes, seasonal dynamics, flow conditions, and habitat suitability, the facility has the potential to create localized artificial ecosystem conditions that favour the establishment, persistence, and spread of non-native and invasive species.

Artificially elevated temperatures may extend periods of biological activity, including growth, feeding, and reproduction, increase overwinter survival, and enable range expansion for species that would otherwise be constrained by ambient lake conditions. These mechanisms are particularly relevant for species such as dreissenid mussels and other warm-tolerant or expanding taxa. The observed presence of species such as grass

¹ The examples provided relate only to aquatic impacts and are intended to illustrate the nature and seriousness of the information gaps facing the assessment. SON has identified, and continues to have, additional concerns and information gaps relating to other biophysical, socio-economic, cultural, health, and rights-based aspects of the Project, which are not addressed here.

carp, together with established invasive communities in the vicinity of the site, underscores the need to understand whether and how Bruce Power operations are contributing to these dynamics.

Bruce Power has not conducted the targeted, long-term studies necessary to determine the existing facility's role in influencing invasive species establishment, population dynamics, spread, or associated ecosystem change. This is a critical information gap. Invasive species can alter food webs, habitat structure, energy pathways, and species interactions, with direct implications for native fish populations and the SON fishery.

Without this information, it is not possible to assess whether the Project will increase the probability, rate, or ecological consequences of invasive species expansion, or to evaluate resulting impacts on the aquatic ecosystem, the SON fishery, and the exercise of established rights.

3. Entrapment

Entrapment represents a distinct and insufficiently characterized pathway of impact associated with Bruce Power operations. Unlike entrainment or impingement, entrapment involves the retention of fish within the forebay or associated structures, potentially over extended periods, leading to stress, injury, or mortality.

Bruce Power has not historically conducted systematic monitoring to characterize fish presence, movement, residence time, or escape potential within the forebay environment. Monitoring initiated following the recent gizzard shad mortality event has been limited in scope and duration.

Preliminary observations raise concern regarding the potential for fish, including lake sturgeon, to become trapped within the forebay. However, the absence of multi-season, multi-year data means that the frequency, duration, species-specific vulnerability, and ecological consequences of entrapment remain unknown.

Without this information, it is not possible to quantify the magnitude of existing impacts or to assess how the Project may alter entrapment risk, including cumulative mortality and effects on species of cultural and ecological importance to SON.

4. Entrainment

Entrainment represents a significant and insufficiently characterized pathway of impact associated with Bruce Power operations, particularly for early life stages of fish and other aquatic organisms. Existing entrainment studies have been conducted only intermittently, including limited work in 2013–2014 and more recent efforts that have yet to generate a sufficiently robust dataset. Recent changes in sampling methodology, combined with delays in implementation, further limit the continuity and comparability of available data and will result in a short and fragmented dataset. These data are inadequate in duration, consistency, and design to capture interannual variability, seasonal dynamics, and

variability in recruitment. As a result, the magnitude and ecological significance of entrainment impacts remain poorly understood, including cumulative losses of early life stages and potential population-level effects on species important to the SON fishery. Without multi-year, systematic, and methodologically consistent entrainment data, it is not possible to assess existing impacts or to predict how the Project may influence entrainment risk, including impacts on the aquatic ecosystem, the SON fishery, and the exercise of established rights.

5. Cumulative Effects

Bruce Power has not conducted a meaningful cumulative effects assessment and has not demonstrated how cumulative effects will be credibly evaluated for the Project. This represents a critical deficiency given the already stressed condition of the aquatic ecosystem and the SON fishery, including a documented collapse in key species such as lake whitefish.

Project effects cannot be understood in isolation. They must be assessed in combination with interacting and co-occurring stressors, including thermal effects, entrainment, entrapment, impingement, artificial ecosystem conditions, invasive species dynamics, and broader ecosystem change.

At present, key pathways remain poorly quantified, and baseline conditions are not adequately characterized. In this context, it is not possible to determine the magnitude, direction, or interaction of Project-related effects with existing pressures. This includes the inability to assess whether effects will be additive, synergistic, or whether they may contribute to threshold responses or further system destabilization.

Without an integrated, pathway-based cumulative effects framework supported by adequate baseline data, any assessment of cumulative effects would lack scientific credibility and would not support a defensible evaluation of impacts on the aquatic ecosystem, the SON fishery, or the exercise of established rights.

The recent large-scale gizzard shad mortality event provides a clear and highly consequential example of the deficiencies described above. The event is significant not only because of its scale, but because it demonstrates that existing monitoring, ecosystem understanding, predictive analysis, and mitigation were not sufficient to anticipate, prevent, or adequately characterize a major aquatic impact under current operations.

The subsequent requirement by the Canadian Nuclear Safety Commission for Bruce Power to revisit conclusions in its environmental risk assessment further underscores that the existing state of knowledge and analytical framework were not robust. This is not simply a matter of an unexpected event occurring in a complex system. Rather, it reveals a broader failure in the current approach to identifying risk pathways, characterizing baseline conditions, and evaluating the likelihood and consequences of acute and cumulative impacts.

The event also raises concern regarding recurrence. It demonstrates that plant-related conditions can align in a manner that results in large-scale mortality, and it highlights the absence of a sufficiently developed evidentiary basis to determine the frequency, triggering conditions, species vulnerabilities, or effectiveness of mitigation measures associated with such events.

In this context, reliance on existing data and a high-level or iterative study design is not sufficient to support a credible assessment of Project effects. The gizzard shad mortality event instead demonstrates the need for a clearly defined, methodologically robust, and multi-year program of study capable of characterizing baseline conditions, identifying risk pathways, quantifying existing effects, and supporting reliable prediction of both routine and extreme outcomes.

SON has raised concerns of this nature for many years regarding both the conclusions reached by Bruce Power in its environmental analyses and the quality, completeness, and interpretation of the data on which those conclusions rely. Many of these concerns have been repeatedly communicated through technical engagement and formal submissions, yet they have not been substantively addressed. Although not every issue identified above has been raised in the same form or with the same emphasis over time, together they reflect a broader and longstanding pattern of unresolved deficiencies in Bruce Power's understanding of the aquatic environment and the impacts of its operations.

These deficiencies are of particular concern given the condition of the ecosystem itself. The fishery upon which the SON People have relied since time immemorial—and to which SON holds an established Aboriginal right—is already in a state of severe decline and, in key respects, has effectively collapsed. Available evidence indicates that the system has likely exceeded critical ecological thresholds. In this context, SON is deeply concerned that the aquatic ecosystem is no longer functioning within its historical range of variability. In light of this, SON has commissioned independent work to evaluate the extent to which tipping points have already been exceeded and to assess the implications of introducing an additional stressor of the nature and scale contemplated by the Project.

Absence of a Credible Workplan

SON has repeatedly requested that Bruce Power explain how it intends to generate the information necessary to support a scientifically defensible assessment of Project impacts. To date, Bruce Power has not provided a workplan that meets this standard.

Specifically, Bruce Power has not identified, with sufficient detail:

- the studies to be undertaken;
- their methodological design and evaluation framework;
- how they will address identified information gaps;
- how results will be integrated across interacting pathways;

- how uncertainty will be characterized and incorporated into conclusions; or
- how the proposed work can be completed within the stated timelines.

In the absence of this information, it is not possible to determine whether the Impact Statement will be capable of:

- characterizing baseline conditions;
- quantifying Project-related effects;
- assessing significance;
- evaluating cumulative effects; or
- supporting conclusions that are scientifically robust and legally defensible.

Accordingly, the current level of detail provided by Bruce Power is insufficient to support meaningful technical review, informed participation, or confidence in the assessment process.

Clarification Regarding the Draft Workplan and the Proposed Collaborative Process

Bruce Power characterizes the draft Workplan as a planning tool intended to be developed collaboratively through ongoing technical team meetings, with the level of detail requested by SON to emerge over the course of the Impact Statement phase. SON does not dispute that such an approach may be appropriate in the context of a genuinely iterative assessment process supported by adequate time.

Indeed, SON contemplated a process in which the parties would first engage on foundational matters—such as baseline conditions, study design, scope, and methodological requirements—before proceeding with studies and the preparation of the Impact Statement. That type of collaboration presupposes sufficient time to design, implement, and refine technical work in response to emerging information.

However, when Bruce Power provided the draft Workplan, it was doing so in the context of an intended Impact Statement submission date less than a year away. In that context, a high-level workplan that deferred essential details to future meetings was not fit for purpose. In such circumstances, a workplan must already articulate, with specificity, the studies to be undertaken and demonstrate their feasibility within the proposed timeframe.

There is therefore a clear mismatch between the collaborative, iterative process Bruce Power describes and the compressed timelines it has proposed and been unwilling to revisit in any meaningful way.

Clarification Regarding Project Timelines, SON Knowledge, and Participation

Your letter suggests that refinements to the Project schedule depend on whether, when, and how SON may undertake SON-led assessments or share SON Knowledge, and further implies that

SON has declined to participate in the Impact Statement phase. This characterization is inaccurate.

An extension of the proposed assessment timelines is not sought solely to accommodate SON-led assessments or the incorporation of SON Knowledge. SON has consistently advised that the timelines proposed by Bruce Power are fundamentally inadequate to support a credible assessment of the Project's impacts, even from a western science perspective—that is, irrespective of whether SON undertakes additional assessments or provides SON Knowledge during the Impact Statement phase.

SON has provided extensive technical justification—independent of SON Knowledge considerations—for its conclusion that the current schedule cannot accommodate the scope, duration, and methodological rigor required to assess Project effects. The deficiencies outlined above remain regardless of the timing or inclusion of SON-led studies or SON-provided information. In addition, the deficiencies in the current assessment approach raise serious concerns for SON regarding whether SON Knowledge would be meaningfully and respectfully incorporated. As a result, SON is not presently in a position to determine whether, when, or how SON Knowledge could appropriately be provided within the proposed process. Additionally, without a clear understanding of Bruce Power's proposed program of study, SON is not presently able to determine what SON-led studies would be necessary, or what their scope or purpose might be.

Further, SON has not declined to participate in the Impact Statement phase. Rather, SON temporarily suspended participation in technical meetings while seeking to determine whether a collaborative assessment and decision-making process could be established. It has recently become clear that Bruce Power is not prepared to agree to the conditions necessary for such a process. In addition, SON has consistently advised that the provision of a detailed and credible workplan is a prerequisite to productive technical discussions. In the absence of such a workplan, meetings would not be capable of meaningfully advancing the technical work required to assess Project impacts.

Conclusion

SON remains prepared to engage in a process aimed at ensuring that the Project is rigorously and credibly assessed. We continue to emphasize that the provision of a detailed and credible workplan remains essential to support meaningful technical discussions and informed participation in the assessment process.

While we await that workplan, SON is reviewing the limited information Bruce Power has provided to date, including materials related to proposed valued components and study areas. That review does not alter SON's longstanding view that, without a comprehensive workplan setting out the studies to be undertaken, their scope, methodologies, and feasibility within the

proposed timelines, SON lacks the information necessary to meaningfully assess the adequacy of Bruce Power's approach.

SON continues to expect that Bruce Power will provide the substantive technical information necessary to enable informed engagement and meaningful participation in the impact assessment process, including information sufficient to evaluate whether the proposed timelines are capable of supporting a credible assessment.

Miigwetch,
<Original signed by> April 10, 2026

Owen Tanner

Cc Mike Rinker and John Mikkelsen