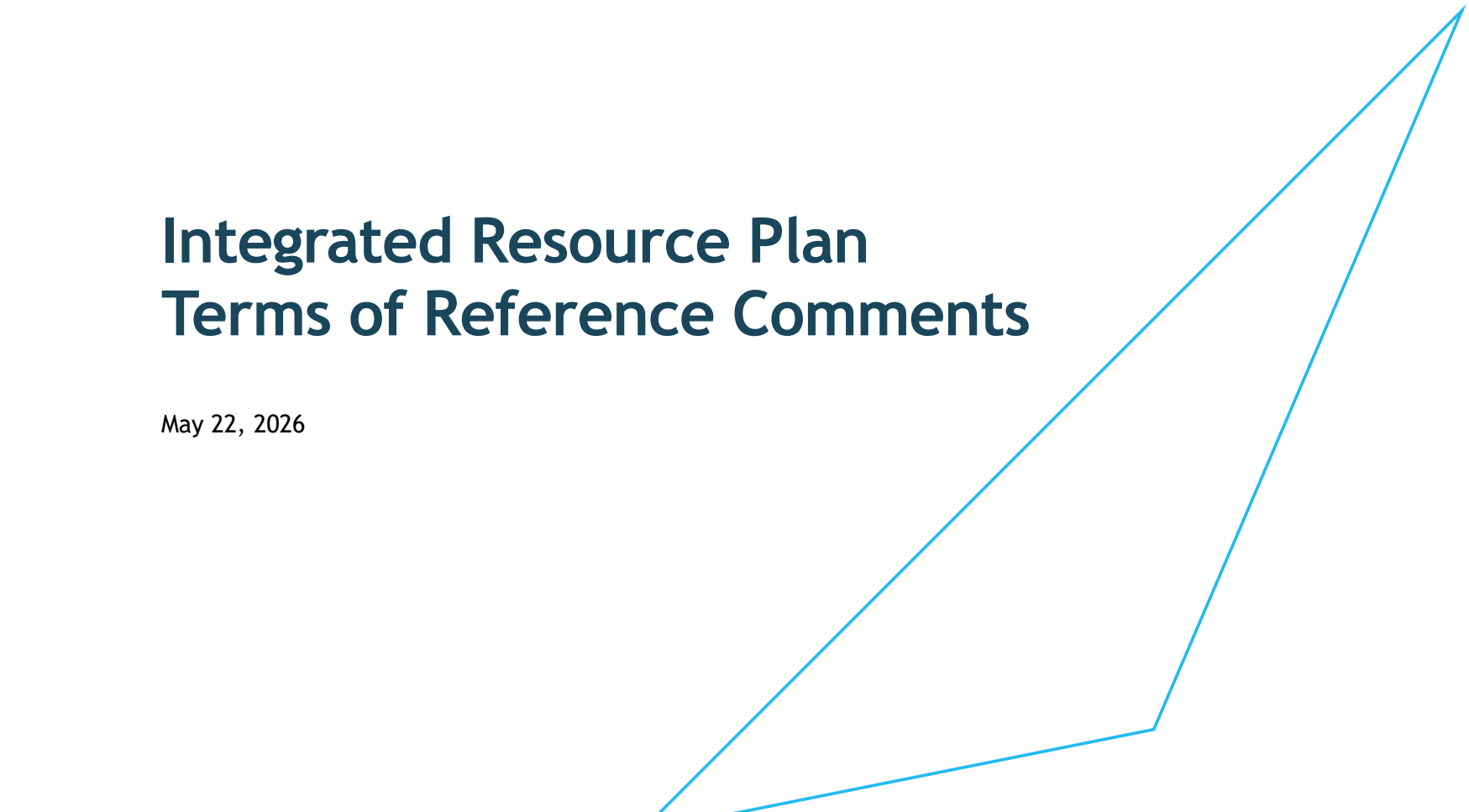
Integrated Resource Plan
Terms of Reference Comments

May 22, 2026



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INTRODUCTION

On March 31, 2026 IESO Nova Scotia published on its public website the draft Terms of Reference (ToR) for its inaugural IRP. An email was sent to IESO Nova Scotia's Integrated Resource Plan (IRP) stakeholder list informing them the draft Terms of Reference had been published and provided a link to the draft ToR. On April 17, 2026 IESO Nova Scotia held a virtual stakeholder session where part of the agenda included a review of the draft ToR and a question and answer period on the draft ToR. IESO Nova Scotia invited stakeholders to provide their feedback on the draft ToR and requested any feedback be submitted to IESO Nova Scotia by April 24, 2026. IESO Nova Scotia received seventeen ToR feedback submissions.

In this document IESO Nova Scotia has provided responses to the stakeholder feedback on the draft ToR. In order to efficiently and concisely respond to comments and questions IESO NS has taken excerpts from the parties submissions and inserted them into a table with accompanying responses. Where deemed necessary the proponents framing for the question was included in the excerpt. For full transparency all proponents complete feedback is provided as an Appendix. In addition to responding to ToR feedback submissions, questions and responses from the stakeholder session are also included in this document, including questions posed in the meeting chat that were not answered during the session due to time restrictions

Comments not specific to IESO Nova Scotia's draft Terms of Reference have not been responded to in this document. IESO Nova Scotia has other mediums to discuss non-IRP related matters and active stakeholder engagement processes for other projects where appropriate.

ACRONYMS

Acronyms used through the responses are:

ToR – Terms of Reference

IRP – Integrated Resource Plan

TWG – Technical Working Group

APRIL 17 STAKEHOLDER SESSION QUESTIONS

Question/Comment	Response
How will the IESO design and apply its primary and secondary metrics—such as the newly proposed collaborative scorecard—to rigorously test the "preferred plan," ensuring that the resulting action plan is transparent, actionable, and truly robust across all plausible futures?	The primary and secondary metrics will be scored as per the scorecard to obtain a score out of 100 for all modelled resource plans. The resource plan with the highest score will be identified as the preferred plan. Please note findings from modelling results may point to the need to define an additional scenario/sensitivity or scenarios/sensitivities with previous untested combinations of resources to identify a preferred plan.
With the weighting function for ranking IRP Scenarios evolving, is there consideration for delaying current procurement process until December?	While this question is not related to the ToR, the response below was provided during the stakeholder session: The current procurement process was a direct action plan item from the 2020/2023 IRP, tied from a time bound perspective to the phase out of coal and 2030 renewable obligations. There is a critical path tied to replacement resources to maintain system reliability. From a scheduling perspective, IRP draft results will be available in the summer, which will provide opportunity to inform procurement decision.
Where does health and health equity get factored into IRP? What would it take to have scenarios that consider impact on Nova Scotians' Health?	Health and health equity are indirectly factored into the IRP through the Federal and Provincial environment policies and regulations that regulate emissions and mandate clean energy resources. These regulations reduce air emissions produced by the generation of electricity which are intended to improve

	health outcomes. Some of the federal and provincial regulations IESO Nova Scotia must plan to meet include: • Provincial Greenhouse Gas Emission Regulations • Provincial Air Quality Regulations • The Provinces Environmental Goals and Climate Change Reduction Act (EGCCRA) that includes the 80 percent Renewable Energy Standard 2030 goal in addition to the requirement to phase out coal-fired electricity generation in the Province by 2030. • The Federal Regulations Limiting Carbon Dioxide Emissions from Coal fired Generation of Electricity • The Federal Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity • The Federal Clean Electricity regulations that come into enforcement in 2035.
As stakeholders are engaged, how will they be educated, informed and supported in understanding health and health impacts?	This question is out of scope for the IRP process.
How will IESO engage stakeholders for groups that are not easy to engage?	IESO Nova Scotia is open to engaging with stakeholders interested in the IRP in one-on-one meetings if the “open-for-all" stakeholder engagement sessions don’t meet the needs of interested groups.
Will IESO ensure that future RFPs are technology neutral, unlike the RFP for the twin peaker plants for Pictou?	This question is out of scope for the IRP process.

On the technical working group will there be opportunity for other subject matter experts as necessary?	Yes. As identified in the Terms of Reference the technical working group may call on expertise as required to participate in discussions.
Will there be a robust discussion on scenarios?	Yes. IESO Nova Scotia will collaborate with its technical consultant, stakeholders and the technical working group when developing scenarios.
Is there room for iterating results in the schedule?	Yes. The proposed schedule allows for the iteration of results through the process. Preliminary results will be provided and reviewed with stakeholders in July allowing stakeholders the opportunity for stakeholders to comment on what they are seeing.
Are Green Choice 2 scenarios going to be modelled as fixed decisions?	No. Only contracted resources will be modelled as fixed decisions.
How do you reconcile the 25 year study period with objective of using it to identify near term (3-5 year) procurement needs?	The results of this IRP will be available by the end of 2026. The timeline to procure and build most resources is 3 to 5 years. As such, this IRP will identify resource additions for the years 2029 to 2031. The 25 year study period is necessary due to the long-life cycle of resources and ensuring near term decisions are aligned with long term planning needs. Future IRPs will inform and refine future procurement needs.
There has been no statement of Plexos/IRP scenario model accuracy around how accurately they reflect NS grid system behaviour in terms of costs and emissions. Without this	IESO Nova Scotia compares modelled results to operational information like generation output and emission levels as a quality control measure to make sure model outputs represent and are rooted in operational experience. Fuel and resource

knowledge, how can we be sure in our scenario rankings and by extension procurement recommendations?	costs are inputs to the model that are reviewed with stakeholders during assumption development.
Stakeholders need sufficient information about immediate and long term effects of energy decisions such as gas peaker plants – cost is only one consideration. Impacts on water, health and health equity need to be clearly outlined to all stakeholders?	Health and health equity outcomes are indirectly linked via Provincial and Federal regulations which limit generation from emitting resources. At the development phase any new project needs to demonstrate its ability to meet and adhere to Provincial and Federal environmental policies and regulations including any related to water resources.
Do you have a list of specific pre-IRP studies to be done or updated?	The pre-IRP studies being undertaken for this IRP and the entity responsible for the completion of the study are: 1. Dunsky Report on IRP Process – led by IESO Nova Scotia 2. The Effective Load Carrying Capacity (ELCC) study – led jointly by IESO Nova Scotia and Nova Scotia Power 3. Hybrid-heating study - led by Net- Zero Atlantic 4. DSM Potential Study – led by EfficiencyOne
Would IESO-NS be open to building iterative linkage -feedback from the E1 potential study back into IRP modelling in the 2026 cycle?	Building the iterative linkage-feedback loop between the DSM potential study and IRP modelling is not possible within the IRP schedule.
Has IESO-NS been engaged in the DERIR being developed by Dunsky? If yes, how will it interact with IRP?	IESO NS has only had limited engagement with Dunsky and Nova Scotia Power on the Distributed Energy Resource Integration Road Map.

Are capacity cost considerations to be included in the ELCC study? In 2019 there was separate information on capacity costs in addition to ELCC information.	No, capacity costs are not included in the ELCC study. Capital cost considerations will be reviewed with stakeholders during the stakeholder sessions on assumptions. In 2019 E3 conducted two pre-IRP studies an ELCC study and Supply Options study.
Does NSP retain all REC (renewable energy certificates) for all new renewable energy projects? How do IPP (independent power producers) realize their the carbon reduction effort?	This question is out of scope for the IRP process.
How are we going to mitigate environmental impacts of natural gas exploitation, uranium, hydrogen and ammonium gas exploration? How do we protect our water resources?	Natural resource exploration and development are outside of scope for the IRP which is focused on planning specific to the electricity sector. At the development phase any new project needs to demonstrate its ability to meet and adhere to Provincial and Federal environmental polices and regulations including any related to water resources.
Beyond engagement, there should be direct Mi'kmaq representation (as the rightsholders) in the technical working group, as is the case in other jurisdictions like the Ontario IESO's regional planning process.	IESO Nova Scotia is open to having Mi'kmaq representation on the TWG and has reached out to a Mi'kmaq organization that works on behalf of the Mi'kmaq of Nova Scotia to see if they would like to participate in the TWG.
Given the advances that have been made in tidal stream technology commercialisation internationally and recent regulatory approvals in Nova Scotia, was this lack of reference deliberate or an oversight, and is there a future opportunity for it to be included in further assessments?	The lack of reference was not a deliberate oversight. IESO Nova Scotia is open to including tidal technology as a resource option in the IRP and has updated the Terms of Reference to include it.

What is the status of the comments provided to the Impact Assessment Agency of Canada? What is the timeline for IESO to address these concerns?	This question is out of scope for the IRP process.

CONSUMER ADVOCATE

Question/Comment	Response
However, IESO Nova Scotia needs to evaluate several topics that require more extensive study than may be feasible under the proposed timeline. This includes, but is not limited to, consideration of operational reliability related to technology selections and deployments, such as synchronous condensers and dynamic line ratings. The effectiveness of these technologies needs to be evaluated in models that are not commonly used during IRPs, but the outcomes of those evaluations may have a material impact on the IRP. Accordingly, I recommend that IESO Nova Scotia kick off at 2027 IRP in approximately September 2026 by drafting Terms of Reference (ToR) for the following IRP and initiating any procurement processes necessary for expert assistance with special studies, etc. for that project. These conversations should continue through November or December. Activities related to special studies should kick off at the earliest possible date. The expectation may be that the 2027 IRP will take 14-18 months to complete, not being published before early or even mid-2028.	Dunsky recommended IESO Nova Scotia move to a more regular cadence for conducting IRPs and IESO Nova Scotia believes that with a more regular cadence and advancement of IRP action plan items in between IRPs, such as system dynamic studies identified as needed during the IRP, will lead to a more consistent and steady engagement effort. The process flow of 2026 IRP, to action plan items, to the next IRP will in principle be similar to what the CA is proposing just with different naming/terminology.
The Dunsky assessment of the prior IRP process state that, "certain other stakeholders such as resource developers noted that the IRP was too vague to provide them with the clarity and certainty needed to effectively plan out their investments and efforts in the province, including committing teams to NS	Besides the challenge identified, that inviting a single developer could be seen as advantageous to them over others, this same principle applies between resource types as well. IESO Nova Scotia did consider having representation on the TWG from industry groups or developers but felt in order for it

versus elsewhere." Based on that finding, I recommend that IESO Nova Scotia add such a stakeholder representative to address renewable energy project development. I recognize that unless there is a trade association that is able to participate, selecting one or another resource developer could be seen as advantageous to that developer and prejudicial to others. IESO Nova Scotia should, of course, seek to minimize any such advantage gained, but the benefit to the process of having an experienced resource developer engaged in the conversation should outweigh any such concerns.	to be equitable there would need to be room for representation from all resources types which would significantly increase the TWG size and reduce the efficiency of the TWG. Trade associations and developers maintain the ability to provide comments at each stage of the IRP, including highlighting what clarity they would need to effectively plan out their investments and efforts in the province. In addition the TWG retains the option to invite trade associations or developers to TWG meetings to provide their input on specific topics of which they have expertise, if desired.
The IESO NS should consider holding workshops with the technical work group in advance of finalizing pre-IRP studies. It may be too late for this to occur in some or all cases, but this should be established as a practice going forward.	IESO Nova Scotia acknowledges this recommendation and will consider it when planning future studies.
Net Zero Atlantic has published "Mitigating the Impact of Building Electrification on Peak Demand in Atlantic Canada" in August 2025, and NS Power states that a Hybrid Heating study is underway, in which Net Zero Atlantic will use a jurisdictional scan and survey of NS Power customers to understand interest in a hybrid heating program. (...) Information on these studies should be discussed with the technical work group at the earliest opportunity in order to develop a shared understanding of how this approach will be evaluated in the IRP.	The Net Zero Atlantic Hybrid Heating study should be available in July which will provide further information on this topic. IESO Nova Scotia will consider how best to provide further information to the TWG on this topic in order to develop a shared

Decisional vs Deliberative (…)_ In the context of Nova Scotia, I recommend that the "hybrid" approach be taken. Specifically, the IRP should include – as attachments or separate filings – requests to proceed with proposed RFPs that are supported directly and fully by the IRP. Not only will this promote efficiency but it will also promote alignment between the IRP and proposed methods for evaluating bids received in response to the RFP. (…) For more complex resource decisions, such as those that require power flow modeling in the bid evaluation process, it may be appropriate to file those proposals in a separate capital application process.	IESO Nova Scotia acknowledges the Consumer Advocate's thoughts and recommendation on this matter. They will be considered when charting the path from IRP outcomes to procurement.

BATES WHITE

Question/Comment	Response
The ToR states: "An IRP assesses both supply-side and demand-side resources within the context of the Nova Scotia planning environment, including all applicable Federal and Provincial environmental policy and regulations, to develop a long-term plan for a reliable, sustainable, and cost-effective power grid for the next 20 to 30 years." The ToR also states that one of the "objectives" of the first IRP is to "[d]evelop a robust long-term electricity system plan that is reliable, sustainable, and cost-effective covering the next 20 to 30 years." In our view, the ToR would be improved by providing greater clarity on the applicable planning horizon. This can be done by specifying the base case planning horizon to be 25 years, or by detailing how the IESO may consider different planning horizons – such as 20-, 25-, and 30-year horizons – in the IRP process.	IESO Nova Scotia's intent, as stated in the assessment period section of the Terms of Reference, is for the IRP planning horizon to cover the 25 year period from 2029 – 2053. Whereas the planning period begins in 2029, the reference to the "next 20 to 30" years was intended capture the years 2026 - 2053.
Regarding the selection of the 2029-2053 period as the base case, the ToR identifies one supporting reason for this selection as the fact that the current in-service date for the Reliability Intertie is "2028." While valid, we recommend that the IESO retain the flexibility to model the system with a later in-service date for the Reliability Intertie should delays occur.	IESO Nova Scotia confirms it is flexible to the possibility of modelling the system with a later in-service date for the Reliability Intertie.
The ToR states that "IESO Nova Scotia will strive for a reduced set of crisp, focused scenarios which (a) are designed to support key decisions, (b) are anchored around one 'most	The wording used is a direct copy of Dunsky's recommendation and is intended to provide direction on how scenarios and sensitives will be will designed and selected.

likely' base case, (c) represent holistic and distinct possible futures, (d) are vetted by stakeholders, (e) are complemented by targeted sensitivities." This language mixes critical elements, such as stakeholder vetting, with important but undefined terms, such as "reduced set," and amorphous terms, such as "crisp" and "holistic." While this may be intended as a loose summary, the enumeration implies that more specific objectives are being enshrined in the ToR.	
The ToR should clarify that the process of identifying, considering and selecting model scenarios and sensitivities will involve close consultation with stakeholders	Stakeholders will have the opportunity to inform the scenarios and sensitivities modelled during the IRP. The ToR have been updated to make this point clearer.
We recommend caution against over-emphasizing a "most likely" base case. Even if such a case exists, it may not be significantly more likely than others. Our view is that it is especially important to examine likely scenarios that entail different portfolio selections, to provide useful information regarding the implications of any future deviations of reality from base assumptions.	IESO Nova Scotia has updated the terms of reference to remove the wording "most likely". The rest of the comment aligns with Dunsky's recommendation that scenarios represent holistic and distinct possible futures.
For every model case, IESO should provide stakeholders all input and output data in accessible format.	IESO Nova Scotia will provide input and output data in Excel format, recognizing this is the preferred format of stakeholders for receiving this data.
The ToR states: In December 2025, an update to the previous Effective Load Carrying Capacity (ELCC) study began in partnership with Nova Scotia Power and Energy and Environmental Economics, Inc	IESO Nova Scotia has deleted the final sentence, as per the recommendation.

(E3). The ELCC, or "capacity value", of a resource represents the anticipated contribution from energy limited resources during periods when the grid is most likely to experience capacity shortfalls and, as a result, what percentage of its nameplate capacity can be counted on as firm for system planning. Loss of Load Expectation (LOLE) studies are the industry standard used to calculate the ELCC or capacity value of intermittent or energy limited resources. The reference in the final sentence to the LOLE study appears unconnected to the discussion of the ELCC study commissioned by the IESO. It may be that the final sentence attempts to explain how the ELCC study will be conducted, and that the methodology is consistent with industry standard. We suggest deleting this final sentence, or clarifying its intent.	
We also suggest elaborating on the sentence that states: "The execution of an updated ELCC study was a Nova Scotia Energy Board (NSEB) directive to NS Power, and the scope of work for the study was developed collaboratively with stakeholders in 2025." It is not obvious which "stakeholders" worked on the development of the ELCC study scope of work. Specificity would help and would avoid suggesting that all stakeholders were involved in the development of the scope of work.	The ELCC study scope of work was distributed by NS Power to its IRP stakeholder list for feedback in 2025. Comments on the study scope were received from: • Industrial Group • Department of Energy • Consumer Advocate • Small Business Advocate • EfficiencyOne/Power Advisory • Solar Nova Scotia • Energy Storage Canada

The term “sustainable” is used throughout the ToR, including in two separate IRP objectives. We understand that the term is used in section 2(e) of the More Access to Energy Act, but the ToR would benefit from a definition of the term, given the frequency of its use and the multiple ways the term may be interpreted.	The definition for sustainable prosperity has been added to the Terms of Reference.
Two other terms would benefit from definition. The first is “integrated electricity system,” which is used in the second IRP objective. It is not clear whether this is referring to an electricity system with integrated generation, transmission, and distribution resources, or whether this refers to the provincial system’s integration into the Maritimes region (with interties with New Brunswick and Newfoundland and Labrador), or both. The second is “non-electric energy resources,” a term that is not clear	Definitions have been added to the terms of reference for these two terms.
Developing an updated avoided cost calculation for demand-side resources makes sense and is akin to ensuring the IRP uses up-to-date, credible cost assumptions in assessing new and existing resources for future portfolios. However, this update seems out of place as an “objective” of the IRP, one of six identified in the ToR. We suggest two potential solutions. One is to remove the objective entirely and address the issue elsewhere, such as in the section on “Assumption and Scenario Development,” or as is already done in the “Updated Avoided Costs” section. An alternative approach is to broaden this IRP objective to include all resource cost assumptions.	Updating the avoided costs prior to, or as part of, conducting an integrated resource planning exercise is a duty of the IESO under the More Access to Energy Act. It’s inclusion as an objective is due to this statutory requirement.

The ToR would benefit from additional specificity regarding the pre-IRP studies that have been commissioned by the IESO, which will allow stakeholders to plan their resources for reviewing these studies and providing feedback.	Details have been added to the Terms of Reference on the pre-IRP studies being undertaken.
To that end, it would be helpful to add a bullet to the "Assumption and Scenario Development" section (at page 4) to include "sensitivities regarding pre-IRP study values," or similar language. Adding this language would not obligate IESO to consider every stakeholder-suggested sensitivity run, but would allow stakeholders to recommend and justify such runs.	The inclusion of sensitivities has been added to the "Assumption and Scenario Development" of the terms of reference.
The ToR indicates that the IESO "intends to engage with stakeholders as it progresses through the different phases of the IRP." We recommend replacing the words "intends to" with "will" to reflect the importance of this aspect of the IRP process and the IESO's commitment to a transparent, collaborative process	This recommendation has been implemented in the Terms of Reference.
The ToR should include the ability of stakeholders to submit written requests for information to the IESO.	IESO Nova Scotia is striving to provide a transparent process and does not anticipate a need for written requests for information. The written comment periods that follow stakeholder sessions and the publication of materials, provide an opportunity for stakeholders to seek clarity from IESO Nova Scotia on materials provided.
The limitations proposed on meeting participation may be overly restrictive. Many of the stakeholders will have expert	IESO Nova Scotia is open to working with the technical working group to strike an appropriate balance on participation. During

consultants and staff that exceed the "one" member limit, requiring that one member to report back and collaborate with their respective teams and potentially depriving the TWG meeting of useful contributions. The ToR does retain the right to "invite" additional participants, but does not explain how that process would work. We recommend consideration of a less extreme approach, one that requires stakeholder members to minimize the number of meeting participants and/or to designate a single individual as a speaking participant during the meetings.	the first technical working group meeting on May 13th guidelines were established and agreed to that allow members to designate an alternate representative in order to allow for continuity of support throughout the process.
The ToR proposes to plan future resource portfolios based on cost (70%) and other non-cost factors (30%). We recommend the IESO reconsider this weighting to more heavily weigh cost, particularly where the non-cost criteria may be implemented in other ways. GHG reduction (10%) can be implemented through ensuring that the selected portfolio meets applicable GHG emissions criteria, and through sufficient modeling of GHG emissions adders or costs, such as the Output-Based Pricing System ("OBPS") carbon intensity allowances. Technology risk (10%) can be implemented through qualitative considerations, such as avoiding first-of-a-kind technology risk (or requiring that resources be of proven technology). Economic growth (10%) can be difficult to measure with accuracy and relies on particularly uncertain assumptions. If there is a national or provincial preference for resources or resource components/vendors, such requirements can be implemented at the procurement stage. We suggest the IESO reconsider	In response to stakeholder feedback IESO Nova Scotia has adjusted the scorecard weightings to more heavily weight cost. The cost weighting has been increased to 80% from 70% and economic growth and technology risk have both been decreased from 10% to 5%.

these categories or, at minimum, consider reductions to their weights in the evaluation process.	
The ToR would benefit from additional language explaining how the load forecast (and scenarios) will be developed, vetted, and implemented.	The load forecast is an assumption and will be addressed during the assumption and scenario development phase of the IRP. Feedback from the technical working group and stakeholders will be considered.
The ToR would be improved by including at least some reference to fuel supply and how the IRP will consider alternatives, costs and risks of fuel supply	Fuel supply has been added to the list of assumptions in the terms of reference.
The ToR should explain how the IRP will model grid reliability beyond measures of installed capacity and planning reserve margins	Grid reliability beyond measures, such as intermittent renewable integration constraints are an assumption and will be addressed during the assumption and scenario development phase of the IRP.

EAST COAST ENVIRONMENTAL LAW

Question/Comment	Response
We note the recommendation by Bates White Economic Consulting that the word sustainable" be defined in the TOR. The More Access to Energy Act provides statutory definitions of the terms "sustainable development" and "sustainable prosperity", and we would argue that those definitions are the basis for NS IESO interpretations of what the word "sustainable" means in the context of the NS IESO's mandate and responsibilities under the More Access to Energy Act. However, we would agree that if the NS IESO intends to use the word "sustainable" more broadly, beyond the context of Nova Scotia's statutorily-defined concepts of sustainable development and sustainable prosperity, it would be helpful to clarify the intended meaning.	The statutory definitions for sustainable development and sustainable prosperity in the More Access to Energy Act are the bases for the NS IESO interpretations of what the word "sustainable" and they have been added to the Terms of Reference for clarity.
We support the NS IESO's proposal to develop a means of evaluating other resource planning objectives beyond the identification of least-cost options; however, we would like to learn more about the proposed scorecard approach before commenting on its potential use. We appreciate that the NS IESO intends to develop an evaluation method in consultation with stakeholders, and we look forward to opportunities to examine the NS IESO's proposal in more detail.	IESO Nova Scotia has added wording to the ToR to more clearly explain how the scorecard will be used.

EASTWARD ENERGY

Question/Comment	Response
Eastward notes that the time periods in the proposed IRP schedule for stakeholders to provide written comments following the engagement sessions for each of the draft assumptions and scenarios, preliminary modelling results and modelling results and draft action plan is only one week. As stakeholders may not fully understand the information provided until after the engagement sessions where they can ask questions and provide input, Eastward suggests that the schedule be revised to allow 10 days following each of the three engagement sessions noted to provide written comments	The IRP schedule has been updated to allow 10 days for stakeholders to provide written comments following an engagement session.
Eastward believes it would be helpful for IESO Nova Scotia for Eastward to participate and offer its and its consultants expert opinion when this specific area is being discussed by the TWG	IESO Nova Scotia recognizes and accepts this offer.
Eastward suggests that moving to 30% of the evaluation on factors other than Least Cost when electricity customers are facing significant affordability concerns does not appear to be appropriate. If IESO Nova Scotia is going to include factors other than Least Cost in this IRP, Eastward suggests that it begin with no more than 15% of the evaluation being based on other factors than Least Cost. The proportion of the evaluation of such factors in future IRPs can then be evaluated having seen how these factors played into the development of the preferred resource plan in this IRP.	In response to stakeholder feedback IESO Nova Scotia has adjusted the scorecard weightings to more heavily weight cost. The cost weighting has been increased to 80% from 70% and economic growth and technology risk have both been decreased from 10% to 5%.

With respect to the Economic Growth criteria Eastward is not clear on how IESO Nova Scotia is going to determine the total jobs created and the construction and operation job counts. Further elaboration on where this information is going to be sourced for each potential resource to be evaluated is required in order to understand the validity of this criteria.	Like other assumptions used in the IRP, IESO Nova Scotia would present job count assumptions and site the source of the values for stakeholder consideration and feedback.
It may be useful to provide stakeholders with a copy of the final proposed Terms of Reference prior to its filing with the NSEB so they can determine whether they will wish to make comments to the NSEB on the final proposed version.	Due to the volume of feedback received and the extended time needed to consider and address this feedback it was not possible to provide the Terms of Reference to stakeholders in advance of filing, but IESO Nova Scotia has published the Terms of Reference on its website so that all parties have access.

EFFICIENCYONE

Question/Comment	Response
Please confirm whether NS Power or the IESO will be providing updated avoided transmission & distribution (T&D) costs and whether this will be developed as part of the IRP process?	The avoided transmission and distribution costs are based on NS Power's spend on transmission and distribution assets which IESO Nova Scotia does not have the data for. Updates to these values will be provided by NS Power with input by IESO-NS where required.
The IRP study period is defined to be 2029-2053 – does this mean that the 3–5-year objective (provided below) covers 2031-2033?	The 3 to 5 year objective is meant to cover the period beginning when the IESO's inaugural IRP is completed, which is currently planned for the end of 2026; therefore, the 3 to 5 year period spans 2027 to 3031. Whereas there is insufficient time for any resources that are not yet procured to be built and be available at the start of 2027 and 2028, the IESO will procure resources identified in the IRP as needed in 2029, 2030, and 2031.
The primary evaluation criteria for selecting the Preferred Resource Plan is 'least cost' measured as the cumulative total 25-year Net Present Value (NPV) of the modelled capacity expansion and production costs. Is this defined as the lowest NPV Revenue Requirement with or without end effects and will NPV inclusive of end effects be provided for all IRP scenarios?	The lowest cost NPV is inclusive of end effects. The ToR have been updated to clarify this. End effects will be provided for all scenarios.

Under Key Questions it states IESO must "research and analyze the capital and operating and maintenance costs for new supply-side resources…" Please confirm whether these costs include full life cycle costs?	Consistent with prior IRPs in Nova Scotia, costs will include build costs, fixed and variable operating costs, and end-effects to capture the full life cycle costs of supply side resources.
Expand the scope to include exploring ways to model demand-side management (DSM) as a resource, rather than narrowly focusing solely on energy efficiency.	IESO Nova Scotia will explore approaches to endogenizing DSM/DER as selectable resources. However, it may not be feasible to accommodate modelling DSM as a resource during this IRP and maintain an IRP schedule that concludes with sufficient time to inform planning for the 2030 transition.
Recommend that the IESO, in exploring ways to model DSM, considers how to include levels of DSM in between the discreet scenarios that are provided from the DSM potential study. This approach should ensure that the preferred IRP scenario(s) treat DSM as a first-order resource ("first fuel") and clearly demonstrate value to ratepayers. E1 suggests this approach to inclusion of DSM be put into practice for the 2026 IRP taking the approach that is most reasonable given the 2026 IRP timeline.	As was done in previous IRPs IESO Nova Scotia anticipates studying varying levels of DSM in the IRP and will work with E1 and the TWG on how to best accomplish this. The modeling approach will reflect the contribution of DSM resources to the evaluation criteria against which IRP resource plans will be evaluated, as defined in the ToR.
Please describe how the 2026 IRP, which has a study period beginning in 2029 is going to "Confirm the resource needs of the system to achieve the 2030 Provincial decarbonization targets"?	The timing of the IRP and the selected planning horizon allow for the opportunity to confirm the need for required capacity of any resources not yet contracted that are part of meeting the 2030 decarbonization targets. This includes, for example, reviewing the planned additions of battery capacity, fast acting generation, unit conversions, and wind and solar generation which were identified in previous IRP Results and Action Plans.

ENERGY STORAGE CANADA

Energy Storage Canada noted that “The Draft Terms of Reference outline a structured and methodical approach that is well suited to the scale and complexity of the planning exercise ahead. The clarity of the objectives, analytical framework, modelling tools, and engagement steps reflects a strong commitment to evidence-based planning and to ensuring that the IRP process is accessible, and technically rigorous.” Otherwise, Energy Storage Canada did not pose any questions or provide feedback on ToR.

INDUSTRIAL GROUP

Question/Comment	Response
The economic growth metric (proposed to be weighted 10%) is stated to reflect the total number of jobs created. This metric risks overstating benefits to NS while ignoring electricity cost impacts that could undermine existing industrial or small business employment and doesn't account for risks to export-oriented sectors sensitive to power prices. If this is an included consideration (and it is fraught with complexity), any job creation metrics should account for electricity cost competitiveness spillover effects.	The weighting of the economic growth metric has been reduced in response to stakeholder feedback. Extending the job count analysis beyond direct impacts and into an economy wide analysis significantly increases the complexity of the analysis. IESO Nova Scotia recognizes that higher electricity costs could impact export orientated sectors but believes containing the scope of the job impact analysis to only direct construction and operating job creation is an appropriately sized first step for inclusion of such a metric in the IRP and the reduced weighting in part recognizes the limited scope of the analysis.
The IG recommends that the TOR and final IRP explicitly state that the least cost NPV outcome will govern selection of the preferred resource plan, accounting for reliability and compliance constraints. Any scorecard results should not override cost-based outcomes.	In response to stakeholder feedback IESO Nova Scotia has adjusted the scorecard weightings to more heavily weight cost. The cost weighting has been increased to 80% from 70% and economic growth and technology risk have both been decreased from 10% to 5%.
To the extent that non-NPV metrics influence decisions, there should be a clear articulation of the trade-offs as these are not substitutes for affordability and may not directly benefit electricity customers who ultimately bear the system costs through rates.	One of Dunsky's recommendations was to "More clearly select, present and test the preferred plan, (...) and (c) dedicating an IRP chapter to presenting the preferred plan in detail (selection, content, robustness)." IESO NS believes in meeting this recommendation it will also address the Industrial

	Groups feedback for clear articulation of trade-offs when non-NPV metrics influence decisions.

KARL LEUSCHEN

Question/Comment	Response
The ToR should require that the DR capacity values used in the IRP reflect: • Effective capacity at design-day conditions (not average conditions). • Net capacity after snapback (not the gross reduction during the event window). • An availability rate that accounts for opt-out, connectivity loss, and device state (e.g., the unit is already off or already at minimum). • Duration limits, because a resource delivering for one hour is not interchangeable with one delivering for four. This distinction directly affects how much supply-side build the IRP concludes is needed. If the model treats 37 MW of enrolled DR (the 2025 IRP Action Plan's firm DR target by 2035) as 37 MW of firm capacity, the result will be wrong in the very conditions where that capacity is supposed to show up.	IESO Nova Scotia generally agrees with points 1, 3 and 4. For point 2 it agrees that snapback must be considered but not that DR capacity values must be net of snapback. The systems load profile when snapback occurs would determine to what extent DR capacity values would need to be adjusted when accounting for snapback. IESO Nova Scotia doesn't believe the Terms of Reference is the proper place for characterizing demand response. Demand Response will be discussed in further detail when discussing the assumptions for the IRP.
DR performance is highly sensitive to the same conditions that create system stress, so the IRP should test this explicitly. Based on Dunsky's April 17 clarification, key stress variables like this belong in sensitivities, rather than multiplying the scenario count. DR availability under cold-event conditions is a good candidate for a dedicated sensitivity within the base Scenario.	IESO Nova Scotia acknowledges this recommendation and will consider it when developing the scenarios and sensitivities.

Add a positive technology-risk credit for plans that meet reliability requirements with a higher share of commercially proven resources, or clarify that technology-risk scoring is intended to work that way (i.e., more proven-technology content scores higher, not only less emerging-technology content).	The way the technology score is designed, scenarios or sensitivities with more proven-technology content will receive higher scores.
Include demand-side program delivery jobs in the job-count methodology, not only construction and operations jobs for generation and transmission assets. This aligns with Dunsky's NEXT priority action to "report on the economic impact of each portfolio.”	IESO Nova Scotia agrees demand side delivery jobs should be included in the job count methodology.

MARINE RENEWABLE CANADA

Question/Comment	Response
MRC notes that cost is weighted heavily in the evaluation framework, accounting for 70% of the assessment. While we recognize the importance of affordability, we encourage a broader interpretation of cost beyond simple levelized cost of energy (LCOE). A system-level view should incorporate factors such as Effective Load Carrying Capability (ELCC), capacity factors, and the benefits of resource diversity.	Least cost is measured as the cumulative net present value of the modelled capacity expansion and production costs including end effects which takes into consideration ELCC, capacity factors and resource diversity, amongst other things.
The IRP should explicitly recognize the asymmetric risks of underestimating demand in a context of rapid electrification. Constraining electricity supply poses a significant risk to Nova Scotia's economic growth, particularly as new industrial opportunities emerge.	IESO Nova Scotia will consider this point and how it could be incorporated into the IRP for consideration.
MRC strongly emphasizes that the IRP must align with Nova Scotia's legislated climate targets, including achieving net-zero emissions by 2050. Planning assumptions that do not fully incorporate these targets risk undermining their achievement.	Nova Scotia's legislated climate targets are a central planning assumption for the IRP, but given that policy can change overtime, and with the change of governments, the IRP will also explore alternative policy scenarios in order to test the robustness of outcomes across a range of possible futures.

NATURAL FORCES

Question/Comment	Response
The term of cost assessment should reflect the operating life of assets. Wind projects typically operate over approximately 25-30 years, and hydro assets 40+ years. Shorter evaluation periods risk biasing results toward lower-capex, shorter-life options.	The inclusion of end effects in the NPV analysis is intended to account for the differences in the operating lives of assets. IESO NS has updated the ToR to make it clearer that resource plan costs are inclusive of end effects.
Sustainability should be prioritized within the evaluation framework, rather than treated as a secondary or post-model consideration.	Including multiple objective functions within the model would be a drastic change from the current model set up and is not possible within the schedule of the IRP. In addition, as the optimizations requirements expand, the run time of the model increases. Increasing the optimization parameters to include the factors associated with sustainability may not be technically feasible with the tools IESO Nova Scotia uses.
Cost evaluation should also incorporate risk, not just nominal cost. Fuel-based generation carries fuel price risk, while wind and solar carry resource variability risk. These risks should be explicitly assessed and compared. In addition, broader cost risks should be considered, including tariffs, supply chain constraints, geopolitical impacts, and increased capital cost variability driven by external factors.	The different risks identified are normally explored as alternative scenarios or sensitivities to evaluate their impact on resource selection.
Limiting environmental evaluation to GHG reduction does not fully capture project impacts. Additional factors such as water consumption and quality, land use and degradation,	Environmental evaluation is not limited to GHG reduction. Current Federal and Provincial environmental policies and regulations that regulate emissions and mandate clean energy

ecosystem impacts, non-GHG air contaminants, and waste generation and disposal should be included.	resources are included as environmental assumptions used in the IRP. The GHG Reduction evaluation criteria provides additional weighting to GHG reduction above and beyond the considerable emissions reduction achieved from policy and regulation.
Given the volume of wind generation contracts expiring within the next 6–8 years, it would be useful to understand whether the IESO intends to engage with incumbent generators. Early engagement could support contract extensions and repowering opportunities.	This question is out of scope for the IRP process.
It may also be worthwhile for the IRP to consider a scenario where the coal phase-out is partially delayed (for example, to 2032), to assess whether this could result in long-term ratepayer benefits. This would require government direction and sufficient lead time but could reduce near-term system pressure.	IESO Nova Scotia acknowledges this recommendation and will consider it during the development of scenarios and sensitivities.
The draft IRP scorecard proposes applying non-cost objectives—such as GHG reduction, economic growth, and energy security—at the resource plan level after capacity expansion and production cost modeling. This approach risks treating these factors as secondary considerations. Applying these criteria at the facility level prior to modeling would better align with broader policy objectives.	Including these items endogenously in the modelling would be a drastic change from the current model set up and is not possible within the schedule of the IRP. In addition, as the optimizations requirements expand, the run time of the model increases. Such a dramatic expansion of the optimization parameters may not be technically feasible with the tools IESO Nova Scotia uses.
Finally, given current geopolitical conditions, energy security should be explicitly considered within the framework.	The provinces clean power plan, which focus's on development of domestic renewable resources to meet the 80% renewable

Favouring domestic energy sources over imported fuels would improve system resilience and reduce exposure to external risks.	energy standard will significantly reduce Nova Scotia's exposure risk to the costs of imported fuels. Further energy security requirements would be best assessed as a scenario or sensitivity.

NOVA SCOTIA POWER

Question/Comment	Response
In addition to the near-term resource procurement identification (3 – 5 years) and the long-term resource plan identification, NS Power also recommends the IRP as the source of identifying capital work to existing resources that may be triggered ahead of or following the procurement window. For example, the decision point for the Mersey Hydro System will serve as a source of information/direction on the decision point for rebuild or partial decommissioning	IESO Nova Scotia has updated the IRP objectives to include identifying ranges of capital investment expenditures to existing resources that support a reliable, least cost power system in Nova Scotia.
NS Power notes the TOR and Report will be filed with the NSEB. Will the feedback provided by stakeholders be captured as part of an IR process with the NSEB for these phases or will feedback be provided to the IESO-NS to be published, with IESO-NS responses, on the IESO-NS system planning website as per the other phases of the IRP?	IESO Nova Scotia has filed stakeholder comments and corresponding responses with the Terms of Reference it filed with the NSEB. The ToR and stakeholder comments/responses will also be available on IESO Nova Scotia system planning website.
Since the stakeholder engagement session will be held one week before the final feedback is due, would the IESO-NS be open to short extensions to providing feedback if new information or clarity is provided during the session that requires additional time to update the stakeholder engagement feedback?	In response to stakeholder feedback IESO Nova Scotia has increased the feedback window from 7 days to 10 days.

NS Power would recommend the IRP start in 2028 (study period would run from 2028 – 2052) to capture the timing of the remaining CPP work to achieve the 2030 targets. This includes the conversion of POT, the addition of the GCP wind, the evaluation of the potential for Trenton 6 biomass conversion, which, given the scope of work, could occur in 2028. This also supports the justification for the 10YSO capacity build out and timing and provides a clear resource for the work required to meet the 2030 targets.	In IESO Nova Scotia's long term capacity expansion models, capacity additions and retirements are normally represented in the model as changes on January 1 of a year. IESO Nova Scotia's experience is its capacity expansion models run better when configured this way and since there is considerable project timing uncertainty in a 25 year model it is reasonable to take this approach. For the IRP, the model will be configured in a manner to allow resources to be added or retired at the start of the planning horizon, Jan 1 2029, meaning it is not necessary to model 2028 to capture potential projects that could come online in that year as they will be represented as a resource change on Jan 1, 2029.
Please refer to the previous comments re:feedback timing. NS Power is generally supportive of the completion of an IRP in 2026 but is requesting the potential for some flexibility in providing feedback following engagement sessions.	Please see previous response.
NS Power recommends only considering the inclusion of the least cost and GHG reduction components in the draft score card for the following reasons: - The technology risk should already be embedded in the assumptions for the emerging resources (costs, date of commercial availability) - NS Power supports the evaluation of economic growth in the Province for the scenarios considered in the IRP but recommends consideration of this evaluation outside of the IRP process.	In response to stakeholder feedback IESO Nova Scotia has adjusted the scorecard weightings to more heavily weight cost. The cost weighting has been increased to 80% from 70% and economic growth and technology risk have both been decreased from 10% to 5%.

NRSTOR

Question/Comment	Response
NRStor welcomes the opportunity to review the draft storage findings in the ELCC Study and other pre-IRP studies. NRStor's 250 MW/1,000 MWh Oneida Battery Energy Storage has been operational since May 2025. Technical insights including performance characteristics and operational parameters from Oneida and our other diverse storage portfolio could be instructive in finalizing the storage assumptions for the ELCC Study.	IESO Nova Scotia thanks NRStor for this offer but the performance characteristics and operating parameters used in the ELCC were set months earlier at the start of the ELCC study.
NRStor recommends that system needs be defined by grid services and specified operability criteria, allowing for a diverse range of resources to be evaluated for both the capital and operational costs in meeting the specified criteria.	Where possible IESO Nova Scotia will take this approach; however, sometimes either due to modelling limitations or to simplify modelling it may be necessary to indirectly represent grid services or operability criteria. One example of this from previous modelling efforts in Nova Scotia is how local grid strength was enforced in the reliability intertie modelling by requiring transmission connected renewables to be built with synchronous condensers.
NRStor welcomes the multiple opportunities for stakeholder feedback in the IRP process. We propose that non-confidential stakeholder feedback be posted online for greater transparency, as is done in other jurisdictions like Ontario.	Stakeholder feedback and the corresponding responses from IESO Nova Scotia will be published in IESO Nova Scotia website, as stated in the ToR, in order to offer transparency for all parties.
NRStor proposes targeted outreach to energy storage	IESO Nova Scotia recognizes and thanks NRStor for this offer and it will follow up with NRStor on it.

developers and industry representations, to account for up-to-date market intelligence on energy storage assumptions including costing, performance characteristics, and installation timelines that are essential for accurate economic modeling in the IRP process. NRStor would be pleased to participate in these targeted outreach efforts.	
To support alignment with provincial objectives including the 2030 Clean Power Plan, NRStor recommends examining avoiding costs from a Societal Cost Test (SCT) in addition to a Program Administrative Cost Test or a Total Resource Cost Test. The SCT will help inform avoided costs from a wider lens beyond least cost, including quantification of avoided greenhouse gas emissions (GHG) beyond the 10% scoring criteria being proposed for GHG reductions. The SCT can support guiding investment decisions for near-term government decision making including procurement priorities.	The avoided costs referenced in the ToR are specific to the role of IESO-NS in developing avoided costs of energy and capacity calculated based on modelling from the IRP. Any additional considerations regarding the use of these avoided costs, for example as part of DSM cost effectiveness testing, are outside the scope of IESO Nova Scotia's role in updating avoided costs during the IRP.
NRStor is glad to see the recommendation for enhanced engagement with the Mi'kmaq. Beyond engagement, there should be direct Mi'kmaq representation (as the rightsholders) in the Technical Working group, as is the case in other jurisdictions like the Ontario IESO's regional planning process.	IESO Nova Scotia has expanded the TWG membership to include an opening for Indigenous representation and is working to fill this opening.
IESO-NS is proposing a study period of 2029 – 2053. NRStor proposes that the start of the assessment period be 2028, to reflect some of the 2030 Clean Power Plan early actions and priorities including the timeline of the first coal power plant	In IESO Nova Scotia's long term capacity expansion models, capacity additions and retirements are normally represented in the model as changes on January 1 of a year. IESO Nova Scotia's experience is its capacity expansion models run better when configured this way and since there is considerable

closure, the Trenton generating plant. Depending on IESO-NS procurement timelines for energy storage, the Mi'kmaq majority owned Trenton battery project is shovel ready to be in-service as early as Fall of 2028.	project timing uncertainty in a 25 year model it is reasonable to take this approach. For the IRP the model will be configured in a manner to allow resources to be added or retired at the start of the planning horizon, Jan 1 2029, meaning it is not necessary to model 2028 to capture potential projects that could come online in that year as they will be represented as a resource change on Jan 1, 2029.
NRStor recommends that that energy storage be a key part of any on- and offshore wind modeling, including the following additional question that will be examined by IESO-NS in the IRP. ▪ "Determine the economic opportunity for domestic use of energy from offshore wind"	Energy storage will be a candidate resource in all scenarios and sensitivities, unless for reasons that would be documented and stakeholders would have the opportunity to provide feedback on a specific scenario or sensitivity excluded energy storage.

PORT HAWKESBURY PAPER

Question/Comment	Response
Transmission and distribution, as well as needed ancillary services, are key parts of the development of the grid that do not appear to be included in the IRP, as was the case for the previous IRP. The overall cost of the system should include the transmission and distribution side, and any additional ancillary services to reliably manage an 80% renewable grid, as this cost can be significant and has long term impact to rates in Nova Scotia.	Transmission and ancillary services will be discussed in the next phase of the IRP (Assumptions and Scenarios). The ToR has been updated to include these in the list of assumptions to make this more clear.
How does the IESO plan to integrate the previous Evergreen IRP findings and results. There should be some crossover to the new IRP instead of a somewhat blank slate.	Every IRP builds on the previous one. Some examples where this IRP will build on the findings from the Evergreen IRP are: Action Item 1: Regional Integration Strategy • The reliability intertie has been approved and will be fixed into the model for this IRP. Action Item 2: Electrification • The electrification strategy report was published following the Evergreen IRP and has been used during the development of the load forecast since the last IRP. Action Item 3: Thermal Retirement Plan • NS Power filed a depreciation study with its GRA, domestic wind development has progressed with close to 600 MW of new wind expected to come online in 2026, 100 MW of battery energy storage systems are in-

	service with another 50 MW coming online this year, and development of fast acting capacity resources to balance renewable generation was initiated. Action Item 4: Demand Response • DR capacity and the number of customers enrolled in time varying rates have both increased. The hybrid peak electrification study led by Net-Zero Atlantic is nearing completion. Action Item 5: Avoided Costs of DSM • The avoided costs of DSM have been updated twice since the Evergreen IRP and the most recent update will be used in the DSM Potential Study.
PHP is supportive of the primary objective of the IRP to be the least cost plan.	IESO NS takes note of PHP's position on this matter.
In the previous IRP there were a significant number of scenarios and the IESO has commented on the need to reduce the number of these. There should be an allowance for "sensitivities" as well as scenarios. Sensitivities are important to the overall outcome and changing one variable as a sensitivity is not as intensive as a scenario. The IESO should land on a limited set of scenarios on how the system can evolve over time, and then run individual sensitivities as requested by stakeholders to show the impact of one variable change in a scenario.	Dunsky's recommendations included allowances for sensitivities and the ToR have been updated to make this more clear.
The Technical Working Group (TWG) membership has already established with respect to the members that will be a part of	While IESO Nova Scotia recognizes the role PHP plays in the power system, the technical working group is intended to

the committee. As the largest load in the province, PHP does not feel any of its interests will be represented by any member of the TWG, as PHP is not represented by any consumer group in Nova Scotia . PHP is a fully integrated asset on the grid and is a critical resource for the system operator. PHP strongly urges the IESO to consider adding PHP to the TWG.	discuss and work through modelling and representation challenges for the system as a whole. If PHP representation is a topic explored by the TWG IESO Nova Scotia will invite PHP to participate in those discussions.
PHP notes that there were multiple times when additional time was requested by stakeholders in the previous IRP process. PHP is requesting that the IESO is allowing adequate time to assess and adequately understand the outcomes of the individual parts of the process as it unfolds.	In response to stakeholder feedback IESO Nova Scotia has increased the feedback period from 7 days to 10 days at each feedback window. It is willing to work with stakeholders where possible if there are specific requests to add additional time to assess and understand the outcomes of the individual parts of the IRP process.
How does the IESO intend to incorporate the 10 year system outlook into the IRP process?	Similar to past process IESO Nova Scotia intends for the IRP, upon its completion, to inform the 10 Year System Outlook. Due to timing this means the IRP will be used to inform the 2027 10 Year System Outlook.
Will the 2026 ten year system outlook be published and available for this process?	Yes, the 2026 10 Year System outlook will be published by June 30, 2026 as per the Nova Scotia Wholesale and Renewable to Retail Electricity Market Rules. As IRP modelling will still be in progress the 10 Year System Outlook will be informed by the Clean Power Plan, the 2023 Evergreen IRP, NS Powers GRA modelling for 2026 and 2027, and recent procurements.
How does the IESO intend to incorporate large scale demand and supply projects into the IRP such as data centers, offshore	The listed items represent assumptions to be used in the IRP which will be further discussed and vetted with stakeholders in the next phase of the IRP (Assumptions and Scenarios).

wind, significant high voltage transmission lines, ancillary services, for example, and incorporate these in the scorecard?	
The IESO has been mandated to procure certain resources ahead of the IRP. How will this be accounted for and how will scenarios be relevant given some decisions on future resources have already been made?	Resources that have contracts (e.g. PPAs) signed will be fixed into the resource mix at their forecast in-service date. Resources not yet contracted, including those associated with planned procurements and procurements in progress concurrently with the IRP, will not be fixed into model base assumptions.

SIMPLY BLUE ENERGY

Question/Comment	Response
The Objectives section should explicitly reference the CER Act, as these regulations will apply throughout the assessment period.	Environmental policies and regulations are captured under the assumptions for the IRP. While IESO Nova Scotia must plan to meet current policies like the CER Act, policies and regulations can change over time. In order to capture a broad set of potential futures when planning across a 25 year time horizon, alternative environmental policies and their impact on resource decisions are normally explored during an IRP.
The governing Acts should be identified as Bullet 1 and Bullet 2 within the objective sections, as compliance with these requirements is mandatory and should guide all planning and decision making.	Please see previous response.
While these Acts and regulations establish minimum compliance requirements, the IESO also has an opportunity to lead by example and position Nova Scotia as a national leader in climate action and clean electricity planning. It is strongly recommended that the IESO clearly articulate this vision within the Objectives section. One potential approach would be to adopt the 2050 CER emissions requirements from the outset, rather than waiting until the prescribed compliance dates. This would help avoid future costly upgrades or retrofits that could otherwise be avoided through prudent planning.	Alternative environmental policies and their impact on resource decisions are normally explored during an IRP.

While it is encouraging to see GHG Reduction included as a scorecard criterion, the proposed weighting of 10% is insufficient. At this level, particularly when combined with prorating, emissions performance will have little practical influence and meaning. In effect, this risks becoming a criterion that is present in form but not materially meaningful in outcome. It is strongly recommended that the weighting assigned to emissions related criteria be significantly increased, ideally to at least 50%.	Current Federal and Provincial environmental policies and regulations that regulate emissions and mandate clean energy resources are already guiding the Nova Scotia electricity system to significant GHG emission reductions. The GHG Reduction evaluation criteria provides additional weighting to GHG reduction above and beyond the considerable emissions reduction achieved from policy and regulation.
In addition, the proposed prorating methodology is unclear. It is recommended that: • full marks be awarded to generation sources with zero emissions • zero marks be assigned to sources whose emissions do not meet the most stringent 2050 emissions requirements This would ensure alignment with long-term climate objectives.	The GHG reduction criterion is intended to be scored at the system level for each scenario/sensitivity not by resource type.
The current scorecard appears to evaluate generation options in isolation (in silos). It is unclear how the IESO intends to use these individual scorecard results to inform a diversified long term resource strategy. For example, if the scorecard ranks solar as the highest scoring option, would this imply that procurement decisions would only include solar generation?	The scorecard is intended to evaluate each scenario/sensitivity relative to the others. It is not intended to evaluate generation options in isolation.
It is therefore recommended that the Terms of Reference clearly explain how scorecard results will be translated into	The ToR have been updated to more clearly state how the scorecard results will be used. The scorecard is intended to

procurement decisions that ensure system reliability, diversity, and long-term resilience, rather than simply selecting the highest-scoring individual resource type.	evaluate and compare resource portfolios in the different scenarios and sensitivities not individual resource types.

SMALL BUSINESS ADVOCATE

Question/Comment	Response
The Draft TOR does not include explicit discussion of risk analysis, aside from the "Technology Risk" factor included in the draft score card description provided in Appendix A. The IRP should incorporate consideration of several risk elements, including load forecast, resource capital costs, policy changes, fuel prices, and others. These risk dimensions should be defined early in the process so that the methodology can be appropriately defined to assess those risks.	Scenarios and sensitivities will be used to vary and test different assumptions like varying the load forecast, resource capital costs, policy changes, fuel prices, etc. IESO Nova Scotia has updated the terms of reference to try to make this more clear.
The SBA agrees with the priority of focusing on a somewhat limited set of high-value scenarios and sensitivities in order to keep the modelling and analytical effort manageable on the planned timeline. However, it is important that the scenarios and sensitivities are sufficiently expansive such that they provide insight into key uncertainties and inform the action plan and signposts.	IESO Nova Scotia agrees with this statement.
The Draft TOR includes a proposed score card approach in Appendix A. It is unclear from the Draft TOR how multiple portfolios will be created and scored under this proposal. Certain elements, such as GHG reduction, can be reflected in modelling constraints during the portfolio optimization process. It is also unclear how the IESO determined the specific scoring elements (e.g. under Technology Risk, the 1 point deduction for 5% of NPV attributed to emerging technologies). Lastly, using overly-prescribed scoring methods	The ToR have been updated to more clearly state how portfolio's will be scored and compared. IESO Nova Scotia used engineering judgement to determine the methods for scoring secondary objectives. IESO Nova Scotia recognizes that while many IRPs consider secondary objectives, beyond least cost, there isn't an industry standard approach to incorporating them into the evaluation process. Part of the reason for including these metrics in the draft ToR

can have inadvertent consequences where certain metrics can have an outsized influence on final portfolio recommendations. The IESO should plan for significant stakeholder engagement on the score card approach through the IRP process.	and seeking feedback from stakeholders on them was to help refine this approach. IESO Nova Scotia recognizes this is the first time taking such an approach to incorporating secondary considerations and that as a result there may be a need for this approach to evolve as the IRP process progresses which was stated in the ToR.
The Draft TOR states that an additional element of the IRP to "Determine the economic opportunity for domestic use of energy from offshore wind" (p. 10). Economic development analysis is not a conventional element of an IRP, and it is unclear how this will be incorporated in the analysis or the extent to which it could impact the proposed resource portfolio. The TOR should be more explicit regarding the objective, scope, and methodology of this analysis.	The use of the word economic in the phrase "Determine the economic opportunity for domestic use of energy from offshore wind" was not meant to mean economic development but rather to improve the economics of the power system costs, or, said another way. to reduce the overall costs of supplying electricity to meet the demand in Nova Scotia.

SOLAR NOVA SCOTIA

Question/Comment	Response
SNS would appreciate it if stakeholder feedback on the ToR, and during subsequent steps in the IRP process, were made available to all stakeholders for transparency.	Yes, stakeholder feedback will be made available to all stakeholders unless it is unable to due to confidentiality.
SNS recommends that the term "energy resources" in the Objectives of the IESO in the Terms of Reference (ToR) be explicitly defined as per the More Access to Energy Act (MAEA) to add greater clarity: "…resources capable of providing transmission service or capacity or energy, including wind, solar, hydrogen, battery technology or other energy storage resources, distributed energy, demand side management resources, demand response and control resources, combined heat and power resources and hybrid peaking resources, and combinations of such resources".	The definition of energy resources in the MAEA does not limit the scope of resources that can be evaluated, but purely identifies examples of technologies that would be considered. Consistent with past IRP processes in Nova Scotia, IESO Nova Scotia will model many different resources types including some not listed in the MAEA such as tidal and nuclear. IESO Nova Scotia also clarifies that the definition of "energy resources" in the MAEA does not include "transmission service".
If the intent for the 2026 IRP is to scope or weight "energy resources" differently from those legislated definitions (specifically with reduced consideration of energy resources at the distribution-level, including strategic electrification), SNS recommends that the re-scoping or weighting be the subject of additional stakeholder consultation.	Please see the response to the previous question.

While the MAEA mandates IESO-NS to "conduct independent planning for energy resources, demand-side management and transmission" (s. 9q), the roles and responsibilities for considering energy resources at the distribution-level in the 2026 IRP are currently unclear to SNS SNS would appreciate further clarity on how energy resources at the distribution-level will be considered in the 2026 IRP, and how that will interact with other processes (e.g., DERIR, NSPI Load Forecast etc).	Further details on how distribution-level energy resources will be considered in the IRP will be reviewed during the Assumptions and Scenarios phase of the IRP.
SNS recommends that the Draft IRP Score Card, that incorporates evaluation criteria for consideration of other objectives beyond "least-cost", should differentiate between costs for imported fuels both prior to and after running capacity expansion and production cost models. The playing-field should not be level for imported fuels with clean local electricity.	IESO Nova Scotia is not proposing fuel/energy security be specifically included in the scorecard, but notes the cost of transportation of fuel or energy from other jurisdictions is included in fuel/energy costs and is considered during modelling. Exploring concepts like this is normally done using sensitivities, and this concept could be considered as a potential sensitivity to model. In addition, it is worth noting that the Province's Clean Power plan focuses on the development of domestic wind and solar resources to meet the 80% renewable energy standard so Nova Scotia's dependence on imported fuels will be significantly reduced by 2030.

SYNAPSE

Question/Comment	Response
To ensure transparency - especially given the likelihood that no stakeholders will run PLEXOS - it is critical to release all input and output materials in Excel format as available. Such releases in prior IRPs were enormously helpful, but not always as comprehensive as they could have been. While pdf-based slide decks with results, or with input assumption graphics are useful, it is easier to undertake analyses (especially given the short windows that are involved) when data is provided in machine-readable form.	IESO Nova Scotia recognizes this request and will provide input and output data in Excel format, recognizing this is the preferred format of stakeholders for receiving this data.
Please release the ELCC study at least one week prior to the planned May 12th stakeholder session. Please release any further studies, such as associated capacity cost studies, as soon as they are available, and inform stakeholders of the full set of pre-IRP reports or studies that may be available. Please release all load forecast information and planned incorporation of energy efficiency and demand response program plans as soon as it is available.	The report for the ELCC study will not be available until after the stakeholder session but meeting materials will be provided the week before the stakeholder session. Resource costs, load forecast information, energy efficiency and demand response program details will be provided and reviewed during the Scenario and Assumption phase. The pre-IRP studies being undertaken for this IRP and the entity responsible for the completion of the study are: 1. Dunsky Report on IRP Process – led by IESO Nova Scotia 2. The Effective Load Carrying Capacity (ELCC) study – led jointly by IESO Nova Scotia and Nova Scotia Power 3. Hybrid-heating study - led by Net- Zero Atlantic 4. DSM Potential Study – led by EfficiencyOne

Allow for more intensive stakeholder involvement in the selection of scenarios to be considered. This may include holding a few specific scenario slots to be defined fully by stakeholders. It would be useful to use the May 28th session not just to review the scenarios, but to allow for a fulsome discussion on potential additional scenarios to those released by NS IESO prior to the meeting.	IESO Nova Scotia will consider this request while planning for how best stakeholders can be involved in eth scenario design process.
Consider allowing for the iterative approach mentioned earlier in the ToR (page 5) to be explicitly used during the July-August timeframe, when preliminary modeling results are first released. There may be a clear need to redefine or add scenarios at that time to address planning elements that are only revealed when the modeling results are first reviewed.	IESO Nova Scotia agrees that there may be a need to redefine or add scenarios or sensitivities depending on what the preliminary modelling results reveal. The terms or reference have been updated to clarify this point.
At different points in the timeline, written comment deadlines are imposed. Synapse would add that the ToR should directly allow for written, informal discovery by parties to supplement material released by NS IESO or discussed at stakeholder meetings. These could be formally structured as part of the ToR at each of June 5, August 19, and October 29	IESO Nova Scotia is striving to provide an increased level of transparency compared to previous IRPs and hopes with increased information there won't be a need for written requests for information. The written comment periods, that follow stakeholder sessions and the publication of materials, also provide an opportunity for stakeholders to seek clarity from IESO Nova Scotia on materials provided.

APPENDIX

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April 24, 2026

IRP Team
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Vía e-mail

Subject: Bates White's Comments Regarding IESO's Draft Terms of Reference

Introduction

Bates White appreciates the opportunity to provide these comments to the Independent System Operator of Nova Scotia ("IESO") regarding its March 31, 2026 Draft Terms of Reference ("ToR") related to the IESO's 2026 Integrated Resource Plan ("IRP") process.

We provide comments on eleven areas below.

1. IRP planning and modeling horizon

The ToR states: "An IRP assesses both supply-side and demand-side resources within the context of the Nova Scotia planning environment, including all applicable Federal and Provincial environmental policy and regulations, to develop a long-term plan for a reliable, sustainable, and cost-effective power grid for the next 20 to 30 years."[1] The ToR also states that one of the "objectives" of the first IRP is to "[d]evelop a robust long-term electricity system plan that is reliable, sustainable, and cost-effective covering the next 20 to 30 years."[2]

In our view, the ToR would be improved by providing greater clarity on the applicable planning horizon. This can be done by specifying the base case planning horizon to be 25 years,[3] or by detailing how the IESO may consider different planning horizons – such as 20-, 25-, and 30-year horizons – in the IRP process.

[1] ToR, page 2.
[2] ToR, page 3.
[3] ToR, page 8.

Regarding the selection of the 2029-2053 period as the base case,[4] the ToR identifies one supporting reason for this selection as the fact that the current in-service date for the Reliability Intertie is "2028."[5] While valid, we recommend that the IESO retain the flexibility to model the system with a later in-service date for the Reliability Intertie should delays occur.

2. Model scenarios

The ToR states that "IESO Nova Scotia will strive for a reduced set of crisp, focused scenarios which (a) are designed to support key decisions, (b) are anchored around one 'most likely' base case, (c) represent holistic and distinct possible futures, (d) are vetted by stakeholders, (e) are complemented by targeted sensitivities."[6] This language mixes critical elements, such as stakeholder vetting, with important but undefined terms, such as "reduced set," and amorphous terms, such as "crisp" and "holistic." While this may be intended as a loose summary, the enumeration implies that more specific objectives are being enshrined in the ToR.

We are particularly concerned that the ToR not restrict the potential range of modeled scenarios and sensitivities based on an objective to produce a "reduced set." The ToR includes the ability of the IESO to "screen" the "scenarios/sensitivities, candidate resources, or other inputs outside of the expansion plan and production cost modelling."[7] The IESO commits only to "transparently communicate to stakeholders" instances of "screening or assessments" done outside of the model.[8]

The ToR should clarify that the process of identifying, considering and selecting model scenarios and sensitivities will involve close consultation with stakeholders. It would be inappropriate at this early stage to establish what constitutes a reasonable number of cases, particularly in the current context of such high uncertainty about potential futures. In that vein, we recommend caution against over-emphasizing a "most likely" base case. Even if such a case exists, it may not be significantly more likely than others. Our view is that it is especially important to examine likely scenarios that entail different portfolio selections, to provide useful information regarding the implications of any future deviations of reality from base assumptions.

[4] ToR, page 8.
[5] ToR, page 8.
[6] ToR, page 5.
[7] ToR, page 5.
[8] ToR, page 5.

For every model case, IESO should provide stakeholders all input and output data in accessible format.

3. Loss of Load Expectation study reference

The ToR states:

> In December 2025, an update to the previous Effective Load Carrying Capacity (ELCC) study began in partnership with Nova Scotia Power and Energy and Environmental Economics, Inc (E3). The ELCC, or "capacity value", of a resource represents the anticipated contribution from energy limited resources during periods when the grid is most likely to experience capacity shortfalls and, as a result, what percentage of its nameplate capacity can be counted on as firm for system planning. Loss of Load Expectation (LOLE) studies are the industry standard used to calculate the ELCC or capacity value of intermittent or energy limited resources.[9]

The reference in the final sentence to the LOLE study appears unconnected to the discussion of the ELCC study commissioned by the IESO. It may be that the final sentence attempts to explain how the ELCC study will be conducted, and that the methodology is consistent with industry standard. We suggest deleting this final sentence, or clarifying its intent. In any event, we caution against suggesting in the ToR that the ELCC study meets industry standard, since it has not yet been published. Stating that it is planned to follow industry standards would be preferred.

We also suggest elaborating on the sentence that states: "The execution of an updated ELCC study was a Nova Scotia Energy Board (NSEB) directive to NS Power, and the scope of work for the study was developed collaboratively with stakeholders in 2025."[10] It is not obvious which "stakeholders" worked on the development of the ELCC study scope of work. Specificity would help and would avoid suggesting that all stakeholders were involved in the development of the scope of work.

4. Adding definitions

The term "sustainable" is used throughout the ToR, including in two separate IRP objectives.[11] We understand that the term is used in section 2(e) of the *More Access to Energy Act*, but the ToR would benefit from a definition of the term, given the frequency of its use and the multiple ways the term may be interpreted. For example, sustainability could mean compliance with all

[9] ToR, page 2.
[10] ToR, pages 2-3.
[11] ToR, page 3.

applicable laws and regulations, including and especially environmental laws and regulations. Sustainability may also have a more subjective definition, whereby the portfolio, its constituent assets, and its fuels may be judged on their sustainability. Biomass fuel harvesting, for example, may be scrutinized subjectively for its long-term affects on the province's natural resources. The ToR and the IRP process would benefit from more precision in specifying the role of "sustainability" in the IRP's objectives.

Two other terms would benefit from definition. The first is "integrated electricity system," which is used in the second IRP objective.[12] It is not clear whether this is referring to an electricity system with integrated generation, transmission, and distribution resources, or whether this refers to the provincial system's integration into the Maritimes region (with interties with New Brunswick and Newfoundland and Labrador), or both. The second is "non-electric energy resources,"[13] a term that is not clear.

5. Avoided cost calculation may be better suited elsewhere in the ToR

Developing an updated avoided cost calculation for demand-side resources makes sense and is akin to ensuring the IRP uses up-to-date, credible cost assumptions in assessing new and existing resources for future portfolios. However, this update seems out of place as an "objective" of the IRP, one of six identified in the ToR.[14] We suggest two potential solutions. One is to remove the objective entirely and address the issue elsewhere, such as in the section on "Assumption and Scenario Development,"[15] or as is already done in the "Updated Avoided Costs" section.[16] An alternative approach is to broaden this IRP objective to include all resource cost assumptions.

6. Pre-IRP studies specification

The ToR indicates that there will be multiple "Pre-IRP Studies," but identifies just one—the ELCC study. Nova Scotia Power, Inc.'s ("NSPI's") 2019-2020 IRP featured several pre-IRP studies, including those on supply options, renewable integration, hydroelectric resources, and demand-side programs. The ToR would benefit from additional specificity regarding the pre-IRP

[12] ToR, page 3.
[13] ToR, page 3.
[14] ToR, page 3.
[15] ToR, page 4.
[16] ToR, page 6.

studies that have been commissioned by the IESO, which will allow stakeholders to plan their resources for reviewing these studies and providing feedback.

7. Feedback on pre-IRP studies

The ToR appropriately allows for feedback on the pre-IRP studies.[17] However, the timeline does not afford sufficient time to make any alterations to those studies and the underlying modeling work.[18] Instead, it appears the only avenue for addressing any concerns with the pre-IRP studies is through the specification of modeling scenarios. To that end, it would be helpful to add a bullet to the "Assumption and Scenario Development" section (at page 4) to include "sensitivities regarding pre-IRP study values," or similar language. Adding this language would not obligate IESO to consider every stakeholder-suggested sensitivity run, but would allow stakeholders to recommend and justify such runs.

8. Strengthening commitment to engage with stakeholders

The ToR indicates that the IESO "intends to engage with stakeholders as it progresses through the different phases of the IRP."[19] We recommend replacing the words "intends to" with "will" to reflect the importance of this aspect of the IRP process and the IESO's commitment to a transparent, collaborative process.

In addition, the ToR should include the ability of stakeholders to submit written requests for information to the IESO.

9. Relaxing restrictions on Technical Working Group participation

We agree with the ToR that Technical Working Group sessions should be productive, and it is possible that allowing for unlimited membership would hinder that goal. However, the limitations proposed on meeting participation may be overly restrictive. Many of the stakeholders will have expert consultants and staff that exceed the "one" member limit, requiring that one member to report back and collaborate with their respective teams and potentially depriving the TWG meeting of useful contributions. The ToR does retain the right to "invite" additional participants, but does not explain how that process would work. We recommend consideration of a less extreme approach, one that requires stakeholder members to minimize the

[17] ToR, page 4.
[18] ToR, page 11.
[19] ToR, page 6.

number of meeting participants and/or to designate a single individual as a speaking participant during the meetings.

10. Evaluation criteria

The ToR proposes to plan future resource portfolios based on cost (70%) and other non-cost factors (30%).[20] We recommend the IESO reconsider this weighting to more heavily weigh cost, particularly where the non-cost criteria may be implemented in other ways. GHG reduction (10%) can be implemented through ensuring that the selected portfolio meets applicable GHG emissions criteria, and through sufficient modeling of GHG emissions adders or costs, such as the Output-Based Pricing System ("OBPS") carbon intensity allowances. Technology risk (10%) can be implemented through qualitative considerations, such as avoiding first-of-a-kind technology risk (or requiring that resources be of proven technology). Economic growth (10%) can be difficult to measure with accuracy and relies on particularly uncertain assumptions. If there is a national or provincial preference for resources or resource components/vendors, such requirements can be implemented at the procurement stage. We suggest the IESO reconsider these categories or, at minimum, consider reductions to their weights in the evaluation process.

11. Items to consider adding to the ToR

There are at least three other considerations that are unmentioned in the ToR that should be considered. First, there is no mention of the role of load forecasting. Our understanding is that load forecasting will remain the responsibility of Nova Scotia Power. However, the development of that load forecast and scenarios associated with it (such as high/low cases) is a critical part of an IRP. The ToR would benefit from additional language explaining how the load forecast (and scenarios) will be developed, vetted, and implemented.

Second, there is no discussion of fuel supply for conventional resources powered by fossil fuels (e.g., natural gas) or emerging fuels (e.g., hydrogen or biofuels). It is unclear whether third-party generation developers would be responsible for fuel supply arrangements, or whether coordination with Nova Scotia Power would be allowed and considered (in order to take advantage of economies of scale in fuel purchasing). The ToR would be improved by including

[20] ToR, page 12.

at least some reference to fuel supply and how the IRP will consider alternatives, costs and risks of fuel supply.

Third, there does not appear to be any mention of a grid stability study to assess the reliability of the grid as inverter-based resources proliferate and mechanical resources retire. System inertia, stability, voltage support, and overall grid reliability will increase in importance if and as this transition takes place. The ToR should explain how the IRP will model grid reliability beyond measures of installed capacity and planning reserve margins.

Comments on IESO Nova Scotia 2026 IRP Draft Terms of Reference

Prepared for the Consumer Advocate

April 20, 2026

John D. Wilson, Grid Strategies LLC

Overall, the ToR are reasonable, but there are a few points where I recommend enhancements.

1. Schedule

Overall, it is reasonable for IESO Nova Scotia to focus the 2026 Integrated Resource Plan (IRP) on an updated resource planning model exercise. Developing confidence in the current resource development outlook is essential, particularly contingency scenarios involving schedule or performance shortfalls from already-planned resource procurements. While somewhat skeptical that the proposed work can be completed by early December, I have no recommendations for changes to the proposed 2026 IRP schedule.

However, IESO Nova Scotia needs to evaluate several topics that require more extensive study than may be feasible under the proposed timeline. This includes, but is not limited to, consideration of operational reliability related to technology selections and deployments, such as synchronous condensers and dynamic line ratings. The effectiveness of these technologies needs to be evaluated in models that are not commonly used during IRPs, but the outcomes of those evaluations may have a material impact on the IRP.

Accordingly, I recommend that IESO Nova Scotia kick off at 2027 IRP in approximately September 2026 by drafting Terms of Reference (ToR) for the following IRP and initiating any procurement processes necessary for expert assistance with special studies, etc. for that project. These conversations should continue through November or December. Activities related to special studies should kick off at the earliest possible date. The expectation may be that the 2027 IRP will take 14-18 months to complete, not being published before early or even mid-2028.

If accepted, this recommendation should be incorporated into the 2026 IRP ToR in order to ensure that higher-complexity tasks are appropriately identified and incorporated into the draft 2027 IRP ToR.

2. Technical Work Group Membership

Overall, IESO Nova Scotia has proposed a reasonable membership roster for the 2026 IRP technical work group. I concur that the membership should be small in order to facilitate deep engagement. Similar conversations during the last IRP were highly successful.

The Dunsky assessment of the prior IRP process state that, “certain other stakeholders such as resource developers noted that the IRP was too vague to provide them with the clarity and certainty needed to effectively plan out their investments and efforts in the province, including committing teams to NS versus elsewhere.” Based on that finding, I recommend that IESO Nova Scotia add such a stakeholder representative to address renewable energy project development.

I recognize that unless there is a trade association that is able to participate, selecting one or another resource developer could be seen as advantageous to that developer and prejudicial to others. IESO Nova Scotia should, of course, seek to minimize any such advantage gained, but the benefit to the process of having an experienced resource developer engaged in the conversation should outweigh any such concerns.

3. Pre-IRP Studies

The IESO NS should consider holding workshops with the technical work group in advance of finalizing pre-IRP studies. It may be too late for this to occur in some or all cases, but this should be established as a practice going forward.

4. Hybrid Peak

Net Zero Atlantic has published "Mitigating the Impact of Building Electrification on Peak Demand in Atlantic Canada" in August 2025, and NS Power states that a Hybrid Heating study is underway, in which Net Zero Atlantic will use a jurisdictional scan and survey of NS Power customers to understand interest in a hybrid heating program.[1] Further, in NS Power's recent 2026 load forecast presentation to stakeholders, NS Power stated that peak mitigation is forecast to be 48 MW with 85 GWh of energy reduction, which works out to be on the order of 2,000 hours per year in which the non-electric heat source could deliver at or near the peak reduction. This simple math seems to suggest that the hybrid heating model would result in relatively little reduction in heating from non-electric sources, which is at odds with the concept (primarily serving extreme winter heat demand) and provincial policy on electrification and decarbonization.

Information on these studies should be discussed with the technical work group at the earliest opportunity in order to develop a shared understanding of how this approach will be evaluated in the IRP.

5. Decisional vs Deliberative

The Dunsky analysis includes a well-characterized discussion of the benefits and drawbacks of decisional and directional IRPs. In particular, I agree with the concerns about inefficiencies and re-work of issues that appeared "resolved" by the IRP, but also recognize that there was not an opportunity for the Board to consider counter-arguments to the IRP.

In the context of Nova Scotia, I recommend that the "hybrid" approach be taken.

Specifically, the IRP should include – as attachments or separate filings – requests to proceed with proposed RFPs that are supported directly and fully by the IRP. Not only will this promote efficiency but it will also promote alignment between the IRP and proposed methods for evaluating bids received in response to the RFP.

If resource procurements are submitted with the IRP, then it would be appropriate for the NSEB to review the IRP to determine whether it supports those actions – in essence, approving the IRP. If no such

[1] NSEB RIR-8, M12247.

submissions are made, then the NSEB could reserve review of the IRP for "decisionality" in some future proceeding in which it is advanced as providing support for a decision.

For more complex resource decisions, such as those that require power flow modeling in the bid evaluation process, it may be appropriate to file those proposals in a separate capital application process. For example, the Xcel Colorado Phase I IRP proceeding examined the challenges of evaluating solar resource proposals concurrently with developing transmission solutions optimized to the solar resource portfolio actually built. Should IESO Nova Scotia anticipate significant non-generation investment requirements to complement RFP-procured resources, it is likely to be reasonable to have the supporting modeling and other analysis submitted in as a separate capital application for more in-depth review.

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Nova Scotia Independent Energy System Operator ("NS IESO")

SENT BY EMAIL
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April 24, 2026

East Coast Environmental Law Comments on Draft Terms of Reference for the NS IESO's 2026 Integrated Resource Plan

East Coast Environmental Law is pleased to provide the following comments on the draft Terms of Reference ("TOR") for the NS IESO's 2026 Integrated Resource Plan ("IRP"). Our comments are limited to the listed objectives of the IRP, the NS IESO's proposed evaluation criteria, and the key questions posed in the draft TOR.

Objectives

We appreciate that the listed objectives of the IRP recognize sustainability as a core system need, along with reliability and cost effectiveness. We also appreciate that the listed objectives recognize the need to support the sustainable development, sustainable prosperity, energy efficiency, and greenhouse gas emissions reduction goals articulated in the *Environmental Goals and Climate Change Reduction Act*. These objectives are in keeping with the stated purposes of the *More Access to Energy Act*, and they are reflective of a clear legislative intention to incorporate sustainability and climate change considerations into electricity system planning, management, and regulation in Nova Scotia.

We note the recommendation by Bates White Economic Consulting that the word "sustainable" be defined in the TOR. The *More Access to Energy Act* provides statutory definitions of the terms "sustainable development" and "sustainable prosperity", and we would argue that those definitions are the basis for NS IESO interpretations of what the word "sustainable" means in the context of the NS IESO's mandate and responsibilities under the *More Access to Energy Act*. However, we would agree that if the NS IESO intends to use the word "sustainable" more broadly, beyond the context of Nova Scotia's statutorily-defined concepts of sustainable development and sustainable prosperity, it would be helpful to clarify the intended meaning.

Evaluation Criteria

We agree that evaluation criteria should be designed to identify least-cost resource planning options, but we also agree that identifying least-cost options should not be the sole objective of

NS IESO integrated resource planning. We appreciate the draft TOR's acknowledgment that the stated purposes of the *More Access to Energy Act* including the purpose of supporting the sustainable development, sustainable prosperity, energy efficiency, and greenhouse gas emissions reduction goals articulated in the *Environmental Goals and Climate Change Reduction Act*.

We support the NS IESO's proposal to develop a means of evaluating other resource planning objectives beyond the identification of least-cost options; however, we would like to learn more about the proposed scorecard approach before commenting on its potential use. We appreciate that the NS IESO intends to develop an evaluation method in consultation with stakeholders, and we look forward to opportunities to examine the NS IESO's proposal in more detail.

Key Questions

We support and are glad to see the NS IESO's stated intentions to confirm the resource needs of the system to achieve Nova Scotia's decarbonization targets and to determine the economic opportunity for domestic use of energy from offshore wind.

Conclusion

Thank you for the opportunity to provide comment on the draft TOR. We look forward to future opportunities to engage in the 2026 IRP process.

April 24, 2026

Mark Peachey
Director, Regulatory Affairs
IESO Nova Scotia
mark.peachey@ieso-ns.ca

Dear Mr. Peachey

Re: IESO Nova Scotia 2026 Integrated Resource Plan ("IRP") Draft Terms of Reference

Eastward Energy Inc. ("Eastward") appreciates the opportunity to provide the following comments on IESO Nova Scotia's draft Terms of Reference for its 2026 IRP.

Stakeholder Input Timing

Eastward notes that the time periods in the proposed IRP schedule for stakeholders to provide written comments following the engagement sessions for each of the draft assumptions and scenarios, preliminary modelling results and modelling results and draft action plan is only one week. As stakeholders may not fully understand the information provided until after the engagement sessions where they can ask questions and provide input, Eastward suggests that the schedule be revised to allow 10 days following each of the three engagement sessions noted to provide written comments.

Technical Working Group

With respect to the Technical Working Group ("TWG") Eastward notes that "The TWG shall retain the option to invite representatives from member and non-member organizations to participate and offer expert opinion when discussing their specific areas of expertise", and that one of the stated objectives of the IRP is to "Evaluate the range of energy resources capable of meeting the needs of the integrated electricity system, including non-electric energy resources that can work in combination with electric resources to satisfy the integrated electricity system demand".

In this regard, Eastward intends to be actively engaged in the IRP and notes in particular that it has in-house and consultant expertise in the area of "non-electric energy resources that can work in combination with electric resources to satisfy the integrated electricity system demand". As such, Eastward believes it would be helpful for IESO Nova Scotia for Eastward to participate and offer its and its consultants expert opinion when this specific area is being discussed by the TWG.

Role of the IRP

The Dunsky report noted that the question of whether the IRP results should be directional or decisional was a matter for consideration. The draft Terms of Reference indicate that the final IRP report outlining modelling assumptions, results – including a preferred resource plan, and an action plan, including identifying target capacity and timing for near-term resource procurements, will "be filed with" the Nova Scotia Energy Board ("NSEB") as required by the *More Access to Energy Act*. Eastward agrees that the IRP itself should be directional, albeit with a greater focus on the near term (3-5 year) resource procurement needs of the integrated electricity system, as noted in the objectives of the 2026 IRP. Specific approvals for defined projects as required by the *Public Utilities Act* or

otherwise will of course still need to be adhered to, but the preferred resource and action plans arising from the IRP should drive near term resource requirements.

Evaluation Scorecard

Eastward notes that for the first time in Nova Scotia IESO Nova Scotia is proposing to evaluate factors other than least cost as a part of the IRP, and as such has "provided an initial scorecard for stakeholders to consider and provide feedback on". The draft IRP scorecard proposes to evaluate resource plans on the basis of Least Cost (70%), GHG reductions (10%), Technology Risk (10%) and Economic Growth (10%). As such, factors other than Least Cost account for 30% of the evaluation.

As IESO Nova Scotia noted "as this is the first time this approach will be used in Nova Scotia, it will be important for the scorecard to be able to evolve as the IRP process progresses". Accordingly, Eastward suggests that moving to 30% of the evaluation on factors other than Least Cost when electricity customers are facing significant affordability concerns does not appear to be appropriate. If IESO Nova Scotia is going to include factors other than Least Cost in this IRP, Eastward suggests that it begin with no more than 15% of the evaluation being based on other factors than Least Cost. The proportion of the evaluation of such factors in future IRPs can then be evaluated having seen how these factors played into the development of the preferred resource plan in this IRP.

With respect to the Economic Growth criteria Eastward is not clear on how IESO Nova Scotia is going to determine the total jobs created and the construction and operation job counts. Further elaboration on where this information is going to be sourced for each potential resource to be evaluated is required in order to understand the validity of this criteria.

We hope these comments assist IESO Nova Scotia in developing a final Terms of Reference for the IRP. In that regard we note that the draft schedule has IESO Nova Scotia submitting the Terms of Reference to the NSEB on May 8. It may be useful to provide stakeholders with a copy of the final proposed Terms of Reference prior to its filing with the NSEB so they can determine whether they will wish to make comments to the NSEB on the final proposed version.

Yours truly,
EASTWARD ENERGY INCORPORATED

J MacNeil

Jordan MacNeil
Director, Energy Transition

cc David MacDougall – McInnes Cooper
Chris MacAulay – Eastward Energy
Michael Johnston – Eastward Energy
Allison Coffin – Eastward Energy
Angela Costello – Eastward Energy

Introduction

The Independent Energy System Operator Nova Scotia (IESO) has initiated its first Integrated Resource Plan (IRP) which is being carried out over 2026. On March 31, 2026 the IESO shared its draft Terms of Reference with stakeholders and subsequently held a stakeholder session on April 17, 2026, requesting comments by April 24, 2026.

EfficiencyOne (E1) appreciates the opportunity to provide these questions and comments on IESO's 2026 IRP Terms of Reference.

Questions and Comments

1. Please confirm whether NS Power or the IESO will be providing updated avoided transmission & distribution (T&D) costs and whether this will be developed as part of the IRP process?
2. The IRP study period is defined to be 2029-2053 – does this mean that the 3–5-year objective (provided below) covers 2031-2033?

   Identify near term (3 – 5 years) resource procurement needs to support IESO Nova Scotia's statutory duty to carry out competitive procurements of energy resources consistent with the results of the integrated resource planning exercises;
3. The primary evaluation criteria for selecting the Preferred Resource Plan is 'least cost' measured as the cumulative total 25-year Net Present Value (NPV) of the modelled capacity expansion and production costs. Is this defined as the lowest NPV Revenue Requirement with or without end effects and will NPV inclusive of end effects be provided for all IRP scenarios?
4. Under Key Questions it states IESO must "research and analyze the capital and operating and maintenance costs for new supply-side resources…" Please confirm whether these costs include full life cycle costs?
5. E1 agrees in principle with Dunsky's Priority Actions related to resource modelling and selection, but offers the following comments relevant to the IESO IRP terms of reference:
   - Expand the scope to include exploring ways to model demand-side management (DSM) as a resource, rather than narrowly focusing solely on energy efficiency.

- Recommend that the IESO, in exploring ways to model DSM, considers how to include levels of DSM in between the discreet scenarios that are provided from the DSM potential study. This approach should ensure that the preferred IRP scenario(s) treat DSM as a first-order resource ("first fuel") and clearly demonstrate value to ratepayers. E1 suggests this approach to inclusion of DSM be put into practice for the 2026 IRP taking the approach that is most reasonable given the 2026 IRP timeline.

6. Please describe how the 2026 IRP, which has a study period beginning in 2029 is going to "Confirm the resource needs of the system to achieve the 2030 Provincial decarbonization targets"?

April 24, 2026

Independent Energy System Operator Nova Scotia (IESO NS)

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Sent electronically to: irp@ieso-ns.ca

RE: Draft Terms of Reference for the 2026 Integrated Resource Plan

Energy Storage Canada (ESC) appreciates the opportunity to provide comments on the Draft Terms of Reference for IESO Nova Scotia's 2026 Integrated Resource Plan (IRP). As the national industry association representing the full spectrum of energy storage technologies, developers, and operators, ESC recognizes the significance of this inaugural IRP in establishing a durable and transparent foundation for long-term electricity system planning in Nova Scotia.

The Draft Terms of Reference outline a structured and methodical approach that is well suited to the scale and complexity of the planning exercise ahead. The clarity of the objectives, analytical framework, modelling tools, and engagement steps reflects a strong commitment to evidence-based planning and to ensuring that the IRP process is accessible, and technically rigorous.

Energy storage will play an increasingly central role in enabling Nova Scotia to meet its reliability, affordability, and decarbonization objectives. As the province transitions away from coal and integrates higher levels of variable renewable generation, and nuclear power imports from New Brunswick the system will require resources capable of providing flexibility, firm capacity, and operational resilience. The IRP process provides an appropriate venue for evaluating these capabilities on a comparable basis with other resource options.

ESC welcomes the opportunity to contribute technical and market expertise throughout the IRP process. Our members bring experience from jurisdictions across Canada and internationally where storage is already delivering measurable system benefits, including peak reduction, renewable integration, transmission support, and improved reliability. We look forward to supporting IESO Nova Scotia as it refines modelling assumptions and evaluates resource portfolios.

ESC appreciates the leadership shown by IESO Nova Scotia in establishing a transparent and well-designed planning process and remains committed to supporting the province as it advances its clean-energy and system-reliability objectives.

Sincerely,

Justin Rangooni
Chief Executive Officer
Energy Storage Canada

Andrew Thiele
VP Policy and Government Relations
Energy Storage Canada

Dena Van de Coevering
Policy Advisor
Energy Storage Canada

Industrial Group

To the IRP Team –

On behalf of the iG, we have reviewed the comments previously filed and offer one additional consideration not yet addressed: First, we share the concern of BW regarding weighting of non-least cost factors in the "scorecard".

The IG supports the continued use of a least-cost objective, measured through the long-term NPV as the primary determinant of the preferred resource plan. The economic growth metric (proposed to be weighted 10%) is stated to reflect the total number of jobs created. This metric risks overstating benefits to NS while ignoring electricity cost impacts that could undermine existing industrial or small business employment and doesn't account for risks to export-oriented sectors sensitive to power prices. IF this is an included consideration (and it is fraught with complexity), any job creation metrics should account for electricity cost competitiveness spillover effects. The IG recommends that the TOR and final IRP explicitly state that the least cost NPV outcome will govern selection of the preferred resource plan, accounting for reliability and compliance constraints. Any scorecard results should not override cost-based outcomes. To the extent that non-NPV metrics influence decisions, there should be a clear articulation of the trade-offs as these are not substitutes for affordability and may not directly benefit electricity customers who ultimately bear the system costs through rates.

Thank you for considering these additional comments.

Nancy G. Rubin, K.C.*
Partner
She/Her
Stewart McKelvey
D: 902.420.3337
*Law Corporation

Karl Leuschen

Hi IRP Team,

Below are my written comments on the Draft Integrated Resource Plan Terms of Reference, submitted ahead of the April 24 deadline discussed at the April 17 stakeholder engagement session.

Overall support

I support IESO Nova Scotia's effort to establish an independent, transparent IRP process, and I appreciate the opportunity to comment on the Terms of Reference.

For context, my background is in utility-managed EV charging programs, including vehicle telematics integration, enrollment optimization, and the operational coordination of load flexibility with grid needs. I'm submitting these comments as a Nova Scotia-based practitioner, focused on a few areas where the real-world behaviour of demand-side resources needs to be reflected in the planning framework.

Capacity value of demand response resources

Demand response can displace supply at peak, but its capacity value is often overstated when planning models rely on enrolled/nameplate capability without accounting for operational constraints.

Recommendation: The ToR should require that the DR capacity values used in the IRP reflect:

- Effective capacity at design-day conditions (not average conditions).
- Net capacity after snapback (not the gross reduction during the event window).
- An availability rate that accounts for opt-out, connectivity loss, and device state (e.g., the unit is already off or already at minimum).
- Duration limits, because a resource delivering for one hour is not interchangeable with one delivering for four.

This distinction directly affects how much supply-side build the IRP concludes is needed. If the model treats 37 MW of enrolled DR (the 2025 IRP Action Plan's firm DR target by 2035) as 37 MW of firm capacity, the result will be wrong in the very conditions where that capacity is supposed to show up.

At the April 17 session, Dunsky described robustness as a plan that remains relevant under contextual changes and sensitivities, rather than one that depends on fragile assumptions. Treating nameplate DR as firm capacity is exactly the kind of assumption that can look fine on average days and fail during system stress.

Sensitivity on winter stress events and DR availability

DR performance is highly sensitive to the same conditions that create system stress, so the IRP should test this explicitly. Based on Dunsky's April 17 clarification, key stress variables like this belong in sensitivities, rather than multiplying the scenario count. DR availability under cold-event conditions is a good candidate for a dedicated sensitivity within the base scenario.

Recommendation: The ToR should require at least one sensitivity that explicitly models DR availability during sustained cold events (multi-day periods at or near Nova Scotia's winter heating design temperature; e.g. approximately -15°C in Halifax, colder inland). The specific threshold and duration should align with the stress conditions used elsewhere in the IRP's resource adequacy assessment. Under these conditions:

- Heat pump COP degrades, increasing baseline consumption.
- Auxiliary/resistance heat activation changes the load shape.
- Customer willingness to accept setbacks decreases as indoor temperatures are already lower.
- Snapback from sequential DR events compounds if recovery periods overlap.

This is where weak DR modelling becomes a reliability risk: the IRP assumes X MW of DR is available, but during the actual stress event, effective delivery can be a fraction of that. The 2022 post-event analysis of Winter Storm Elliott in the northeastern US documented this pattern in practical terms: enrollment looked solid until the coldest event of the year, when availability collapsed. Nova Scotia should stress-test this explicitly rather than assume the problem away.

IRP scorecard: treatment of demand-side resources

I support the move beyond pure least-cost optimization. The multi-criteria scorecard (Least Cost 70%, GHG Reduction 10%, Technology Risk 10%, Economic Growth 10%) is a meaningful improvement over the 2020 IRP. I have two observations on how demand-side resources interact with this framework.

Technology Risk (10%). The ToR defines technology risk based on reliance on "emerging technologies not yet available commercially at scale." DR is not an emerging technology. However, the scoring mechanism (percentage of NPV from emerging tech) does not clearly reward plans that reduce technology risk by substituting proven demand-side resources for speculative supply-side ones. A plan that avoids SMR dependency by leaning on DR and efficiency should score better on technology risk than one that relies on SMRs, even at comparable cost.

Recommendation: Add a positive technology-risk credit for plans that meet reliability requirements with a higher share of commercially proven resources, or clarify that technology-risk scoring is intended to work that way (i.e., more proven-technology content scores higher, not only less emerging-technology content).

Economic Growth (10%). As drafted, this criterion appears to use a construction-and-operations job count that fits supply-side capital projects. DR program delivery creates local jobs as well (program administration, installer enablement, device commissioning, measurement and verification), and those roles are easy to miss under a supply-only job framework.

Recommendation: Include demand-side program delivery jobs in the job-count methodology, not only construction and operations jobs for generation and transmission assets. This aligns with Dunsky's NEXT priority action to "report on the economic impact of each portfolio."

Dunsky's process review (Findings #3 and #17) called for review of planning objectives and metrics. Since the scorecard is new this cycle, getting these criteria right now will shape how portfolios are evaluated going forward.

Thank you for the opportunity to comment. I look forward to continued engagement through the stakeholder process, including the May 12 ELCC study session.

Best,
Karl Leuschen

marine renewables canada

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Dear Registrar,

Marine Renewables Canada (MRC) is the national association for tidal, offshore wind, wave, and river current energy, representing a membership of over 215+ technology and project developers, suppliers, utilities, Indigenous organizations, researchers, and communities. We welcome the opportunity to comment on the 2026 Integrated Resource Plan (IRP) Terms of Reference for Nova Scotia.

As outlined below, MRC is concerned that the proposed Terms of Reference do not adequately reflect the full system cost of different resource options and rely on load scenarios that may underestimate future electricity demand driven by industrial growth and electrification. This approach risks producing a plan that lacks the long-term, dependable procurement signals needed for industry to develop new clean energy resources and associated revenue streams, including those linked to carbon markets.

Least-Cost Framework

MRC notes that cost is weighted heavily in the evaluation framework, accounting for 70% of the assessment. While we recognize the importance of affordability, we encourage a broader interpretation of cost beyond simple levelized cost of energy (LCOE). A system-level view should incorporate factors such as Effective Load Carrying Capability (ELCC), capacity factors, and the benefits of resource diversity.

Higher-capacity-factor resources, such as offshore wind, can deliver greater reliability per unit of installed capacity, reducing the need to overbuild generation to meet the same ELCC targets. For example, achieving 1,000 MW of ELCC could require approximately 6,600 MW of onshore capacity at a 15% capacity factor, compared to roughly 2,000 MW of offshore capacity at a 55% capacity factor. In addition, a more diversified energy mix can reduce overall system costs by improving resilience and reducing exposure to fuel price volatility and intermittency challenges. The methodology used to calculate the total 25-year net present value of system costs will be critical in capturing these benefits.

Risk of Undershooting Demand

The IRP should explicitly recognize the asymmetric risks of underestimating demand in a context of rapid electrification. Constraining electricity supply poses a significant risk to Nova Scotia's economic growth, particularly as new industrial opportunities emerge.

Underbuilding may also lead to reactive, higher-cost decisions, such as the accelerated deployment of fossil-based generation. By contrast, a more proactive approach that anticipates higher demand can support timely investment in optimal, long-term solutions. To mitigate the risks of overbuilding, the plan should also consider export opportunities, which can provide additional value streams and system flexibility as regional demand for clean electricity grows.

Alignment with Climate Targets

MRC strongly emphasizes that the IRP must align with Nova Scotia's legislated climate targets, including achieving net-zero emissions by 2050. Planning assumptions that do not fully incorporate these targets risk undermining their achievement.

A clean electricity grid is also essential to enabling broader decarbonization across the economy. For example, participation in carbon markets increasingly depends on the emissions intensity of the grid. Projects that electrify operations and displace fossil fuels rely on access to low-emissions electricity to generate carbon credits and improve project economics. Prioritizing grid decarbonization will therefore support both climate objectives and private sector investment.

Conclusion

As Nova Scotia advances its energy transition, it is essential that the IRP Terms of Reference provide a framework that reflects system-wide value, anticipates growing demand, and aligns with climate and economic objectives. A more comprehensive approach to cost, combined with clear signals for renewable energy procurement, will be critical to enabling investment in new clean energy resources, including marine renewables.

MRC appreciates the opportunity to provide input and look forward to further engagement as the IRP process progresses.

Sincerely,

Elisa Obermann, Executive Director
Marine Renewables Canada
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April 24, 2026

RE: IESO's Draft Terms of Reference

To whom it may concern;

On behalf of Natural Forces, I am writing to provide comments on the draft Terms of Reference for the 2026 Integrated Resource Plan.

The term of cost assessment should reflect the operating life of assets. Wind projects typically operate over approximately 25-30 years, and hydro assets 40+ years. Shorter evaluation periods risk biasing results toward lower-capex, shorter-life options.

Sustainability should be prioritized within the evaluation framework, rather than treated as a secondary or post-model consideration.

Cost evaluation should also incorporate risk, not just nominal cost. Fuel-based generation carries fuel price risk, while wind and solar carry resource variability risk. These risks should be explicitly assessed and compared. In addition, broader cost risks should be considered, including tariffs, supply chain constraints, geopolitical impacts, and increased capital cost variability driven by external factors.

Limiting environmental evaluation to GHG reduction does not fully capture project impacts. Additional factors such as water consumption and quality, land use and degradation, ecosystem impacts, non-GHG air contaminants, and waste generation and disposal should be included.

We feel economic growth should not be measured solely through job creation. Consideration should also be given to equipment and materials sourced within Nova Scotia and Canada, as well as capital investment retained locally. Projects reliant on internationally sourced infrastructure also introduce additional risk exposure, which should be reflected in the evaluation.

Given the volume of wind generation contracts expiring within the next 6–8 years, it would be useful to understand whether the IESO intends to engage with incumbent generators. Early engagement could support contract extensions and repowering opportunities.

It may also be worthwhile for the IRP to consider a scenario where the coal phase-out is partially delayed (for example, to 2032), to assess whether this could result in long-term ratepayer benefits. This would require government direction and sufficient lead time but could reduce near-term system pressure.

The draft IRP scorecard proposes applying non-cost objectives—such as GHG reduction, economic growth, and energy security—at the resource plan level after capacity expansion and production cost modeling. This approach risks treating these factors as secondary considerations. Applying these criteria at the facility level prior to modeling would better align with broader policy objectives.

Finally, given current geopolitical conditions, energy security should be explicitly considered within the framework. Favouring domestic energy sources over imported fuels would improve system resilience and reduce exposure to external risks.

Thank you for the opportunity to provide input. I would be pleased to discuss these comments further.

Yours sincerely,

“Austen Hughes”

Austen Hughes | VP Corporate Relations

IESO Nova Scotia

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April 24th 2026

RE: 2026 Integrated Resource Plan (IRP), Draft Terms of Reference (ToR) – Feedback from NRStor Incorporated (non-confidential)

NRStor submits the following comments for the IESO-NS's consideration regarding the draft ToR for the IRP dated March 31, 2026.

- Pre-IRP studies including Effective Load Carrying Capacity (ELCC)
    - **Energy storage technical inputs**: NRStor understands an ELCC study is expected to conclude in April and will be an input into the IRP. NRStor welcomes the opportunity to review the draft storage findings in the ELCC Study and other pre-IRP studies. NRStor's 250 MW/1,000 MWh Oneida Battery Energy Storage has been operational since May 2025. Technical insights including performance characteristics and operational parameters from Oneida and our other diverse storage portfolio could be instructive in finalizing the storage assumptions for the ELCC Study.
- Process
    - **Operating Costs**: NRStor is encouraged by IESO-NS's proposal in the draft ToR to include operating and maintenance costs in addition to capital costs when evaluating existing and candidate resources, as directed by M12412.
    - **Technology neutral**: NRStor recommends that system needs be defined by grid services and specified operability criteria, allowing for a diverse range of resources to be evaluated for both the capital and operational costs in meeting the specified criteria.
    - **Transparency**: NRStor welcomes the multiple opportunities for stakeholder feedback in the IRP process. We propose that non-confidential stakeholder feedback be posted online for greater transparency, as is done in other jurisdictions like Ontario.
    - **Targeted outreach**: NRStor proposes targeted outreach to energy storage developers and industry representations, to account for up-to-date market intelligence on energy storage assumptions including costing, performance characteristics, and installation timelines that are essential for accurate economic modeling in the IRP process. NRStor would be pleased to participate in these targeted outreach efforts.

- Updated Avoided Costs / Evaluation Criteria / Key Questions
    - **Societal Cost Test**: To support alignment with provincial objectives including the 2030 Clean Power Plan, NRStor recommends examining avoiding costs from a Societal Cost Test (SCT) in addition to a Program Administrative Cost Test or a Total Resource Cost Test. The SCT will help inform avoided costs from a wider lens beyond least cost, including quantification of avoided greenhouse gas emissions (GHG) beyond the 10% scoring criteria being proposed for GHG reductions. The SCT can support guiding investment decisions for near-term government decision-making including procurement priorities. This aligns with M12412 as well as Section 2(e) of the More
      Access to Energy Act (MAEA):
        - Section 2(e) of the MAEA: *"The purpose of this Act is to… support the sustainable development, sustainable prosperity, energy efficiency and greenhouse gas emissions reduction goals of the Province articulated in the Environmental Goals and Climate Change Reduction Act"*
        - M12412: "*To ensure that all emissions offset purchase costs, carbon costs, and any ongoing use of the output-based pricing system are dynamically linked in the capacity expansion optimization modeling.*"
        - As an example, Ontario's 2024 Cost Effective Energy Pathways Study found that the savings form avoided damages associated with GHG reductions far outweigh the investments needed for a cost-effective net-zero pathway.
        - The SCT can incorporate other metrics including and health and equity metrics and water resource impacts.
    - **Demand-Side and Non-Wires**:
        - NRStor welcomes the IESO-NS's proposed approach to better assess energy efficiency and non-wires solutions alongside supply-side resources, including working with E1 and the Demand Side Management Advisory Group to update the avoided costs of energy and capacity.
        - NRStor has up to date costing information on both grid-scale and behind-the-meter residential storage that will be instructive to help inform non-wires solutions including avoiding and/or deferring new transmission and distribution infrastructure.
- Technical Working Group
    - NRStor is glad to see the recommendation for enhanced engagement with the Mi'kmaq. Beyond engagement, there should be direct Mi'kmaq representation (as the rightsholders) in the Technical Working group, as is the case in other jurisdictions like the Ontario IESO's regional planning process.
- Assessment Period
    - IESO-NS is proposing a study period of 2029 – 2053. NRStor proposes that the start of the assessment period be 2028, to reflect some of the 2030 Clean Power Plan early actions and priorities including the timeline of the first coal power plant

closure, the Trenton generating plant. Depending on IESO-NS procurement timelines for energy storage, the Mi'kmaq majority owned Trenton battery project is shovel ready to be in-service as early as Fall of 2028.

- Key Questions
    - NRStor recommends that that energy storage be a key part of any on- and offshore wind modeling, including the following additional question that will be examined by IESO-NS in the IRP.
        - "Determine the economic opportunity for domestic use of energy from offshore wind"

—END OF DOCUMENT—

Submitted by:

Homaira Siddiqui,

Partnerships and Development Manager,

NRStor Incorporated

hsiddiqui@nrstor.com

TOR Section	Details/Component	NS Power Feedback/ Questions
Objectives	All objectives listed in the TOR	NS Power supports the objectives noted in the TOR. In addition to the near-term resource procurement identification (3 – 5 years) and the long-term resource plan identification, NS Power also recommends the IRP as the source of identifying capital work to existing resources that may be triggered ahead of or following the procurement window. For example, the decision point for the Mersey Hydro System will serve as a source of information/direction on the decision point for rebuild or partial decommissioning
Process	Phases of the IRP, which includes the following: - Pre-IRP studies - Terms of Reference - Assumption and Scenario development - Modelling - Analysis and Conclusions - Report - Update Avoided Costs	NS Power supports the phases of the IESO-NS IRP in concept as identified in the TOR. Specifically, NS Power supports the recommendations for stakeholder engagement at each phase of the IRP, the iterative nature of the modelling phase to provide feedback on preliminary results, a reduced set of scenarios to be studied under the IRP and the identification of a preferred resource plan/action plan. NS Power notes the TOR and Report will be filed with the NSEB. Will the feedback provided by stakeholders be captured as part of an IR process with the NSEB for these phases or will feedback be provided to the IESO-NS to be published, with IESO-NS responses, on the IESO-NS system planning website as per the other phases of the IRP?
	Stakeholder Engagement Feedback Timelines	NS Power would like to note the feedback timelines for published materials of two weeks from the release of the materials appear to be reasonable and consistent with the goal of completing the IRP in 2026. However, since the stakeholder engagement session will be held one week before the final

		feedback is due, would the IESO-NS be open to short extensions to providing feedback if new information or clarity is provided during the session that requires additional time to update the stakeholder engagement feedback?
Technical Working Group	Creation of a Technical Working Group to allow technical input on the overall approach of the analysis	NS Power is supportive of the development of the technical working group and appreciates a seat at the table. Given the input assumptions provided to the IESO-NS from NSP span a number of SME's within NSP, NSP understands and appreciates, based on feedback from the IESO-NS during the stakeholder engagement session held on April 17, 2026, that while NS Power has one consistent seat in the TWG, NS Power may bring additional SME's close to the subject matter being discussed to ensure the required technical feedback is being provided.
Assessment Period	Proposed Study Period of 2029 - 2053	NS Power is supportive of a 25-year assessment period that captures a pre-2030 and post-2050 time period. However, NS Power would recommend the IRP start in 2028 (study period would run from 2028 – 2052) to capture the timing of the remaining CPP work to achieve the 2030 targets. This includes the conversion of POT, the addition of the GCP wind, the evaluation of the potential for Trenton 6 biomass conversion, which, given the scope of work, could occur in 2028. This also supports the justification for the 10YSO capacity build out and timing and provides a clear resource for the work required to meet the 2030 targets.
Evaluation Criteria	For this IRP, IESO-NS is proposing the objective function to be least cost for all expansion plan and production cost modelling.	NS Power supports this objective function for the 2026 IRP and also supports the development of a scorecard that considers other objectives when comparing IRP scenarios. Please see below for NS Power's feedback on the Draft IRP Scorecard in Appendix A.

Key Questions	Key questions/notes re: the IRP referenced by the NSEB in the IESO-NS's approval of its Proposed Expenditure and Revenue Requirement for the Test Year ending March 31, 2026 (M12412)	NS Power looks forward to reviewing the modelling outcomes that will explore the directives provided to the IESO-NS by the NSEB. In particular, NS Power appreciates the additional three questions the IESO-NS identifies will be explored in the IRP. Specifically, the confirmation of resource needs of the system to achieve the 2030 targets and evaluating the opportunities for Mersey Hydro redevelopment and decommissioning. It is the former (the confirmation of resource needs of the system to achieve the 2030 targets) that also supports NS Power's recommendation of a planning horizon starting in 2028 (planning horizon of 2028 – 2052).
Timelines	IRP timelines starting with the release of the draft TOR and ending with the publication of the final IRP report in December of 2026.	Please refer to the previous comments re: feedback timing. NS Power is generally supportive of the completion of an IRP in 2026 but is requesting the potential for some flexibility in providing feedback following engagement sessions.
Appendix A – Draft IRP Scorecard	Percentage influence of other factors impacting scenarios assessed as part of the IRP.	NS Power is supportive of the consideration of a score card approach. NS Power also supports rating the least cost as the highest contribution to the score card given the goal of identifying a path forward that results in the least cost to customers. While NS Power agrees that all other components noted in the score card are important, NS Power recommends only considering the inclusion of the least cost and GHG reduction components in the draft score card for the following reasons: - The technology risk should already be embedded in the assumptions for the emerging resources (costs, date of commercial availability)

		- NS Power supports the evaluation of economic growth in the Province for the scenarios considered in the IRP but recommends consideration of this evaluation outside of the IRP process.

Port Hawkesbury Paper

Thank you for the opportunity to comment on the draft 2026 IESO IRPTerms of Reference. This is an important first step that sets the agenda for the IRP. While the Terms Of Reference attempt to capture all aspects of the process, there may be times when a deviation is necessary and PHP is expecting there will be some flexibility along the way in order to accommodate times when unexpected or unanticipated items arise.

Below are PHP comments on the ToR:

- Transmission and distribution, as well as needed ancillary services, are key parts of the development of the grid that do not appear to be included in the IRP, as was the case for the previous IRP. The overall cost of the system should include the transmission and distribution side, and any additional ancillary services to reliably manage a 80% renewable grid, as this cost can be significant and has long term impact to rates in Nova Scotia.
- How does the IESO plan to integrate the previous Evergreen IRP findings and results. There should be some crossover to the new IRP instead of a somewhat blank slate.
- PHP is supportive of the primary objective of the IRP to be the least cost plan.
- In the previous IRP there were a significant number of scenarios and the IESO has commented on the need to reduce the number of these. There should be an allowance for "sensitivities" as well as scenarios. Sensitivities are important to the overall outcome and changing one variable as a sensitivity is not as intensive as a scenario. The IESO should land on a limited set of scenarios on how the system can evolve over time, and then run individual sensitivities as requested by stakeholders to show the impact of one variable change in a scenario.
- The Technical Working Group (TWG) membership has already established with respect to the members that will be a part of the committee. As the largest load in the province, PHP does not feel any of its interests will be represented by any member of the TWG, as PHP is not represented by any consumer group in Nova Scotia . PHP is a fully integrated asset on the grid and is a critical resource for the

system operator. PHP strongly urges the IESO to consider adding PHP to the TWG. Attached is a expression of interest in relation to this item.

- PHP notes that there were multiple times when additional time was requested by stakeholders in the previous IRP process. PHP is requesting that the IESO is allowing adequate time to assess and adequately understand the outcomes of the individual parts of the process as it unfolds.
- How does the IESO intend to incorporate the 10 year system outlook into the IRP process? The next 10 years have far more certainty than the 25 year horizon of the IRP. There is significant risk and unanticipated outcomes that are well beyond the ability of an IRP to account for, thus the near term results have more significant meaning than any outcomes predicted 25 years away. Also will the 2026 ten year system outlook be published and available for this process?
- How does the IESO intend to incorporate large scale demand and supply projects into the IRP such as data centers, offshore wind, significant high voltage transmission lines, ancillary services, for example, and incorporate these in the scorecard?
- The IESO has been mandated to procure certain resources ahead of the IRP. How will this be accounted for and how will scenarios be relevant given some decisions on future resources have already been made?

PHP appreciates the opportunity to comment on the ToR and looks forward to a robust and productive IRP process. If there are any question on the above or the Expression of Interest, please contact me at your convenience.

John

John Esaiw

Energy Director

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Written Comments on the 2026 Integrated Resource Plan Terms of Reference (dated March 31, 2026

The following key points are provided for consideration:

1. **Objectives**
   - Bullet point 5 references the provincial legislation ***Environmental Goals and Climate Change Reduction Act***
   - The IRP states that the assessment period covers **2029-2053**
   - The ***Clean Electricity Regulations (CER),*** will be in effect during this assessment period and will therefore govern elements of the IRP process

   Given this, the following revisions are recommended:

   - The Objectives section should explicitly reference the **CER Act**, as these regulations will apply throughout the assessment period
   - The governing **Acts** should be identified as Bullet 1 and Bullet 2 within the objective sections, as compliance with these requirements is mandatory and should guide all planning and decision making
   - While these Acts and regulations establish minimum compliance requirements, the IESO also has an opportunity to **lead by example** and position Nova Scotia as a national leader in climate action and clean electricity planning

   It is strongly recommended that the IESO clearly articulate this vision within the Objectives section.

   One potential approach would be to adopt the **2050 CER emissions requirements from the outset**, rather than waiting until the prescribed compliance dates. This would help avoid future costly upgrades or retrofits that could otherwise be avoided through prudent planning.

2. **Score Card**

Emissions

As noted above, this first IRP presents an important opportunity for the IESO to demonstrate a clear and credible commitment to climate change mitigation and emissions reduction.

While it is encouraging to see **GHG Reduction** included as a scorecard criterion, the proposed weighting of **10% is insufficient**. At this level, particularly when combined with prorating, emissions performance will have little practical influence and meaning.

In effect, this risks becoming a criterion that is present in form but not materially meaningful in outcome.

It is strongly recommended that the weighting assigned to emissions related criteria be **significantly increased, ideally to at least 50%**.

In addition, the proposed prorating methodology is unclear.

It is recommended that:

- **full marks** be awarded to generation sources with **zero emissions**
- **zero marks** be assigned to sources whose emissions do not meet the **most stringent 2050 emissions requirements**

This would ensure alignment with long-term climate objectives.

Diversity

The current scorecard appears to evaluate generation options **in isolation (in silos)**.

It is unclear how the IESO intends to use these individual scorecard results to inform a **diversified long term resource strategy**.

For example, if the scorecard ranks solar as the highest scoring option, would this imply that procurement decisions would only include solar generation?

A reliable and resilient clean electricity system requires **resource diversity**, including an appropriate mix of solar, onshore wind, offshore wind, hydro, tidal, interties and battery storage.

It is therefore recommended that the Terms of Reference clearly explain how scorecard results will be translated into procurement decisions that ensure **system reliability, diversity, and long-term resilience**, rather than simply selecting the highest-scoring individual resource type.

Good Afternoon,

With apologies for the delay in getting these comments to the group, please find the SBA's comments on the draft Terms of Reference outlined below. I note that we also echo many of the comments made by others.

IRP should include robust consideration of risks

The Draft TOR does not include explicit discussion of risk analysis, aside from the "Technology Risk" factor included in the draft score card description provided in Appendix A. The IRP should incorporate consideration of several risk elements, including load forecast, resource capital costs, policy changes, fuel prices, and others. These risk dimensions should be defined early in the process so that the methodology can be appropriately defined to assess those risks.

Scenario/sensitivity analysis should provide foundation for action plan and signposts

The Draft TOR notes that the IRP "will strive for a reduced set of crisp, focused scenarios" (p. 5). The SBA agrees with the priority of focusing on a somewhat limited set of high-value scenarios and sensitivities in order to keep the modelling and analytical effort manageable on the planned timeline. However, it is important that the scenarios and sensitivities are sufficiently expansive such that they provide insight into key uncertainties and inform the action plan and signposts.

For example, key uncertainties include whether there is a "Phase 2" to the new Reliability Intertie with New Brunswick that results in opportunities for capacity imports or exports; the level of future offshore wind development; whether other inter-provincial transmission is completed as a result of the recent Memorandum of Understanding,[1] etc. Those uncertainties can have a major impact on the results of the IRP, so it is important that the scenarios are expansive enough to provide insight on the implications so that the learnings can be incorporated into the action plan as signposts, if needed.

Score card approach should be informed by stakeholder engagement

[1] https://news.ontario.ca/en/release/1007115/ontario-secures-groundbreaking-national-energy-corridor-agreement

The Draft TOR includes a proposed score card approach in Appendix A. It is unclear from the Draft TOR how multiple portfolios will be created and scored under this proposal. Certain elements, such as GHG reduction, can be reflected in modelling constraints during the portfolio optimization process. It is also unclear how the IESO determined the specific scoring elements (e.g. under Technology Risk, the 1 point deduction for 5% of NPV attributed to emerging technologies). Lastly, using overly-prescribed scoring methods can have inadvertent consequences where certain metrics can have an outsized influence on final portfolio recommendations. The IESO should plan for significant stakeholder engagement on the score card approach through the IRP process.

TOR should clarify economic development analysis

The Draft TOR states that an additional element of the IRP to "Determine the economic opportunity for domestic use of energy from offshore wind" (p. 10). Economic development analysis is not a conventional element of an IRP, and it is unclear how this will be incorporated in the analysis or the extent to which it could impact the proposed resource portfolio. The TOR should be more explicit regarding the objective, scope, and methodology of this analysis.

Thank you

Melissa

Melissa P. MacAdam (she/her)

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24 April, 2026

Chris Milligan, Vice President Planning & Procurement

Nova Scotia Independent Electricity System Operator (IESO-NS)

Sent to: irp@ieso-ns.ca

To whom it may concern,

RE: Written Feedback on 2026 Integrated Resource Plan (IRP) Draft Terms of Reference (ToR)

Please see below Solar Nova Scotia (SNS)'s written feedback on the draft Terms of Reference (ToR) for the 2026 IESO-NS Integrated Resource Plan (IRP):

1. SNS would appreciate it if stakeholder feedback on the ToR, and during subsequent steps in the IRP process, were made available to all stakeholders for transparency.

2. SNS recommends that the term "energy resources" in the Objectives of the IESO in the Terms of Reference (ToR) be explicitly defined as per the *More Access to Energy Act* (MAEA) to add greater clarity:

   "…*resources capable of providing transmission service or capacity or energy, including wind, solar, hydrogen, battery technology or other energy storage resources, distributed energy, demand side management resources, demand response and control resources, combined heat and power resources and hybrid peaking resources, and combinations of such resources*".

   Where "demand-side management" is defined in the *Public Utilities Act* as:

   "*activities, programs or plans relating to: i) the efficient use of electricity; ii) the conservation of electricity; iii) the alteration of the consumption pattern of an end-user of electricity that has the effect of reducing demand during Nova Scotia Power Incorporated's periods of highest demand; iv) strategic electrification of energy end uses currently powered by fossil fuels in a manner that reduces overall greenhouse gas emissions and electricity costs; v) the delivery of a reduction in the amount of electrical energy or capacity that Nova Scotia Power Incorporated would otherwise be required to supply to its customers, or; vi) any other prescribed activities, plans or programs*".

   If the intent for the 2026 IRP is to scope or weight "energy resources" differently from those legislated definitions (specifically with reduced consideration of energy resources at the distribution-level, including strategic electrification), SNS recommends that the re-scoping or weighting be the subject of additional stakeholder consultation.

3. While the *MAEA* mandates IESO-NS to "*conduct independent planning for energy resources, demand-side management and transmission*" (s. 9q), the roles and responsibilities for considering energy resources at the distribution-level in the 2026 IRP are currently unclear to

SNS. (The final report in the Distributed Energy Resources Integration Roadmap (DERIR) expected to be filed by June 30 (M12177) may provide further clarity to stakeholders). In the 2025 Load Forecast (M12349), NS Power deferred the recommendation for "*a DER Potential Assessment… to identify the growth potential of DERs, and where the grid can (or cannot) accommodate them. The Study would have refreshed assumptions for DERs capital costs and business models, and would produce a more precise forecast of the impact of DER deployment on the load profile at the provincial and sub-provincial level. The Study should prioritize identifying where the deployment of DERs could bring most value (e.g., targeting the alleviation of grid constraints as non-wires solutions)*" to the IESO-NS IRP process (NS Power, Rebuttal Evidence, November 6, 2025). But Dunsky's IRP Review key finding #19 identified that "[t]*he distinct value of Distributed Energy Resources (DERs) for distribution systems – e.g. as non-wires alternatives (NWAs) or for resiliency – was not captured. This is aligned with industry-standard practices which mostly do not consider the distribution system*". (We note that the IESO in Ontario was directed in June 2025 by government to "[l]*ead the review of the bulk system planning process to ensure alignment and consistent DER consideration across all planning levels*" and that as such industry-standard practices may be evolving). SNS would appreciate further clarity on how energy resources at the distribution-level will be considered in the 2026 IRP, and how that will interact with other processes (e.g., DERIR, NSPI Load Forecast etc).

4. The Clean Power Plan states that "…[a] *key driver for building a clean electricity system in Nova Scotia is to produce energy savings by electrifying heating and transportation for households*", as it "…*will reduce energy bills and replace spending on imported fuels with clean local electricity*". In alignment with this policy objective, SNS recommends that the Draft IRP Score Card, that incorporates evaluation criteria for consideration of other objectives beyond "least-cost", should differentiate between costs for imported fuels both prior to and after running capacity expansion and production cost models. The playing-field should not be level for imported fuels with clean local electricity.

Thank you for the opportunity to participate in this important process.

Very best regards,

Dave Brushett, Chair of the Board of Directors, Solar Nova Scotia

Synapse Comments on NS IESO Terms of Reference – 2026 IRP

April 24, 2026

Synapse Energy Economics, independent consultant to the NS Energy Board, provides these comments on NS IESO's Terms of Reference ("ToR").

The objectives of the IRP are reasonable. Synapse notes that the way in which IRP plan "robustness" is considered, and potentially assured through the modeling processes used, is critical and difficult to achieve. It usually requires a very carefully considered set of scenarios, and set of sensitivities, to allow for determinations of truly "low regrets" resource plan elements. Synapse notes that it is less important to finalize a "correct" preferred plan, and more important to understand what drives the differences between candidate plans. Synapse proposes a few minor modifications to specific activities within the timeline of the ToR to help ensure sufficient efforts to achieve robustness across the modeling space.

To ensure transparency - especially given the likelihood that no stakeholders will run PLEXOS - it is critical to release all input and output materials in Excel format as available. Such releases in prior IRPs were enormously helpful, but not always as comprehensive as they could have been. While pdf-based slide decks with results, or with input assumption graphics are useful, it is easier to undertake analyses (especially given the short windows that are involved) when data is provided in machine-readable form.

The establishment of a technical working group ("TWG") is sensible and valuable. While we noted during the April 17th session the potential value in having an in-person session for at least one of these meetings, on reflection we do not think it is critical to convene an in-person TWG.

Releasing all pre-IRP studies with adequate time for review is essential. Please release the ELCC study at least one week prior to the planned May 12th stakeholder session. Please release any further studies, such as associated capacity cost studies, as soon as they are available, and inform stakeholders of the full set of pre-IRP reports or studies that may be available. Please release all load forecast information and planned incorporation of energy efficiency and demand response program plans as soon as it is available.

Synapse is highly supportive of the noted "Key Questions" NS IESO included in the ToR. We note in particular the importance of more expansive Maritime regional modeling, the potential for different resource cost trajectories, and the critical importance of demand-side options to reduce projected peak loads. Our participation in the TWG will continue to

emphasize the importance of how these elements are considered in the modeling structure.

Generally, the sequencing, timing and identification of the activities in the Timeline section of the Terms of Reference is reasonable. We suggest the following minor modifications or additions to the Timeline of the ToR:

1. Allow for more intensive stakeholder involvement in the selection of scenarios to be considered. This may include holding a few specific scenario slots to be defined fully by stakeholders. It would be useful to use the May 28th session not just to review the scenarios, but to allow for a fulsome discussion on potential additional scenarios to those released by NS IESO prior to the meeting.

   For example, there is no reason to limit modeling approaches to, e.g., 3-5 scenarios. In our opinion, it would be advisable to consider - at the start - use of the PLEXOS engine to evaluate as many as 15-20 scenarios, given the number of permutations that can arise with even just 4 key variables, each with even just 2 alternative numerical trajectories; and with possible additional scenarios identified further down the timeline of the process. The use of many scenarios allows for a differential analysis between scenarios to assess the key drivers behind outcomes that may be quite different. The scenarios defined serve to highlight the difference between an optimal outcome, and potential sub-optimal outcomes. While it is reasonable to strike a balance, due to limited staff resources, the computing effort itself is likely not a constraint to considering a wide range of alternative scenarios.

2. Consider allowing for the iterative approach mentioned earlier in the ToR (page 5) to be explicitly used during the July-August timeframe, when preliminary modeling results are first released. There may be a clear need to redefine or add scenarios at that time to address planning elements that are only revealed when the modeling results are first reviewed.

3. At different points in the timeline, written comment deadlines are imposed. Synapse would add that the ToR should directly allow for written, informal discovery by parties to supplement material released by NS IESO or discussed at stakeholder meetings. These could be formally structured as part of the ToR at each of June 5, August 19, and October 29.