# Feedback Form

## Long-Term 2 RFP | Deliverability Guidance Document | April 18, 2024

### Feedback Provided by:


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Date: May 3rd, 2024

To promote transparency, feedback submitted will be posted on the Long-Term RFP engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Confidential".

Following the LT2 RFP Guidance Document webinar on April 18, 2024, the Independent Electricity System Operator (IESO) is seeking feedback from participants on the items discussed during the session. The presentation material and recording can be accessed from the engagement web page.

**Please submit feedback to** engagement@ieso.ca **by May 3, 2024.**

## Guidance Document: Readability and Layout

| Topic | Feedback |
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| Do you have any advice or feedback on the style, layout and overall readability of the April 2024 Deliverability Guidance Document released by the IESO? | Neoen thanks the IESO for putting together the preliminary connection guidance document.<br><br>The document is overall clear and understandable. The main missing piece is the absence of a map to clearly identify the circuits, substations and zones to avoid. It will take countless hours to developers to identify every circuit when the IESO could publish a map.<br><br>Neoen believes the information provided in the document ought to be collected into a user friendly or accessible database of transmission circuit and station names so developers/bidders can simply determine the limitations/restrictions for each transmission section.<br><br>It is also our view that the IESO should publish a detailed map and single line diagram (SLD) of the Ontario transmission system with the circuit names to allow bidders to fully understand the preliminary connection guidance document. The IESO provided 150+ circuit names that don't have much weighted meaning or relevance without a reference map to utilize. We believe that a good reference is the interactive transmission capability map the AESO published for transmission system layout and capabilities could be a good benchmark the IESO should try to aim for.<br><br>Regarding Section 6, the information provided to date does not give enough clarity about the rationale of the 50km buffer from certain substations. Is 50km a hard cap? How does the risk change depending on the distance from the substation? |

## Guidance Document: Content

| Topic | Feedback |
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| Are there any specific areas of the Deliverability Guidance Document that you would like to provide feedback on from a technical and/or content-specific point of view?<br><br>If so, please be as specific as possible in your feedback and consider using page numbers and content title where possible to ensure the IESO can consider your feedback accurately | It would be helpful to understand if IESO and HONI are open to direct connections at substations and if this solution is preferred in terms of impacts to the grid.<br><br>The deliverability document appears to take a very conservative approach to assessing connection capability across Ontario. Neoen's view is that the document should provide access or be supplemented with analysis on ability for bidders to fund expansion/upgrades/reinforcements of the transmission system to allow higher connection capabilities or to relive restrictions for better flexibility in meeting system needs/requirements on the grid. Given that the procurement target in LT2 is 2000MW, this is relevant and important given the size of procurement which appears to represent a substantial expansion of installed capacity in the province and would naturally require upgrades to the transmission system generally.<br><br>It is also our view to better understand how hybrid projects can reduce/alleviate or avoid specific restrictions on the circuits listed in the preliminary connection guidance documents. It does not appear that the IESO has considered the abilities and benefits of hybrid resources from a connection view point.<br><br>It is also in our view that not only would the above be critical on the transmission system but also on the distribution level connection perspective.<br><br>For other additional comments, see below |

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| Do you find the preliminary connection guidance information sufficient for your siting needs? If you feel more information is required, please be specific on what other information you would find useful. | This preliminary analysis gives some insights to developers but doesn't provide enough certainty to inform all siting decisions.<br><br>The information about circuits to avoid is helpful for developers.<br><br>But the information provided in terms of size of projects is not helpful and even confusing for developers. It is understood that the model has been run with an assumption that projects can connect up to 30 MW on 115kV lines and up to 100 MW on 230kV lines. As many developers expressed during the webinar, those values are surprisingly low. If those values are not hard stops and larger projects can actually be connected at those tension levels provided that they can mitigate their impact on the grid, then the Guidance Document is not helping to size projects. This "soft" limit creates more confusion than real guidance. We would need to understand what the requirements are to assess the actual capacity that can be connected to the line (equipment, protection schemes, remedial action schemes, etc.).<br><br>Having highlighted the limits of the proposed approach, we suggest that the IESO defines for each line (or small area) a more precise capacity constraint that the existing grid can accept. It would also be interesting to have from the IESO a value (per $/MW or $/MWh) that would represent the grid improvement cost that the developer would have to pay if the proposed project is exceeding the line (or region) interconnection capacity. This would provide broader siting options as well a better understanding of the interconnection risks associated to a specific project size. Otherwise, it would be very difficult for developers to price the cost of interconnection upgrades in their submissions.<br><br>Also, it would be helpful to have a process in place and an intermediate assessment or "pre-SIA" with IESO and HONI where proponents can – ahead of their bid submission – propose a project size and |

basic design, and IESO and HONI would comment on the feasibility and cost of the interconnection, similar to the Deliverability Test that was put in place for LT1. It gives clarity to the developers on the capacity that they can submit to the RFP. We understand this would represent a significant workload for the IESO and HONI, but an option to limit the quantity of assessment requests could be to ask developers to pay a fee (which could then be deduced from further studies fees if the project is successful). By doing so, IESO would make sure that serious and well-funded developers can provide quality and competitive bids with the most accurate interconnection information possible, which will be beneficial to all parties and ratepayers. This fee would indeed provide IESO with more resource to run the studies and would act as a natural filter to avoid assessing non-feasible projects.

This approach has been taken by many system operators in different jurisdictions, for example:

- For its 2024 Call For Power, BC Hydro has put in place an Interconnection Request process, where proponents have to submit information about their projects and locations and pay a $30k deposit. Within 10 weeks, BC Hydro provides an Interconnection Feasibility Study Agreement with (i) a power flow analysis, (ii) a short-circuit analysis, (iii) an assessment of the impact of the project on the system and the required network upgrades and (iv) a non-binding estimate of cost and time. Those costs are then taken into consideration by BC Hydro at the evaluation stage of the projects. This is a transparent process which gives more visibility to developers, who have 2 months between the Feasibility Study Results and the proposal submission date to optimize their project and offer. It avoids situations where developers spend months working on a project which is not technically viable or for which the network upgrade costs will be uneconomic.
- In Alberta, the AESO takes a similar approach for its cluster process. Proponents pay a

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| | processing fee of $5k and a preliminary assessment fee of up to $25k (depending on the size of the project). In 3-4 months, the AESO provides developers with options for interconnection, cost estimates and curtailment information. Developers can then decide to withdraw their project or move forward with the next phase of interconnection studies.<br><br>With the current situation, developers will be blind about the capacity they can actually connect to a circuit, leading to a non-optimal situation with 2 potential outcomes:<br>- Developers proposing only 30/100 MW on a 115/230kV circuit where a bigger project could have been built, resulting in a higher price in $/MWh<br>- Developers submitting a project with a higher capacity, but with the risk of being disqualified for technical reasons, putting at risk IESO's procurement targets.<br><br>Finally, it's important to note that developers will need an update of the Guidance Document after the LT1 results are announced. |

## General Comments/Feedback:

On the global objectives of LT2 and the impact of the Guidance Document:

- The LT2 RFP, followed by the announcement of LT3 and LT4, constitute an ambitious target for the IESO and an attractive opportunity for developers.
- If the IESO wants to procure 5 TWh with LT2 and more through LT3 and LT4, but if at the same time so many constraints are imposed on developers (prime land, municipal support, limitations on project sizes), it will be difficult to meet the energy need with competitive projects.
- For example, in some areas of the province, there is enough capacity to add more than 2 GW of projects. But with 30 MW limits at 115kV and 100 MW limits at 230kV, the IESO would need to contract with 50-75 smaller projects to meet its target, which

would result in less competitive projects due to a lac of economies of scale and non-optimal competitive behaviour.

On the Deliverability Assessment at the Evaluation stage:

- We understand the methodology will be similar to the one exposed in the Guidance Document, but developers would need clarity on the details of the process as soon as possible
- For example, we would need to understand if the assessment will be on a pass or fail basis, or if a project could be awarded only part of its capacity. Could a project make different proposals for different capacities and production factors?