

Feedback Form

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

Feedback Provided by:

Name: Shelby Dockendorff

Title: Advisor, Public Affairs and Communications

Organization: Boralex Inc.

Email: [REDACTED]

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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
<p>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?</p>	<p>Boralex appreciates that the Deliverability Guidance Document has laid out circuits to ideally avoid in a table format. This makes the document easier to navigate because you can search by circuit name. We ask that this formatting be used going forward whenever possible. In addition, the document clearly layouts the methodology that was used to develop the document which is appreciated. Overall, the document is easy to read in a clear and concise format, however it is lacking critical information that proponents will need in order to site projects and is not reflective of the scale of projects that will be built</p>

Guidance Document: Content

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?

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

Executive Summary

Page 5-6: There are several maps and tables highlighting area limits. Boralex has several comments on these maps as we find them ineffective for future planning. Currently these maps do not convey enough information, they do identify cumulative area limits as well as circuits to avoid which is beneficial but we ask that in addition to these current maps, if the IESO could identify maximum MW that could be installed based on individual circuits. If that model is not feasible, we ask that the IESO release information regarding maximum MW by planning region, for example Sudbury/Algoma max capacity 300 MW, Peterborough-Kingston max capacity 800 MW. This will help with project planning and bid submission as a developer will be able to determine how many projects within an area would be able to connect.

Section 2 Zonal Probabilistic Limitations

Page 11: Table 2 for Zonal Capacity Limits, Boralex would like clarity on why the study limits of 2000 MW for wind and 4000 MW for solar were used? Is it solely based on the IESO's need to procure 5TWh of energy? It would be beneficial to know if certain areas of Ontario would be able to handle great amounts of MWs knowing that there will be cadenced procurements for the next 5 years. Therefore, we would like to better understand the IESO's rationale behind these limits.

Section 3 Area Congestion Limits

Page 12 Assumptions and Methodology: It is stated that batteries are assumed to be charged at 50% capacity. Why was this assumption made and is this 50% assumed to be during the day or night? It also states that gas is assumed for the minimum load case. We wonder why that has been asserted, as the assumption that gas is running at low loads is not consistent with likely Market Renewal Program outcomes. This assumption is not listed as the same for nuclear and hydro run-of-river, which should be assumed to run due to low marginal cost. Finally, it was noted that summer ratings were used. We are seeking further clarity on if these ratings are representative of what the proponents will see in the SIA/CIA process, as well as in real-time dispatch and conditions. Boralex would also like to know if the IESO is assuming that summer will be more conservative than winter.

Topic	Feedback
	<p><u>Section 4. Inverter Base Resource (IBR) Limitations</u></p> <p><u>Page 17-18:</u> The size of projects used to determine inverter base resource limitations were unrealistic, with project sizes of 30 MW on 100 kV lines, and 100-150 MW on 230 kV lines. The project sizes are too small to make financially viable on the respectively sized transmission lines. If this guidance were to be followed it would lead to higher priced projects. As the IESO is targeting to procure 2000 MW, Boralex is asking the IESO to conduct further studies and consider larger project sizes for their connection guidance documentation. For example, more realistic project sizes would be 80-125 MW on a 115 kV and 150-300 MW on 230 kV. The more detail that the IESO can provided preferably in table format as mentioned above would be beneficial such as a list of 115 kV and 230 kV circuits with maximum capacity limits.</p> <p>Page 19: On the maps regarding circuits to avoid, please also list the circuit names on the tables/map whenever possible. Additionally, for the map labelled Figure 8, we ask that the IESO draw the approximate location of the limiting transmission lines to help highlight the areas to avoid. The current marker on the map is not useful as proponents start planning projects.</p>

Topic	Feedback
<p>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.</p>	<p>Overall, the preliminary connection guidance information provided is somewhat helpful but not sufficient for project siting. There is further elaboration below regarding siting barriers, with respect to the Document. The overly conservative nature and lack of detailed information does not allow proponents to narrow down areas that would be preferred for projects. For example. Page 14-15 – We are appreciative that the maps provide the overall area congestion limits, which is helpful however this information needs to be combine with more detailed circuit limits or planning area limits to make the maps relevant for sitting. In additional it would help if circuits to avoid were included on the maps so all the information is in one location. . This would help with project planning and bid submission as a developer will be able to determine how many projects within an area would be able to connect.</p> <p>An executive summary combining the limitations should be produced. This is lightly touched on by the statement on Page 28 indicating the proponent should take the most limiting constraint – but a summary combining the minimum of all the 6 definitions would be very helpful for communication and education purposes.</p> <p>In the Assumptions and Methodology section of the document, the IESO highlights that three main basecases were created for three larger sub-systems of focus (Northern Ontario, West of Toronto, and East of Toronto). We are seeking further clarification on the results of each basecase for the different sub-systems in comparison to the one presented in the document. If all the results could be presented in an appendix of the document, this would be beneficial for proponents.</p>

General Comments/Feedback:

It is unclear how the second phase of the deliverability tests will be completed, which is a crucial piece to understand when deciding to invest in a new project site and submit a bid. Boralex would prefer deliverability tests be completed prior to submission. If that's not possible, it would be beneficial if the IESO would allow for multiple bid size variants in a single submission as well as provide the ability to identify a maximum dollar amount for transmission system upgrades that a proponent would be willing to pay to connect a project.

Boralex's preferred connection guidance document/process would include an update to this Document that includes circuit maximum capacity and/or planning area maximum capacity. This would allow proponents to start their siting process. Followed by a deliverability test, similar to LT1, initiated once the IESO RFP is released with results provided back to proponents a minimum of 2 months before the RFP submission. This will provide proponents with the certainty needed to submit projects with appropriate sizes into the RFP.

In general, proponents are facing incredibly high uncertainty and challenges for this stage of procurement engagement:

- It is unclear if there is a viable path forward for renewables south of Sudbury due to political uncertainty around agricultural land. This to a degree negates a large portion of the guidance document's focus and available MW's
- Based on initial timelines presented by the IESO suggesting bid submission mid 2025, developers are now facing timing constraints to be able to deliver the lowest cost bid to ratepayers. In order to provide the lowest bid price possible developers, need to study the resource. Resource certainty is easier with solar than with wind, so solar bids can be more easily expedited however because of the political uncertainty mentioned above surrounding agricultural land it is difficult to initiate steps to site solar projects in Southern Ontario. In addition, there is uncertainty regarding the Crown Land process if a developer were interested in siting solar/wind in Northern Ontario.
- Currently, the MNRF is not processing new Crown Land applications and has not provided guidance on how they will manage legacy applications. Therefore, developers cannot begin wind resource monitoring even in areas indicated as favourable in the Guidance Document which again impacts timing of bid submission and providing lowest cost pricing for ratepayers.
- This all leads to an incredibly difficult environment to invest in with uncertainty on where projects can actually be developed and the process to follow for acquiring land in Northern Ontario.

The overall message to the renewable industry is that though we have the ability to provide the lowest cost solutions to provide the energy the IESO requires by 2030 Ontario's political challenges signal to us that we are unwanted.