

March 5, 2018

Barbara Ellard
Director, Markets and Procurement
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Barbara,

Power Advisory LLC has coordinated this submission on behalf of a consortium of renewable generators, energy storage providers, and industry associations (i.e., the "Consortium"). The members of the Consortium are: Algonquin Power; BluEarth Renewables; Boralex; Brookfield Renewable Power; Canadian Wind Energy Association; EDF EN; EDP Renewables; Enbridge; Energy Storage Canada; ENGIE; H2O Power; Kruger Energy; NextEra Energy Canada; Pattern Energy; Suncor; wpd Canada; and Canadian Solar Industries Association.

On February 15, 2018, the Independent Electricity System Operator (IESO) posted a draft of the Phase 1 Non-Emitting Resources (NERs) Request for Information (RFI). On February 16, 2018, the IESO hosted a webinar regarding the draft NERs RFI and requested feedback from stakeholders.

Based on the Consortium's review of the draft NERs RFI, we support its following three objectives:

- Gather information to better understand how NERs can participate in the current and future IESO-Administered Markets (IAM) (i.e., Ontario's wholesale electricity market), and contribute to a reliable and efficient electricity system;
- Solicit information on the technical characteristics of existing resources and potential projects; and
- Gaining a better understanding of the barriers facing different resource types from participating within the IAM.

In order to ensure that the data and information to be provided within the responses from the Consortium members (and other respondents) best meets the objectives above relating to potential inputs to the IESO's Market Renewal Program (MRP), including forthcoming developments of High-Level Design (HLD) documents for respective MRP Workstreams (e.g.,

energy-related, capacity-related), we offer the following comments organized by section within the draft Phase 1 NERs RFI.

Section 1: Introduction and Purpose

- Additional clarity is needed regarding how results from the Phase 1 NERs RFI will be used to inform MRP HLD, including how decisions will be made leveraging any data and information received from RFI submissions and how any recommendations from the Non-Emitting Resource Sub-Committee (NERSC) may ultimately inform MRP HLD.
- In order to improve the quality of data and information submitted in response to the RFI, stakeholders previously requested that the IESO provide connection availability information or other relevant technical information. In response to this request, the IESO pointed to a series of existing power system planning reports (e.g., 18-Month Outlook, Ontario Planning Outlook (OPO), Long-Term Energy Plan (LTEP)), and indicated that providing connection data is beyond the scope of the RFI. However, none of the sources that were referenced are sufficient for providing information that stakeholders can effectively utilize to improve the quality of their submissions to align with Ontario's power system needs.
 - As previously expressed by the Consortium and other stakeholders, if the outcome of the RFI is to result in useful technical submissions to effectively inform the IESO and stakeholders, the IESO should provide additional, more specific system information regarding Ontario's future needs.

Section 2: Information Requested

- The draft RFI does not define what a "non-emitting resource" is and the Consortium understands from the IESO Responses to January 2018 Stakeholder Feedback that a definition will not be provided. The Consortium believes that this creates too broad a scope for the RFI and may diminish the value of RFI submissions because the IESO does not have any criteria to evaluate the resources under this category. This approach has been used in the Public Service Company of Colorado's competitive RFP's, wherein respondents are asked to indicate why the project is believed to qualify as "new" and "clean".¹ The IESO could instead ask respondents to describe how the resource meets the intent of the RFI as a "non-emitting resource".

¹ Section 1.5 of the Public Service Company of Colorado's 2017 Renewable Resources RFP, entitled Section 123 Resources, includes the following: Colorado Revised Statutes ("C.R.S.") 40-2-123(1)(a) states as follows:

Section 3: RFI Timetable

- As indicated within the Consortium's January 17, 2018 submission to the IESO, as well as within other stakeholder submissions, the proposed NERs RFI timelines are not likely to best capture key data and information (e.g., cost information, project development information, etc.) to be received from Phase 2 submissions within the future NERSC Report to the Market Renewal Working Group (MRWG) and milestone MRP timelines (e.g., final HLDs). Therefore, in order to best meet the objectives of the RFI, the IESO should re-consider timelines regarding Phase 2 submissions and/or timelines of the NERSC Report and finalization of MRP HLDs.
- The IESO allocates four months to evaluate submissions. Please provide clarity regarding how the evaluation process will be undertaken and what analysis the IESO may undertake as part of its evaluation of Phase 1 submissions.
- The Consortium recommends that participation in Phase 1 is not a pre-requisite for participation in Phase 2 of the NERs RFI.
- The Consortium further recommends that the IESO clarify the Phase 2 objectives in advance of the May-August 2018 timeframe.

"The commission shall give the fullest possible consideration to the cost-effective implementation of new clean energy and energy-efficient technologies in its consideration of generation acquisitions for electric utilities, bearing in mind the beneficial contributions such technologies make to Colorado's energy security, economic prosperity, environmental protection, and insulation from fuel price increases."

These "new clean energy and energy-efficient technologies" are referred to as "Section 123 resources."

The Commission clarified in Decision No. C13-0094 ("Decision") that a Section 123 resource must be both new and clean pursuant to the statute. In its Decision the Commission further defined the terms "new" and "clean":

A new project shall either: (1) incorporate one or more technologies, representing a substantial portion of its overall installed cost, that have not been regularly commercially demonstrated,* up to the point in time that the resource is formally bid, or if not bid, acquired; or (2) be a project used to demonstrate the feasibility of a technology not before implemented in its proposed configuration.

A clean project must demonstrate that it would likely cause a decrease in greenhouse gas emissions (e.g., carbon dioxide) or significantly reduce other pollutants. A clean project may also result in reduced water usage.

Respondents to this RFP who believe their proposal meets the definition of a Section 123 resource should indicate in the Beneficial Contributions/Section 123 Resources Bid Narrative Topic why the respondent believes the resource qualifies as a Section 123 resource. Public Service will identify in its 30-Day Report to the Commission a listing of all bids that claim Section 123 status along with its opposition to any claimed Section 123 status and provide the Commission, under seal, a copy of the disputed bids. The Commission will determine whether the disputed bids qualify for further evaluation as a Section 123 resource.

Section 5: Inquiries and Clarifications

- Regarding the draft RFI inquiries and clarifications, the Consortium requests that the IESO describe the Question and Answer process that will be used for the NERs RFI. For example, will the IESO publicly post and respond to questions? If so, within what timeframe will this take place?

Section 6: Confidentiality and Disclosure of Information

- Regarding confidentiality and the disclosure of information, the IESO is unlikely to receive very detailed responses (particularly for future or planned projects) unless this section of the RFI is improved. A potential solution would be to consider all responses to be confidential. As a minimum, please clarify how the IESO will maintain confidentiality or share information in a non-identifiable manner. In order to further assist respondents, the NERs RFI should include a commitment to explain exactly how the analysis will be used and what aggregate data (i.e., inputs to the NERSC Report) will be published.

Appendix A: Respondent and Technical Information Spreadsheet

- The draft Appendix A spreadsheet contains errors which must be fixed in order to allow respondents to populate several cells.
 - Specifically, the following cells require attention:
 - Respondent Tab: C22; and
 - Facility & Technical Tab: C20, C30, C31, C32.
- The IESO should consider differentiating “the project” vs “the facility”. The term “facility” may refer to the existing asset, whereas the term “project” could refer to a specific new build, upgrade, or expansion. This specificity may avoid confusion in evaluating the information received from respondent submissions.
- On the Facility and Technical tab, there is currently no option to indicate if a resource is transmission-connected. This needs to be added under Facility Type.
- Regarding the Facility and Technical tab, the IESO should provide respondents with the definition of “dispatchable” and “partially dispatchable”.
- On the Facility and Technical tab, the IESO should include information with respect to the estimated time to complete a project.

Appendix B: Questionnaire

- In order to enhance responses to the Appendix B RFI, the Consortium requests a meeting with the IESO to provide further commentary on insights requested within Appendix B. This meeting will discuss capabilities and attributes of NERs and how other jurisdictions procure and integrate NERs, as well as how other wholesale electricity markets are changing their market design to better accommodate NERs.

Concluding Thoughts

In closing, the Consortium supports the objectives of Phase 1 of the NERs RFI, however we believe the scope needs additional clarification.

To enhance the scope of the Phase 1 NERs RFI towards better ensuring thoughtful and technically insightful submissions, the Consortium recommends that the IESO undertake the following points regarding the draft RFI.

- Additional clarity is needed with respect to how results from the Phase 1 NERs RFI will be used to inform MRP HLDs, including how decisions will be made leveraging any information from RFI submissions and how any recommendations from the NERSC may ultimately inform MRP HLDs.
- Provide a clear definition of “non-emitting resource” or alternatively ask RFI respondents to describe how resources will meet the intent of the RFI as “non-emitting resources”.
- Provide clarity regarding how the RFI evaluation process will be undertaken and what analysis the IESO may use as part of its evaluation of submissions.
- Confirm that participation in Phase 1 is not a pre-requisite for participation in Phase 2 of the NERs RFI.
- Provide clarity regarding how the IESO will maintain confidentiality or share information in a non-identifiable manner.
- Technical improvements and updated content (as detailed in this submission) regarding the Appendix A spreadsheet are required.

The Consortium will be happy to discuss the contents of this submission with the IESO at a mutually convenient time.



Sincerely,

A handwritten signature in blue ink, appearing to read "acumming", with a long horizontal flourish extending to the right.

Alison Cumming
Manager, Markets
Power Advisory LLC

cc:

Leonard Kula (IESO)
Ryan King (IESO)
Adam Butterfield (IESO)
Patrick Taylor (Algonquin Power)
Roslyn McMann (BluEarth Renewables)
Adam Rosso (Boralex)
Julien Wu (Brookfield Renewable Power)
Brandy Giannetta (Canadian Wind Energy Association)
David Thornton (EDF EN)
Tom LoTurco (EDPR)
Ian MacRobbie (Enbridge)
Pat Phillips (Energy Storage Canada)
Deborah Langelaan (ENGIE)
Stephen Somerville (H2O Power)
JJ Davis (Kruger Energy)
Jennifer Tuck (NextEra Energy Canada)
Kellie Metcalf (Pattern Energy)
Chris Scott (Suncor)
Ian MacRae (wpd Canada)
Wes Johnston (Canadian Solar Industries Association)