Feedback Form

Long-Term RFP – February 8, 2022

Feedback Provided by:

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Following the February 8th public webinar on the Long-Term RFP, the Independent Electricity System Operator (IESO) is seeking feedback from participants on a variety of elements to help further inform the draft RFP and Contract, including: potential revenue streams, contracting mechanisms, term length and forward period, ability of resources to meet mandatory requirements and rated criteria, as well as the general approach to the RFQ including the proposed method to evaluate finances and experience.

The referenced presentation can be found on the Long-Term RFP webpage.

Please provide feedback by February 18, 2022 to engagement@ieso.ca.

Please use subject header: **Long-Term RFP**. To promote transparency, this feedback will be posted on the **Long-Term RFP** webpage unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and post responses on the webpage.

Thank you for your contribution.



Revenue Streams

Revenue Streams	
Topic	Feedback
Please provide feedback on the revenue stream options that the IESO proposed. Are there additional revenue streams that proponents see that can be monetized?	Proponent does not have any specific feedback on the "collar" option and has the following general and specific comments regarding the two other options (CFDs and price adders) related to revenue streams. Generally speaking, there is value to the
	flexibility that large energy storage technologies can bring to a power system. Such technology can closely emulate the output curves of gas-fired power generation on either a standby (based on point of time available capacity) or a baseload profile (controlled energy output over time based on available capacity at the commencement of grid injection) without the associated carbon emissions. Due to this flexibility, Proponent is of the view that a contractual revenue stream or streams may be devised that provides the system with the capacity and the ancillary services that it particularly needs. We note that a contract for differences approach (with a net revenue requirement) has been used successfully for capacity contracts in Ontario, providing both certainty regarding coverage of developers' capital costs and reasonable returns on capital while protecting ratepayers by ensuring developers do not receive windfall returns.
	In addition to the previous, Proponent also supports the inclusion of the below potential energy products for monetization by the IESO. We are of the view that, while the IESO may wish to encourage developers to seek these energy incentives in the market, the IESO is in the best position to evaluate and predict the value of the following project attributes. Energy storage projects

should be able to provide these products to differing degrees. To the extent that these products (and (without duplication) the technical requirements referenced below) are available from a project, they should either be treated as accretive to a net revenue requirement or handled separately as additional revenue stream(s). While the former would likely be simpler to administer from a contractual perspective, the latter would provide greater transparency as to how much and when the IESO is paying for such products.

- Quick start
- Black start
- Frequency modulation
- Voltage support
- Load-following and ramping
- Transmission congestion relief
- Systems management (rapid absorption of excess power in the network)
- Demand shifting and peak reduction
- Spinning and non-spinning reserves and supplemental reserves

See below regarding environmental attributes.

Other jurisdictions have procured new-build resources under long-term agreements through a variety of contract types (power purchase agreements, capacity only contracts, capacity contracts with energy components, etc.). What lessons do stakeholders have from their experience with these other contracting mechanisms?

Proponent will provide its feedback on this topic in the *LT I RFP Engagement – Questionnaire*.

What opportunities do stakeholders see in the future to monetize environmental attributes?

Proponent does not have any specific feedback on this topic at this time. We do note that there appears to be uncertainty as to how any environmental attributes arising from a project would interact with or be affected by the Province's proposed clean energy credits market. Additionally, there is

historical uncertainty of the value of environmental attributes and the impact that changes of provincial and federal government policy may have on such attributes. Proponent is currently of the view that environmental attributes could be approached in the same manner described above regarding other energy products and ancillary services.

Term Length and Forward Period

Торіс	Feedback
Please provide feedback on the options for additional term-length that the IESO proposed.	Proponent agrees that resources that provide high system value as demonstrated by achieving various rated criteria, such as critical locations, should be incented. As noted above, such incentives could come in the form of specific revenues and could be further valued through additional contract term length.
Do stakeholders feel that the options presented provide proponents with some certainty from an investment and/or financing perspective?	If the IESO wishes to address quickly emerging system needs and to ensure the best value for ratepayers, larger capital intensive projects with efficiencies of scale are more likely to address these objectives. The term length will be a significant determinant of the cost of financing for any such capital investment and to a large extent will be driven by a project's technology. To ensure the participation in such projects of equity and debt investors at reasonable rates of return, our research to date, including in respect of the market's recent experience with merchant CCGTs, our view is that a term of at least 15 years is necessary.
What are some options for additional term that the IESO should consider?	Proponent will provide its feedback on this topic in the <i>LT I RFP Engagement</i> – <i>Questionnaire</i> .

Are stakeholders aware of any resources (new-build and/or expansions to existing resources) that able to come into service as early as 2025?

What challenges would resources face with being fully operational by 2025?

Please provide any additional information that may help inform the IESO of potential projects and their development timelines, in order to help guide discussions around LT I RFP forward periods.

Proponent does not have any specific feedback on this topic at this time.

Proponent believes that the timelines for projects will be technology-specific, however, challenges for achieving a reference date COD in May 2025 for innovative, larger or more capital intensive projects will arise from (i) anticipated date of contract awards in Q3/23, (ii) potential bottlenecks in approvals that have accompanied large OPA/IESO procurements and (iii) construction/completion risk "buffer" required by lenders to developers that require traditional, non-recourse construction financing. We anticipate that lenders will require at least a 12-month period between milestone commercial operation dates and the IESO's long-stop date, which may be longer where a developer is using innovative technology. Seeking aggressive MCODs in light of these factors will result in higher bid prices (to account for delay liquidated damages) and longer buffer periods (to satisfy lenders) and may result in skewing the technology choice of the IESO toward particular, shorter construction period technologies.

Mandatory Requirements and Rated Criteria

Topic	Feedback
Please provide feedback on the mandatory requirements the IESO proposed.	Proponent agrees that the three mandatory requirements are reasonable, subject to the following comment on energy.
The IESO presented a number of technical characteristics that are desirable from a system value perspective, that may form rated criteria in LT I RFP. Please provide feedback on the characteristics proposed and their applicability as rated criteria.	Proponent agrees that the proposed technical characteristics are reasonable. If the IESO's principle objectives are to address quickly emerging system needs and to ensure the best value for ratepayers, however, we would query whether some of these technical characteristics should be

mandatory or the subject matter of separate RFPs (such as some of the specific regional RFPs the OPA previously issued). For example:

- Ability to deliver ≥8hrs of continuous supply: if this is a requirement for reliability or other system need concerns, it is not clear why the mandatory requirement is only ≥4hrs
- Location in areas of greatest need
 (e.g. SW ON and E of GTA): if these
 are areas of need, it would seem
 counterintuitive to grant contracts
 for project outside these areas if that
 would necessitate other
 infrastructure new build or upgrades.
 Consider as well whether these areas
 may be narrowed for greater
 precision and ratepayer benefit

Proponent is also of the view that specifying these technical characteristics will allow for greater technology innovation by developers to meet such requirements. Proponent would go further to suggest that other goals should also be considered for promoting technological innovation, for example, net zero targets and local/exportable expertise development. These may be added to other non-technical characteristics that the IESO or the Province wishes to promote from a policy perspective (e.g. Indigenous and community partnerships/acceptance).

As noted above, the other proposed technical characteristics should be encouraged through revenue and term incentives.

RFQ

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Do stakeholders feel that the high level approach proposed for the RFQ satisfies the IESO's goal of ensuring that interested parties have the capability to undertake project development for the LT I RFP, while also enabling competition? At a high level, the Proponent understands the IESO's need for qualifications that will help ensure that selected projects achieve completion. However, the OPA/IESO's historical thresholds for performance security and creditworthiness and highly prescribed requirements for corporate and employee experience should be expected to limit competition and innovation. To mitigate these potential outcomes, the Proponent has several suggestions:

- It is important for developers to be able to demonstrate an objective creditworthiness in the absence of rated debt but this is an analysis that project lenders are better equipped to make and creditworthiness may be better tied to equity requirements for a project instead of an amount unattainable by less-established developers (e.g. TNW of \$250,000/MW). Proponent would suggest TNW of \$15,000/MW would demonstrate a developer has serious equity participation, is financeable by project lenders, and does not limit RFP applicants to perennial and incumbent participants.
- Similarly, for proposal and performance security, developers will be able to bid more competitively with lower bank-issued (and, therefore, expensive) performance security requirements without losing motivation to complete projects on a timely basis. Entrepreneurial developers, many of which put personal capital at risk, are highly motivated for their projects to succeed. Proponent would propose a \$5,000/MW performance security requirement with a reasonable cap.
- Previously used experience concepts such as "Similar Facilities" and

Topic Feedback

"Comparable Facilities" are not wellsuited to first-of-a-kind or innovative technology and eliminated good potential projects by entrepreneurial developers that do not have existing portfolios. These requirements combined with prohibited changes to qualified applicants and project members after the RFQ stage, results in a playing field more favourable for larger developers. In this respect, Proponent would suggest that greater flexibility in (i) demonstrating corporate/employee experience for innovative or first-ofa-kind projects, (ii) structure changes, in particular changes of control (e.g. permitting such changes at the time of contract execution), and (iii) demonstrating corporate or employee experience (e.g. through lower levels of equity participation to still obtain experience credits or service or consulting agreements to provide experience credits) would allow more innovative and entrepreneurial projects to proceed without creating an artificial and distortive rush toward partnerships that are only necessitated by RFQ requirements.

General Comments/Feedback

On our understanding that the IESO wishes to address quickly emerging system needs and to ensure the best value for ratepayers, our comments above related to larger capital intensive projects helping meet these objectives also mean that we would discourage the consideration by the IESO of caps on the size of projects. While we acknowledge the IESO's concerns about "putting all of its eggs in one basket", we believe that concern is addressed through the incentives that already exist for developers to successfully complete their projects and the possibility of the IESO expanding the RFP for additional or more targeted capacity.

Lastly, proponent notes that a unique context to the proposed LT-RFP is that the unsolicited proposal framework remains in place. The RFQ and RFP communication rules should take this into account and permit developers to advocate unsolicited proposals without prejudicing their ability to participate in the LT-RFP.

Thank you for the opportunity to provide these comments.