

Feedback Form

Long-Term 2 RFP – December 13, 2023

Feedback Provided by:

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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.

Following the LT2 RFP engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on specific items discussed during the webinar. The webinar presentation and recording can be accessed from the [engagement web page](#).

Please submit feedback to <mailto:engagement@ieso.ca> by January 15, 2024. If you wish to provide confidential feedback, please mark "Confidential". Feedback that is not marked "Confidential" will be posted on the engagement webpage.

Resource Adequacy Framework and Cadenced Procurement Approach

Topic	Feedback
Do you have any comments or concerns regarding the cadenced nature between upcoming LT and MT RFPs?	<p>Capital Power appreciates the opportunity to provide comments on the IESO's upcoming LT-2 and material presented during the December 13, 2023 engagement session.</p> <p>Capital Power welcomes the cadenced approach to energy procurements. The chance for projects to participate in a series of procurements over a set period provides developers flexibility and multiple opportunities for projects to be awarded. In addition to the benefits already presented by the IESO, the approach also allows developers to receive feedback through procurements, address challenges, manage timelines, and appropriately resource projects. The approach also provides the IESO insight on zero-emitting resource potential over the course of the RFPs.</p> <p>Capital Power is generally supportive of staggering the long-term procurements and medium-term procurements. However, further clarity is required on the timing of the respective procurement cycle processes and how the individual procurements are intended to interact. Generally, existing operators and developers will need to make investment and other decisions that would extend past the term currently contemplated for MT RFP contracts. Decisions and participation will greatly depend on the unique characteristics of each existing resource, how developers can offer projects between multiple MT and LT procurements, timing of LT awards, contract mechanics, and how life extension and repowering will be treated.</p>
Do you have any comments or concerns regarding the proposed offering of both capacity style and new revenue model style of contracts, based on resource eligibility requirements and system needs?	Further details related to potential provisions of both contract types and how different contracts will be evaluated by the IESO during an RFP must first be explored before the appropriateness of having two different contracts within a single RFP can be determined.

Topic	Feedback
<p>Do you have any concerns regarding the proposed target setting approach for upcoming MT RFPs?</p>	<p>Capital Power is concerned with the IESO’s proposal to set MT RFP targets to be a percentage of eligible, existing resources coming off contract. This proposed approach risks the retirement and loss of affordable, already connected, and proven renewable facilities during a time the IESO is forecasting a need for 5 TWhs of energy. Considering the energy need, the IESO should be looking for ways to extract all the inherent advantages of existing generation until the end of their useful life. Any MT RFP target should be strictly based on the IESO’s system and energy needs. It should not be arbitrarily set.</p> <p>The IESO’s proposed target approach is intended to create a scarcity situation in the number of possible contracts in an attempt to create a more cost-effective outcome of MT RFPs. However, it is unclear if this approach will effectively lead to lower bids or the desired results. The IESO may need to procure more costly generation in the LT procurements if existing generating resources opt to retire if they are unable to secure MT contracts. Generator owners and developers will also be accounting for costs, risks, and other investment related items in their MT procurement bids. It is unclear how a lower target will impact their behavior, and the IESO can likely achieve the desired competitive outcome by leveraging other standard RFP procurement practices and negotiation.</p>
<p>Do you have any comments regarding how best to employ bridging and extensions to contracts to facilitate the success of the Resource Adequacy Framework?</p>	<p>MT-2 and LT-2 will not be in place in time for renewable assets that will come off contract mid-decade. The owners of these assets must immediately make maintenance and life extension decisions or start work in preparation for decommissioning. The IESO’s Resource Adequacy Framework allows the IESO to bilaterally negotiate with entities to address need and timing issues. As such, Capital Power recommends that the IESO immediately engage with the owners of existing renewable assets whose contracts are set to expire prior to LT2 and negotiate extensions to the existing contracts to the end of these assets’ useful lives. This approach will allow these facilities to operate without interruption and allow the full life and value of these assets to be realized. It will also allow the IESO to immediately secure reliable and affordable energy that will be needed by Ontario over the next decade.</p>

LT2 RFP Resource Eligibility and Timelines

Topic	Feedback
Do you have any general feedback on resource eligibility and timelines?	<p>Capital Power appreciates the timelines presented during the engagement session and remains generally supportive. However, timelines to gain local support and to collect meteorological data is exceptionally tight, and Capital Power recommends that these timelines be expanded to be a minimum of 18 months. This additional time is required to attain and install met towers and to complete the necessary post measurement data analysis. Capital Power also expects attaining met towers and associated labour may take longer than it generally would as multiple developers will be completing the same work simultaneously.</p>
If the potential of repowering an existing facility applies to you, would you be interested in exploring this option further?	<p>Capital Power is interested in exploring repowering options for its existing facilities and believes the inclusion of repowered assets in the LT procurements will be critical for the success of the RFP.</p> <p>Repowered assets minimize environmental and community impacts and offers the IESO many inherent advantages including known wind regimes, established interconnection points, and familiar deliverability. Capital Power believes the IESO should leverage this cost-effective alternative to meet its energy needs.</p>

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<p>How should the optimal threshold for what constitutes a partial or fully repowered facility be determined and what considerations should be taken into account regarding the repowering of different resource types?</p>	<p>Capital Power does not see how establishing investment, capacity increase, or any other threshold to determine repower asset eligibility adds value to the procurement process and believes such limitations could drastically impact the overall competitiveness of the LT procurements.</p> <p>All generating facilities are different and have their own unique properties and investment requirements that could impact the overall repowering potential for a site. For example, operating, environmental, and permitting factors can impact the safe or effective reuse of any existing equipment or turbine location. These factors mean there is no guarantee a repowered asset will be able to maintain its existing nameplate capacity – even with more modern equipment. There is also no guarantee that existing transmission could accommodate an increase in nameplate capacity or if a higher capacity makes sense under any proposed revenue model. Asset owners are in the best position to assess and manage the risks of possible paths towards repowering and site optimization. Overly prescribed restrictions could inadvertently prohibit otherwise good projects in supportive communities from offering cost-effective energy.</p> <p>Capital Power proposes that the IESO work with prospective RFP proponents including existing asset owners who may be interested in repowering their facilities to establish simple requirements (e.g., asset availability) that would be agnostic to new build and repowered assets. These requirements will ensure owners make the appropriate level of investment to meet their contractual obligations and provide a reasonable level of confidence to the IESO that the facility will perform over the 20-year term.</p>
<p>What considerations should be taken into account for new-build DERs?</p>	<p>Capital Power recommends that all resources participating in the RFP be evaluated on a similar, level playing field and the most competitive projects are awarded contracts.</p>

Topic	Feedback
Please express any interest and opportunities for uprates and/or expansions at any of your existing facilities.	Capital Power is always interested in finding opportunities to optimize all its operational sites. Our potential opportunities, as it relates to LT-2, will depend on final qualifying technologies and the revenue model.

LT2 RFP Design Considerations – System Congestion and Deliverability Approach

Topic	Feedback
<p>What early system congestion information do proponents need to guide them in choosing the location of their projects and when is this needed by within the procurement cycle?</p>	<p>Congestion and curtailment represent significant risks for energy projects, and Capital Power is concerned that these risks are placed solely on proponents. Proponents do not have the transparency into grid operation, events that leads to congestion or curtailments, or other transmission limitations. Further, proponents have no insight on how fundamentals will shift over the course of the contractual term or any substantial ability to mitigate this risk. Inappropriately siting a project or running into congestion or curtailment risk that is beyond the control of a proponent runs the risk of underutilized generating capability and will result in a less efficient outcome of this RFP.</p> <p>The IESO is responsible for awarding and locating projects that can contribute or alleviate congestion. The IESO is also in the best position to manage congestion risks during grid operation or over the long-term. As such, Capital Power recommends the risk of congestion and curtailment remain with the IESO.</p> <p>If this risk remains with proponents, then, at minimum, proponents will need the following:</p> <ul style="list-style-type: none"> • up-to-date system data that includes the time and frequency of transmission congestion and limits under specific operating conditions; • actual historical congestion and curtailment data for each node; • projected hourly load curves, price, congestion, and curtailments for each node for the next 20 years; and • zonal and nodal capacity limitations. <p>A map with accompanying details that outlines constricted areas and areas with potential transmission capacities would also help proponents with project siting.</p> <p>Considering the tight timelines for proponents to start collecting meteorological data for prospective sites, this information must be provided ASARP.</p>

Topic	Feedback
Do you have any general suggestions for how to approach deliverability evaluation in the LT2 RFP?	Transmission capacity at the point of interconnection is crucial for both siting and facility design. Capital Power recommends that the IESO find ways to provide maximum capability information at points of interconnection to proponents in preparation for the RFP and as early as possible.

LT2 RFP Design Considerations – General Feedback

Topic	Feedback
Do you have any comments regarding the impacts that agricultural land-use limitations may have on project development?	<p>Capital Power understands the importance of maintaining the use of prime agricultural land for agricultural purposes. However, individual projects can impact agricultural lands differently. Some technologies, like wind, requires relatively little land and allows the land to continue to be used for multiple purposes such as farming. Land impacts and co-location can also be managed with appropriate site planning and work with landowners for other renewable technologies, like solar. Co-locating energy projects with agricultural activity optimizes the use of the land and provides farmers with non-agricultural income.</p> <p>Capital Power believes any broad, overarching limitation for development on any specific classification of agricultural land should be avoided as it will eliminate cost effective projects from the RFP and valuable non-agricultural income for farmers. Capital Power submits that the appropriate use of land and the project specific impact is most effectively determined between landowners, developers, and through already established project approvals. Capital Power does not believe additional requirements, rated criteria, or other considerations for agricultural land use needs to be included in the RFP.</p>

Topic	Feedback
Do you have any comments regarding what evaluation criteria can be utilized to evaluate project readiness, given tight timelines and reliability needs?	Capital Power would like to better understand what project readiness evaluation criteria the IESO may be contemplating. Successful proponents in RFPs generally need to post security, where the security is lost if a project does not achieve commercial operation. Capital Power believes that such a security requirement is already a strong incentive to encourage developers to complete projects and no other readiness criteria is necessary.
Do you have input on the proposed mechanism for valuing Indigenous participation?	
Are there any other rated criteria that should be considered?	

Long Lead Time Resources

Topic	Feedback
Does the proposed approach to enabling long-lead time resources enable meaningful participation or sufficient certainty?	

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<p>What additional considerations should the IESO contemplate for enabling broader participation from long-lead time resources?</p>	<p>Capital Power believes that the RFP should be as indifferent as possible to technology types, and projects should be evaluated based on the same set criteria as it relates to costs, ability to meet the IESO’s zero-emitting energy needs, and timelines. The IESO is already proposing special considerations for long-lead resources, an approach that Capital Power generally disagrees with. It also raises questions on how the IESO will be able to ensure the lowest cost energy to meet a specific timeline is procured if long-lead resources will have an opportunity to offer their projects ahead of other proponents.</p> <p>What constitutes a long-lead resource could also be questioned. Some wind and solar facilities need more time for permitting and to develop than others. Could these types of assets be considered long-lead assets?</p> <p>Bifurcating standards based on specific resource classes can quickly create an unlevel playing field and impact the competitiveness of the RFP. Capital Power recommends against such an approach.</p>

Revenue Model

Topic	Feedback
<p>As a potential proponent, are you generally supportive of the proposed Enhanced PPA revenue model? Are there any other considerations that the IESO should look into further with regards to the revenue model?</p>	<p>Capital Power is open to various revenue models, including contract and revenue mechanisms that extend past simple fixed priced models. However, the model, as proposed, transfers risks that proponents cannot reasonably mitigate through siting, construction, operation, or participation within the IAM. This model will result in proponents building material risk premiums into their proposal prices or not participating in the RFP and will lead to a less optimal outcome for the RFP.</p> <p>As mentioned previously, Capital Power is concerned that the proposed revenue model places congestion and curtailment risks solely on the generator. Proponents do not have the transparency into grid operation or events that could lead to congestion and curtailments. Unlike other jurisdictions, the IESO has significant control in</p>

accepting projects that could create or alleviate congestion. Curtailments and congestion will also shift over the term of the contract due to changes in fundamentals (e.g., population growth, electrification, and newly added IESO approved projects) and there is no reasonable way for proponents to forecast potential changes over the term of the contract. The proposed model also does not have mechanisms to account for or adjust the production factor or settlement mechanisms to accommodate congestion or curtailment changes. The IESO remains in the best position to manage these risks and Capital Power submits that congestion and curtailment risk should remain with the IESO.

The IESO's proposed Grid Reliability Payment is expected to use the day-ahead market price to determine deemed energy revenue. Capital Power submits that the use of the day ahead price to calculate deemed energy is inappropriate and places all risk of differences between settled day-ahead and real-time prices on proponents. The intermittent nature of wind and solar generally limits participation in the day ahead market. Therefore, proponents will not have any meaningful way to manage the spread between day ahead and real time prices. The price risk is further amplified by the IESO's proposed use of a simple day-ahead average monthly price to calculate deemed energy revenue. Renewable energy would generally operate during lower priced periods and will likely not be able to capture the highest peak priced hours. Therefore, the calculated deemed energy revenue will not be representative of the market conditions and prices when the unit is operating. It should also be noted that MRP has not yet been implemented and will be in its infancy when LT-2 is rolled out. It remains unclear how LMP, day-ahead, and real-time prices will settle for different nodes – further exasperating challenges for proponents.

The use of an annual production factor to produce monthly revenue is not granular enough for the revenue calculation. Renewable generation can vary month-over-month and throughout the day. As such, there will be a disconnect between hours of generation and the payment calculation. This disconnect will increase the price risk for

proponents and result in significant variances in monthly revenue throughout the year.

Capital Power appreciates that many of the elements of the proposed energy model are intended to provide price signals so that generators offer energy when it is needed and outside of periods with surplus generation. However, wind and solar generation will remain price takers and are unlikely to respond as expected. Therefore, it is unlikely the IESO will achieve the system operational efficiencies they are seeking via the proposed revenue model and would still need to rely heavily on effective storage development and grid operation to resolve surplus generation challenges.

General Comments/Feedback