Feedback Form

Resource Adequacy – August 26, 2021

Feedback Provided by:

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Date: September 17th 2021

To promote transparency, feedback submitted will be posted on the Resource Adequacy webpage unless otherwise requested by the sender.

Following the August 26, 2021 Resource Adequacy webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the following discussed items. Background information related to these feedback requests can be found in the presentation, which can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca **by September 17, 2021**. If you wish to provide confidential feedback, please mark the document "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

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Topic	Feedback
What questions or feedback do you have on Proposed Change #1 – **Test to Capability for All Resources**	Resources should only be tested for capability up to the volume cleared in a capacity auction or other competitive procurement. For clarity, resources should be tested on cleared capacity, not "ICAP". ICAP refers to the facility's installed capacity and UCAP to the expected availability of a resource's capacity based on its historic availability. It should be made clear that for the purpose of assessing whether a facility is meeting its obligation arising from a contract or capacity auction obligation, the Obligation and Assessment Framework should only test the facility's ability to deliver capacity up to its obligation. UCAP, ICAP and cleared capacity are distinct concepts and should be treated as such in the design documents and market rules to ensure clarity and effective administration.
What questions or feedback do you have on Proposed Change #2 – **Changes to Thresholds**	Capital Power understands the IESO's purpose in reducing the margin of error afforded to Demand Response resources is to "level the playing field" between DR resources and other eligible resources. Capital Power also supports design changes that level the playing field and foster conditions to support greater competition, but it remains unclear why 10% was selected as the new margin of error threshold to be applied to DR resources. More information in support of this design proposal would be helpful – specifically, additional details should indicate why it is not possible to apply a uniform threshold to all resource types. Without an explanation of why DR resources require a greater margin of error, or why the difference does not create an unfair advantage, the margin of error threshold afforded to DR resources during a capacity check test should be the same as the margin of error threshold applied to other resources (i.e., 5%).

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What questions or feedback do you have on Proposed Change #3 – **Future De-Rates**	The performance capability of the asset is already captured through the calculation of UCAP. The IESO has not provided sufficient justification for its proposal that a resource's failure to successfully pass a capacity check test in *Obligation Period A* should affect the resource's payments or eligible capacity in *Obligation Period B.* Penalties levied against the participant/resources should be levied in the period during which the failure was recorded. Future penalties for past failures are an inefficient incentive and lack sufficient proximity between the act and penalty. The resource's UCAP for future periods will account for historic performance capabilities/failures. If the IESO has grounds to believe that a resource is regularly incapable of meeting its contracted capacity obligation, the IESO has compliance mechanisms available to it under the market rules to investigate activity, enforce market rules, and administer compliance penalties.
What questions or feedback do you have on Proposed Change #4 – **Common Notification**	Capital Power supports the IESO's proposal to implement a common notice timeline for all resources and supports the IESO's proposal to notify all resources of an upcoming capacity check test no sooner than one day in advance of the scheduled test.

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What questions or feedback do you have on Proposed Change #5 – **Incenting Performance at the Right Time**	Capital Power supports the IESO's efforts to ensure that the market rules permit the incurrence of penalties if a participant/resource is unable to meet its capacity during any dispatch, including during Out-of-Market or Emergency Operating State Control Actions ("EOSCA"). Capital Power is however concerned that the IESO appears to be proposing that a resource unable to provide its full capacity obligation, regardless of pre-existing outage conditions or forced derates/force majeures, will be subject to materially greater penalties that a resource unable to provide its full capacity obligation due to outage conditions/forced derates/force majeures during normal operating conditions. The nature of out-of-market actions and the fact that they occur because the market conditions are unable to incentivize operations required by the system, means that their timing cannot be predicted. In many cases they may be the result of acute or chronic market failure, or an event or series of events independent from the control of any one resource or market participant. Accordingly, it is unclear how an increased penalty would serve the purpose of incentivizing greater compliance with dispatch/availability requirements if the participant/resource cannot take any action that would better enable it to be available during unpredictable events. Capital Power strongly supports design features that appropriately incentivize market participants to accurately report their availability to the system operator and make all capacity available to the market, but also believes that an effective framework should seek to incentivize prudent operations and timely communication of availability during all hours of every dispatch day, and not rely on outsized penalties to be levied against participants unforeseeable events.
What questions or feedback do you have on Proposed Change #6 – **Availability Assessment True-Up**	Capital Power supports the IESO's proposed Availability Assessment True-Up.

Topic	Feedback
General comments and feedback	No comments at this time.

Medium-Term RFP

Topic	Feedback
What questions or feedback do you have on the Medium-Term RFP proposed design consideration on **Contractual Considerations**	The contract term for the mid-term RFP should be at minimum, 5 years in duration. A capacity style contract is not commercially appropriate for the first mid-term RFP due to the fact that market participants will not have had an opportunity to observe market performance under MRP. The IESO should consider using physical power purchase agreements or virtual power purchase agreements (contracts for difference, or CFDs) with a net revenue requirement (NRR) so as to provide bidders with sufficient tools to manage market/price risk that cannot yet be quantified. The notably short duration of the proposed commitment period (three years) and lack of any observed pricing data under yet-to-be-implemented MRP will require bidders to heavily discount market returns over the three-year obligation period. In turn, they will require higher capacity prices capable of offsetting risk of minimal returns from the energy market/monetization of other attributes. Due to the proposed pay-as-bid nature of the RFP, it's not clear what level of price transparency will be available to market participants and potential investors. Capital Power would like to understand the IESO's plans with the proposed bid and evaluation process, and in particular whether awarded prices, and values attributed to Rated Criteria are intended to be made public. The use of UCAP for wind resources should be abandoned. ELCC is more accurate measure of effective capacity that can be delivered from renewable resources, and therefore their capacity value. ELCC should be developed and adopted as the measure of capacity value for all renewables.
What questions or feedback do you have on the Medium-Term RFP proposed design consideration on **Resource Eligibility**	The IESO has stated that it intends to move towards contracting for products and services rather than technology type. This direction is not reflected in the mid-term RFP design and eligibility criteria. The IESO's rationale supporting the exclusion of certain resource types from eligibility (e.g., ineligibility of storage additions to existing renewables) is that new build resources would generate intolerable and unmanageable deliverability risk against the April 2026 commitment

Topic	Feedback
	obligation period start date. Capital Power submits that this position appears irreconcilable with the IESO's AAR, in which it stated that only the most certain of forecasted needs would be procured through long-term RFPs. If true, this would suggest that the deliverability risk would also be intolerable for new build resources participating in the long-term RFP and required to be in-service in 2026/2027. Accordingly, Capital Power would like to understand whether the IESO expects new resources to be eligible for the long-term RFP, and if so then (i) how does the IESO measure deliverability risk in that context and (ii) how can deliverability risk can be tolerated for long-term contacted resources but not mid-term contracted resources when both have the same or near similar in-service date? Capital Power has previously commented, and resubmits here, that existing resources must be eligible to compete with new resources in any competitive process administered by the IESO. This is in the interest of effective and efficient competition between resources, and it is necessary to deliver the greatest value to ratepayers. Capital Power also believes it's incumbent upon the IESO to provide rationale for its eligibility requirements, as well as how the eligibility requirements support the IESO's stated goal of running competitive procurements. The rationale should be supported by analysis of how eligibility requirements support an objective measure of workable competition within the IESO-Administered market. If the IESO has determined it will measure competition in terms of "robust competition" as referenced in the AAR, then Capital Power submits that the IESO should set forth its analysis for measuring the conditions that will satisfy "robust competition" . Capital Power has also previously and frequently commented on the need for the IESO to establish a framework for measuring and assessing the effect its market design and procurement mechanisms have on competition in Ontario. Respectfully, Capital Power once again submits that an objective and documented methodology for assessing workable competition in Ontario is a critical, but missing, aspect of Ontario's market design.
What questions or feedback do you have on the Medium-Term RFP proposed design	More information is required regarding the manner in which the various attributes ("Rated Criteria") will be valued as part of the overall bid.

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consideration on **Proposal Evaluation**	The Rated Criteria listed by the IESO are: (i) locational value (ii) 4-hour energy capability (iii) 5-minute dispatchability (iv) visibility of the resource to control room. Stakeholders require far more detail regarding how the Rated Criteria will inform bid evaluation. For example, no information was provided to stakeholders regarding how locational value would be determined, or whether the IESO would commit to transparency regarding the locational value on the grid. This information, along with the IESO's proposed bid evaluation methodology must be provided to all market participants for the purpose of soliciting feedback prior to the finalizing the design of the RFP. Capital Power requests that the IESO provide detailed examples of sample bid evaluations for different types of eligible resources.
What questions or feedback do you have on the Medium-Term RFP proposed design consideration on **Contract Expiry and Bridging**	It is not commercially reasonable to expect holders of existing, valid, and enforceable contracts to enter into voluntary terminations of their agreement prior to expiration. The IESO entered into a number of bilateral arrangements with resources it has determined are required to "bridge a period to competition" and Capital Power remains unaware of any requirement on these resources to agree to an early termination of their existing agreements. This is notably different from the approach taken with potentially eligible participants in the mid-term RFP proposal, who will be deemed ineligible unless they terminate their existing agreements on a date earlier than contracted for with the IESO. The difference in treatment treatment afforded to contracted suppliers raises questions of fairness that require careful consideration. Capital Power suggests the IESO permit existing contract holders of eligible resources to bid a delayed delivery date, and corresponding shorter term, into the RFP. This would permit contracted assets to operate fully recover contracted revenues. Capital Power has previously commented, but submits again, that the Capacity Auction is an insufficient bridging mechanism for resources, and insufficient mechanism for attracting investment and reinvestment to Ontario.

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What questions or feedback do you have on the Medium-Term RFP proposed **Timelines and Milestones**	Capital Power is concerned that the Timelines and Milestones set out by the IESO are not achievable. Significant issues with the proposed mid-term RFP need to be resolved, and sufficient time and resources need to be allocated to the effort. Further discussion regarding this issue should be accommodated during the September stakeholder meeting.
What questions or feedback do you have on the Medium-Term RFP **UCAP approach** outlined in the presentation materials	UCAP is not satisfactory for wind resources. Please see previous comments in this feedback form. It is unclear whether the figures presented in the AAR are expressed on a UCAP or ICAP basis – can the IESO please clarify?
What areas of the draft RFP and Contract do you want to see more details on in the September engagement session, ahead of the issuance of draft documents?	Please see comments above. Capital Power believes significantly more stakeholdering is required prior to the issuance of draft documents.
Do you have a resource that is eligible, or may be eligible, to participate? If so, please provide feedback specific to your resource based on the proposed design considerations. Please indicate if you would like to meet with the IESO to discuss eligibility or any other aspects of the Medium-Term RFP.	Yes. Capital Power would like to meet with the IESO to discuss eligibility and other aspects of the RFP.
General comments and feedback	Please see below.

General Comments/Feedback

Capital Power appreciates the opportunity to provide feedback to the IESO with respect to its proposed framework for assessing performance obligations, and its proposed mid-term RFP, in the context of future Resource Adequacy in Ontario. As identified in feedback to specific questions from the IESO, Capital Power continues to have serious concerns regarding the sufficiency of the IESO's proposed framework and related revenue mechanisms for attracting and supporting necessary investment in Ontario’s electricity supply. Reasons for these concerns are set out in more detail below.

1. **The IESO’s proposed three-year term for the mid-term RFP is insufficient to attract necessary and competitive investment in Ontario. IESO commitments to a cadenced procurement pathway do not serve to increase investor comfort or reduce the risk premium to be considered in investment analysis.**

Capital Power has repeatedly commented on the necessity of long-term contracting to support necessary investment in Ontario. Consistent with this view, Capital Power considers three-year contracts insufficient to incentivize additional investment in Ontario. Additional investment of capital in existing or new projects will, in most circumstances, need to be supported by fifteen or twenty-year contracts. In a limited number of scenarios investment may be supported by contracts with terms of ten years. Terms of these lengths are necessary to support investment, even if the full cost of those investment will not be recovered over the contract terms.

IESO commitments to enter three-year contracts on a rolling basis (the “cadenced” approach) do not reduce the risk profile associated with a three-year contract term. Investment capital will be priced based on the assumption of contracted revenues for three years, and no more. Given the short duration of the off-take agreement, and significant merchant risk embedded in the proposed structure, available capital will be priced as risk capital. Investments financed with risk capital will only be successful in Ontario if the costs of the increased risk premiums can be recovered from the market, or from ratepayers.

Capital Power’s view with respect to contract terms necessary to support investment in Ontario was developed after a serious consideration of Ontario’s market design, its structure, and its twenty-year history of both contracts and out-of-market actions being relied upon to attract investment and incentivize real-time operations. Capital Power doesn’t dispute whether these actions were necessary but considers it only commercially reasonable to consider these factors when assessing the range of possible future outcomes. Given Ontario’s history, its current market structure, and its anticipated future market structure, long-term contracts remain necessary for attracting competitive investment and low-cost capital to the province’s electricity system.

2. **The insufficiency of three-year contracts to incentivize investment during a period of expected supply shortages generates system reliability risks.**

Insufficient revenue mechanisms generate risk that supply will simply not be available. Capital Power believes that availability risks may result both from, (i) planned early market exit and asset retirement due to insufficient opportunities to recover the costs of further investment and/or operations, and (ii) unplanned decisions to exit or retire assets in the event of major equipment failures. Where long-term contracts are not available to support ongoing investment in the asset, the cost of remediating equipment failures and Force Majeure events will need to be assessed against the at-risk cash flows. Commitment terms of six months to three years will not support additional investment if the associated costs cannot be recovered over the remainder of the term.

Risks to reliability from early market exit due to the lack of revenue sufficiency are risks that must be assessed with consideration to the broader context of Ontario’s history. In this respect, Ontario’s market history is directly relevant and instructive when considering the risks of relying on untested revenue mechanisms in the face of an expected supply shortage. The IESO's forecasted supply shortage in 2026 – five years from now – is ~6,000 MW when accounting for both demand forecasts as well as supply assets coming off contract. Given the wholesale market revenue will continue to be insufficient for merchant resources to operate in Ontario, this represents a significant need that cannot reliably be met through reliance on the proposed commitment revenue mechanisms to attract investment.

3. **If the IESO capacity auction and mid-term RFP fail to attract sufficient investment, it is likely that participants will exit the market and the IESO will need to rely on non-competitive procurements. Over reliance on non-competitive procurements deprives the ratepayer of the benefits of competitive pricing and will most likely result in long-term contracting at bilaterally negotiated prices.**

The consequences of a failed RFP may lead to participants the exiting the market early, and/or to the need for the IESO to rely on non-competitive (in some cases, bilateral) procurements. For the reasons identified in these comments, non-competitive procurements are likely to be long-term. While Capital Power believes that long-term contracts are necessary to incentivize investment in Ontario, it also continues to believe that such contracts should wherever possible, be awarded to competitive bidders. If participants have exited the market early, the conditions necessary to support workable competition are more difficult to establish.

Continued reliance on bilateral contracts for some resources, and capacity auction eligibility for others, also results in significant regulatory uncertainty both in terms of the availability of future procurement opportunities and the availability of revenue opportunities in the IESO-administered market. The likelihood of all opportunities for future revenues will be further discounted should a failed competitive process result in a series of sole source procurements and bilateral contracts to meet Ontario's future supply needs.

This doesn't need to be the case. Competition can work to lower costs for Ontario ratepayers, but the competition must be for the product best suited to the market. In Ontario, the product that works best for attracting competitive investment continues to be the competitive long-term contract.

4. **Ontario investors have an aligned interest with the IESO to deliver reliable, low-cost power to the Ontario ratepayer. Arguments for long term contracts are based on capital market realities, an assessment of which risks can be most efficiently and competitive managed by the investor, and the view that the pricing and risk allocation supporting investment decisions must be acceptable to both the buyer and seller if they are to be sustainable over the long run.**

Capital Power believes that sustainable investment in energy infrastructure must deliver value reasonably expected by the ratepayer. Assumptions that the IESO and investors are misaligned in this regard are incorrect.

Supportable investments are those that are priced to deliver value and reliable energy supply. Value requires efficient pricing facilitated by an efficient allocation of risk between the IESO and the investor – where that allocation of risk is inefficient, pricing will diverge to accommodate the increased risk profile. While lenders and providers of debt capital may be willing to price capital that reflects the risks inherent in a short term off-take agreement, investors are in many cases going to be unwilling to take on the risk of being able to recover the costs of that capital from the market. As earlier stated, this will result in increased investment costs to be recovered from the market, or a lack of willingness to invest at all. It is accordingly in the interest of both the IESO and market participants to consider the benefit that competitive long-term contracts bring to the market.

5. **Electricity markets may need to evolve to continue to support investment.**

The province of Ontario, the nation of Canada, and members of the global community are all undertaking the significant work of transitioning the energy economy. This work is requiring policy makers and market administrators to consider carefully whether market designs and market products of the past can incentivize the desired supply mix of the future. Ontario's use of long-term contracts to support low carbon investment in Ontario may have been prescient in this regard. The concept should not be abandoned now as we enter a period of increased demand on supply to be both available and capable of furthering broader environmental goals.

Next Steps

For the reasons set out in these and previous comments, Capital Power believes the proposed mid-term RFP will not serve to further the purpose of the market - attracting competitive investment, competitively priced and reliably operated, for the benefit of the ratepayer. It is instead prudent for the IESO to rely on contract extensions to secure needed capacity required to meet forecasted needs emerging in 2026. Contract extensions – not the capacity auction, and not the mid-term RFP – should be leveraged as a bridging mechanism until the IESO's next competitive procurement for long-term contracted supply. Capital Power recognizes that terms embedded in contract extensions may need to consider asset-specific circumstances and changes arising from Market Renewal, but that extensions offer the best and most economic means of ensuring supply is available to meet Ontario's forecasted needs.

It is further recommended that the IESO refocus its efforts on the effective engagement of stakeholders with respect to the expected RFP for long-term contracts. This RFP will be a critical mechanism for attracting new investment and reinvestment in the province. To leverage the value of existing assets, they must be eligible to compete for long-term commitments against greenfield development, and competition requires that eligibility for the long-term RFP extend to both new and existing resources.

Capital Power thanks the IESO for considering comments provided here and throughout this stakeholder engagement. The entire team at Capital Power looks forward to discussing this feedback further, and to continuing work with the IESO on these and other matters of importance to the market and stakeholders.