Stakeholder Feedback and IESO Response

Long-Term RFP – June 9, 2022 Webinar

Following the June 9, 2022 Long-Term RFP (LT1 RFP) engagement webinar, the Independent Electricity System Operator (IESO) invited stakeholders to provide feedback on the materials presented.

The IESO received feedback from the following stakeholders:

AB Energy Canada

Anonymous

Atura Power

Aypa Power

Bedrock Energy

CanREA

Capital Power

Capstone Infrastructure

Cedarline Greenhouses/Truly Green Farms

CEM Engineering

City of Ottawa

City of Windsor

Consortium of Renewable Generators, Energy Storage Providers, and the Canadian Renewable Energy Association



Enbridge **Energy Storage Canada** Evolugen by Brookfield Renewable Hydrostor Interested Citizen Invenergy M'Chiqeeng First Nation Northland Power Ontario Greenhouse Vegetable Growers Ontario Power Generation Ontario Waterpower Association Ottawa Renewable Energy Cooperative Soave Hydroponics The Atmospheric Fund TransAlta Trevor McLeod Under Sun Acres Green Energy Wind Concerns Ontario This feedback has been posted on the engagement webpage. Note on Feedback Summary and IESO Response The IESO appreciates the feedback received from stakeholders. The table below responds to the feedback received and is organized by each topic. This document is provided for information purposes only. It does not constitute, nor should it be construed to constitute, legal advice or a guarantee, offer, representation or warranty on behalf of the IESO.

Convergent Energy + Power

Additional Mechanisms: Overview and Linkages

Please provide any feedback on the IESO's overview of the Additional Mechanisms (Expedited Process, Same-Technology Expansions, FCA) and the linkages between acquisition mechanism (e.g., Expedited Process and LT1 RFP, or LT1 RFP and LT2 RFP)

Feedback IESO Response

Many stakeholders indicated that the linkages between the various procurement mechanisms and initiatives are unclear. This has created uncertainty and confusion with regards to project planning and eligibility.

Recommendations from stakeholders include:

- The IESO should clearly identify what types of projects/technologies should be entering which stream
- Any overlap should be avoided where possible to deter duplication and/or inefficient outcomes
- Processes should be streamlined in circumstances where a project (taken as a whole) would be more efficiently pursued bilaterally, versus being parsed out into multiple streams (e.g. same technology expansion and contract extension would be more efficiently procured together, instead of separately)
- Move toward a phased procurement schedule (i.e. ~1.5 GW per year) with clear timelines.

The IESO appreciates the feedback and will endeavour to continue to clarify the linkages between the IESO's different acquisition mechanisms. The IESO has thus far relied on proposed mandatory requirements that all resources interested in participating in a given procurement mechanism need to meet to determine eligibility. Where this is unclear, the IESO will seek to identify additional information.

The IESO appreciates the remaining feedback and will continue to present early information on upcoming acquisition mechanisms to sector participants so that they can have insight into future opportunities. However, the IESO's acquisition mechanisms will continue to be informed by system needs and the actions identified in the Annual Acquisition Report (AAR).

Some stakeholders expressed challenges given the uncertainty in the market resulting from a lack of clear direction from the IESO on its needs and future contract structures (capacity vs. energy, duration of service requirements, etc.).

- Recommends the IESO consider phased procurements with clear timelines and targets and/or specific energy storage procurements to recognize the unique characteristics of energy storage resources.
- To ensure thoughtful development through this period, the IESO should provide as much firm guidance to the market on specific requirements and evaluation frameworks. For example, will LT 2 RFP have the same requirements as LT 1 RFP, or will it switch to focus on an energy-style procurement?

The IESO appreciates the feedback received and will endeavour to provide additional clarity on contract structures for upcoming acquisition mechanisms in order to provide sector participants with sufficient time to make informed decisions.

The current procurement mechanisms, which were highlighted in the most recent AAR, are targeting to meet an emerging capacity need. This has been reflected in the LT1 RFP and Expedited Process mandatory requirement that resources must be able to provide at least 4 consecutive hours of energy.

Future acquisition mechanisms will continue to be informed by system needs as identified in the AAR.

Engagement on the second Long-Term RFP (LT2 RFP) will begin next year and contract design and requirements for that acquisition mechanism will be informed by the system needs at that time. It is expected that the LT2 RFP will seek to meet an energy need in addition to a capacity need.

Some stakeholders suggested that natural gas-fired generation is not a solution to Ontario's capacity needs because of difficulty in siting such facilities and the resource scalability given the possibility that these facilities will have to come offline in 2035 due to expected and foreseeable regulations and requirements.

By structuring the Expedited and LT1 RFPs in favour of fossil projects, while also creating a 'set-aside' stream in the Same-Technology Expansions (which appears to be targeted towards gas plants), the IESO risks sending the signal that developers should be focused only on developing fossil projects for the LT2 RFP and subsequent calls.

The IESO should immediately correct the evaluation mechanism via adding rated criteria for non-emitting resources (recognizing the public good of avoided emissions) or consider alternative means to 'level the playing field' between emitting and non-emitting resources (e.g., for the economic evaluation criteria use \$/kWh given the projected capacity factor, price of gas, and legislated escalating carbon price). Such steps will support the IESO's stated "technology agnostic" goal, while recognizing the public good of procuring capacity from non-emitting resources (and conversely the externalities associated with new or expansion fossil resources).

The IESO appreciates the feedback provided. The IESO's acquisition mechanisms are focused on acquiring products and services required to meet emerging system needs, primarily capacity at this point in time.

Engagement on the second Long-Term RFP (LT2 RFP) will begin next year and contract design and requirements for that acquisition mechanism will be informed by the system needs at that time. It is expected that the LT2 RFP will seek to meet an energy need in addition to a capacity need.

It is not clear what resource type the "same technology" Upgrades and Expansion RFP is intended to procure. We would strongly support IESO enabling existing resources to participate in long-term RFPs as repowered projects, which will help to keep existing assets providing low-cost power to Ontarians for decades to come. However, the proposed Upgrades and Expansion RFP does not seem likely to enable such participation for most existing resources given the constraints, including the short contract period and eight-hour continuous power delivery requirement.

The Same Technology Expansions initiative is intended to incent additional capacity from upgrades at existing contracted facilities with a capacity-style contract (\$/MW) in good standing, with the ability to:

 increase the Capacity rating of the facility by at least 10%, or 10 MW (if the existing capacity of the facility is greater than 100 MW), with an absolute minimum increase of 1 MW (if the existing capacity of the facility is less than 10 MW). For clarity, existing merchant capacity cannot be used for this

and

 be dispatch able with a minimum of 8 hours of load-following capability

and

- be in service by 2025

Contracted facilities interested in pursuing Expansions will be able to participate in the Expedited process.

Through the Same Technology
Expansions initiative, the IESO is
prioritizing the acquisition of capacitystyle resources which provide longduration load-following capability. Future
procurements may focus on the
acquisition of energy resources, which
may be a better fit for some Proponents
and resource-types.

Projects that are unsuccessful in the Expedited RFP should be permitted to participate in the LT RFP.

Projects that are unsuccessful in the Expedited Process are permitted to participate in the LT1 RFP.

Feedback	IESO Response
Proponents that qualify for LT RFP1 should automatically qualify for LT RFP2.	The IESO is considering mechanisms that will streamline qualification for the LT2 RFP for parties who have qualified for the LT1 RFP.
The IESO identified that LT2 RFP will acquire an additional 1,500 MW of effective capacity by 2030 and will start working on the RFP process by 2023. In order to ensure that long-lead and low-cost technologies are available for the procurement, the IESO should clearly define the needs as energy or capacity and clarify the duration requirement (e.g. preference for 8-hours, or even better, separate buckets for 4-hour short duration vs 8-hour long duration as noted below) as soon as possible. Otherwise, technology developers will not be able to make the necessary capital investment required to initiate development.	The IESO appreciates the feedback provided. Dedicated engagement on the LT2 RFP will begin in 2023.
 A stakeholder also recommended that the LT2 RFP be broken down into multiple buckets based on technology type: energy storage (long-duration, short-duration), generation, etc. This will also allow the IESO to provide a contract structure that matches the technology type rather than an all- purpose contract which is not well suited to any technology. 	

The proposal for the same-technology expansion is not clear. The IESO appears to separate same-technology expansion as a different process; however, the procurement mechanism, its timelines, and the proposed contract structure are not explained.

The IESO suggests that upgrades and expansions within the same technology expansion will be treated differently and also suggests that there may be some linkages to the expedited and LT1 RFP processes but it is unclear what types of same technology expansion, i.e., upgrades or expansions and or small scale or large scale, are linked to which proposed procurement process or aspect thereof.

The Same Technology Expansions initiative is intended to provide existing contracted facilities which meet mandatory criteria with an expedited and streamlined opportunity to bid-in to provide additional firm capacity within the 2025 timeframe.

Specifically, the IESO envisions an upgrade to be a performance improvement that is done to the existing generation equipment to increase capacity. Proponents interested in pursuing a same-technology upgrade are expected to be provided the opportunity to bid-in to the existing contract an amended contract capacity, payment amount, and, if applicable, term length.

Proponents interested in pursuing sametechnology additions or expansions that are located at the same site as the existing facility are expected to be eligible to participate in the Expedited Process.

Additional guidance with respect to the Same Technology Expansions initiative will be communicated to Stakeholders and prospective proponents in the coming weeks.

LT1 RFP and Expedited Process: Mandatory Requirements and Rated Criteria

Mandatory Requirements

Please provide any feedback on the Mandatory Requirements and Rated Criteria proposed for the LT1 RFP and Expedited Process.

Feedback	IESO Response
Consider allowing projects to participate in the Expedited Process which were not included in the RFQ submission. For smaller projects (ie. < 20 MW) it is possible to plan, design, finance, construct, and commission a project within 2.5 years (ie. after the RFP results are announced in December 2022).	Recognizing the condensed timeline of the Expedited Process, only projects that were submitted at the RFQ stage (LT1 RFQ) will be considered.

Mandatory Requirements Community Engagement:

- For the Expedited RFP only replace the mandatory requirement for one (1) community meeting before RFP submission with a binding commitment to host an Open House post contract award and before COD. Due to the regional needs, projects may be sited in the same regions, which will create a situation when a lot of open houses will take place in the same communities, at the same time. This will create unnecessary confusion in communities and exponentially increase the risk of opposition.
- For the Expedited RFP, we would recommend that the IESO consider offering greater flexibility with respect to the proposed mandatory requirements for one (1) community meeting before RFP submission (e.g. allow for a post-contract award Open House).
- Requiring a resolution from a municipality or band council as pre-condition to take part in the RFP will place undue pressure on limited local community resources, as well as on developers, in many or most cases for projects that will ultimately not be proceeding to construction.
 Moreover, specific zonal needs are such that these pressures and the need for community meetings will be highly concentrated both regionally and within a narrow time period, which could give rise to confusion and complication with respect to community engagement.
- Support the requirement to provide an engagement plan as a mandatory criterion. Given the coming municipal election and the fact that the Expedited Process will only be open for a short window after proponents learn they are qualified to bid, it may not be possible to hold a formal community meeting with involvement of the local municipal government in time for the RFP close. We request IESO clarify that the public meeting could be an open house or other such informal

Thank you for the feedback.

The IESO continues to meet with municipalities and Indigenous communities to discuss the procurement process. Most recently, the IESO held a more focused discussion on the proposed mandatory requirement to obtain a Municipal Council Resolution prior to proposal submission under the LT1 RFP and post-contract offer under the Expedited Process.

While there was some support for the concept, concerns were raised about the impacts on municipalities and linkages to their permitting process.

Given stakeholder feedback and internal analysis on this item, the IESO is now proposing that Municipal Council Support Resolutions be treated as rated criteria for both the Expedited Process and LT1 RFP.

Feedback IESO Response event insofar as a proponent holds the event in the community and undertakes reasonable efforts to advertise the event. Site Control should be demonstrated with the existence of The IESO will outline the requirements in the draft LT1 RFP and draft Expedited a lease or option to lease. The requirement for further site access declaration(s) introduce unnecessary Process RFP. Additionally, the IESO will duplication. issue draft Prescribed Forms, including one that can be used to evidence Site Control. Stakeholders expressed support of an Indigenous Thank you for the feedback. While the Partnership Price Adder. IESO is looking to incentivize Indigenous participation and is proposing rated An equity agreement takes significant time and resources criteria as the preferred mechanism for to bring together a fair and equitable partnership that incentive under the LT1 RFP, the agreement. These resources are further increased under IESO continues to consider options to very compressed timelines. As a result of the additional encourage meaningful engagement cost, an Adder is required to fairly evaluate a Project that and/or partnership formation with has an Indigenous equity agreement relative to Projects Indigenous communities as part of the that do not have an indigenous agreement. Expedited Process.

Stakeholders commented that the IESO must provide greater clarity with respect to the timelines for commencing the CIA/SIA process with connecting utilities. Some expressed concern that the IESO has not adequately prepared for the volume of connection requests that will follow the large number of projects contracted through the various procurement streams.

They also commented that the IESO proposal currently provides insufficient direction on the details and timing of permitting, community approval and engagement, and deliverability requirements for developers to properly plan for. The lack of clarity on timelines for commencing the CIA/SIA process with connecting utilities is a significant barrier to efficient project development and creates the likelihood of confusion with utilities and local communities given the number of competing projects that will be offered into the LTRFP. This is counter to the IESO's objective of meeting capacity needs with speed, let alone cost efficiencies.

Thank you for the feedback. Please note that CIAs/SIAs are not a prerequisite to participate in the Deliverability Process. Furthermore, the IESO requires all LT1 RFP projects that are currently awaiting a CIA-Dx to rescind their application prior to Deliverability Test submission.

Further information is provided in the Deliverability Guidance Document posted on the LT1 RFP Website.

The IESO should immediately provide information about requirements for permitting and approvals that may be required in advance of the RFP submission deadline. Stakeholders expressed concern that there is limited time to work with permitting authorities in advance of the submission deadline.

Requirements for permitting and approvals that may be required will be outlined in the draft LT1 RFP and draft Expedited Process RFP in advance of the December 20, 2022 submission deadline.

All pre-execution mandatory requirements for the Expedited Process need to be balanced with the urgency of need since the imposition of pre-execution mandatory requirements could disqualify projects capable of meeting the 2025 COD timeline.

Thank you for the feedback, the IESO will make all mandatory requirements known in the draft LT1 RFP and draft Expedited Process RFP in advance of the December 20, 2022 proposal submission period.

We would urge the IESO to provide detailed guidance on Environmental Assessments as soon as possible. The role of the IESO in this procurement is to procure the products and services required to reliably operate Ontario's electricity grid. Permitting requirements for a particular project may be resource or location specific. As such, the IESO will not be outlining permitting requirements that may be applicable to a given project as part of the procurement process. The IESO expects all proponents to familiarize themselves with the permitting requirements and timelines that may be applicable to their resource type and project location prior to submitting a proposal.

It will be important for the IESO to clarify how any external funding sources (e.g. Government of Canada SREPS program) will factor in these procurements, and to take steps to avoid a situation in which external incentives could distort the competition in favour of projects in receipt of these funds rather than those that optimally meet specific system needs most costeffectively.

The role of the IESO in this procurement is to procure the products and services required to reliably operate Ontario's electricity grid. It is not anticipated at this time that the procurements will require evidence on what financing arrangements are proposed for a given project.

Can the IESO please elaborate on its proposed mechanism to ensure supplier diversity. Will this mechanism apply across a single procurement, or will it apply across procurements? For instance, say the mechanism is a limit on the amount of capacity awarded to a single proponent, would this apply only in the context of the Expedited RFP and LT RFP individually, or would it apply to total capacity awarded across those procurements?

The IESO expects the LT1 RFP and Expedited Process to attract participation from a broad set of resource types. In addition to the maximum project threshold of 5 MW for Small-Scale LT1 Projects and 600 MW for Large-Scale LT1 Projects, the IESO is also considering a maximum number of projects or capacity that can be submitted by a single Qualified Applicant. Further details will be provided at a future stakeholder engagement sessions or in draft procurement documents for stakeholder feedback.

A participant suggested restricting emitting resources from the Expedited Process or adding rated criteria to incent non-emitting technologies. The IESO appreciates the feedback provided. The IESO's acquisition mechanisms are focused on acquiring products and services required to meet emerging system needs, primarily capacity at this point in time. The IESO is proceeding with a technology agnostic procurement approach but will continue to engage with the government in order to incorporate any policy decisions, including the treatment of emitting technologies.

A participant felt that longer durations need to be appropriately recognized in the procurement given the strong benefits that duration brings to the system.

Their recommendation would be that instead of a rated criterion for duration, the IESO could break apart the procurement into multiple buckets related to the province's duration needs.

The IESO recognizes the benefits that increased duration brings to the system, and as such the IESO has included a 4-hour minimum duration in the mandatory requirement for the LT1 RFP and Expedited Process.

The IESO considers the use of rated criteria as the best method to reward resource attributes through proposal evaluation, without overly complicating the proposal evaluation process.

A stakeholder felt it may not be possible for one party (Indigenous community or otherwise) to achieve a 50% ownership slice in a consortium, specifically in a utility scale project in the several hundreds of MWs. This can be discouraging for either of the parties. Therefore, the participant believes that the scale of the project should be taken into consideration by the IESO

Thank you for the feedback, the IESO has found that similar rated criteria for Indigenous participation on previous procurements has encouraged Indigenous economic interest in projects, including those with 50% or more. The IESO will continue to engage with Indigenous communities and other stakeholders in order to finalize the proposed rated criteria.

IESO should consider allowing Applicants to modify their commercial structure between the RFQ and the RFP (provided that the Applicant is still a Controlling Member) to support Indigenous Participation.

Per section 2.10(c) of the LT1 RFQ, the corporate structure of a Qualified Applicant can change between the LT1 RFQ and the submission of a proposal under either the Expedited Process or the LT1 RFP, provided that if the Control Group Member of the Qualified Applicant changes, it would need to maintain the same eligibility based on the Entity Development Experience Threshold with the new Control Group Members as the Qualified Applicant received under the LT1 RFQ in order to maintain eligibility.

Duration of Service

- Recommends the IESO offer one (1) bonus point for a Project that can deliver a product beyond 8 hours duration.
- Some stakeholders expressed concern with the rated criteria for duration of service. If the IESO does proceed with these criteria, it is essential that the IESO ensure fair evaluation of "duration" and require that all suppliers demonstrate their ability to achieve the required duration.
- While we recognize the importance of duration in this procurement, the proposed rated criteria points are too heavily weighted for projects that can deliver 8 consecutive hours or more. The fourhour mandatory requirement already considerably limits the types of resources that will be able to compete in this procurement; Each additional hour of duration will reduce competition and significantly increase the total cost of the procurement and will adversely affect ratepayer value.

The IESO is proposing to award rated criteria points in a sliding scale for resources that can provide duration beyond the 4 hour minimum. As such a resource that can provide more than 8 hours of energy will be ranked higher than those able to provide 4 hours.

For the Duration of Service, and the Indigenous Participation, stakeholders recommended that the IESO consider a pro-rata approach to the point system instead of using bins, which may be subject to gamesmanship (e.g., a duration of 4h01m).

Thank you for the feedback. The IESO will consider the pro-rata approach and other approaches to mitigate gamesmanship.

Location:

 Stakeholders encouraged the IESO to recognize that the location of the project is as important, if not more important, then all other project characteristics.

- The IESO should release as much data as quickly as possible in terms of locational needs
- Request additional clarification on "West
 Transmission Zones." We understand that IESO
 intends to provide additional detail by the end of
 June but that will be too late for proponents
 considering participating in the Expedited Process,
 given the requirement that those proponents
 provide details for any project they may want to
 bid into the Expedited Process in their RFQ
 response, due June 30th. We request that IESO
 provide this clarification as soon as possible.

The IESO has released further locational details in the Locational Considerations and Deliverability Guidance documents which can be found on the LT1 RFP Website.

Some stakeholders indicated that they would be interested in some sort of rated criteria for a project's ability to lower Ontario's electric system GHG emissions profile.

A stakeholder felt the lack of any GHG or other similar rating criteria in the LTRFP further slants the outcome of the LTRFP away from energy storage and other forms of emissions-free generation, particularly when paired with the current duration requirements. Convergent appreciates the IESO's priority with this LTRFP is the capacity needed for reliable operations in the coming years. Including GHG as a rated criteria does not contradict that goal, rather it enhances the dependability of that procured capacity by ensuring its sustainability.

The IESO appreciates the feedback provided. The IESO's acquisition mechanisms are focused on acquiring products and services required to meet emerging system needs, primarily capacity at this point in time. The IESO is proceeding with a technology agnostic procurement approach but will continue to engage with the government in order to incorporate any policy decisions, including the treatment of emitting technologies.

Evaluated Proposal Price model:

• Stakeholders expressed support of an Evaluated Bid Price system.

- Some requested that the IESO provides the methodology behind the price reduction multiplier for the Rated Criteria.
- Encourage IESO to finalize details well before the RFP window opens for the Expedited Process so proponents have the time necessary to develop their pricing and to prepare their bid(s).

Thank you for the feedback, the IESO will be finalizing details on commercial considerations, including the Evaluated Proposal Price model in the coming weeks and will share with stakeholders for feedback.

Indigenous Participation:

- The proposed Rated Criteria for Indigenous
 Participation will risk overwhelming First Nations
 with requests under an inappropriately condensed
 timeline for this type of decision-making. The
 option of a post-COD adder would be more
 suitable in this case.
- Request clarification on how IESO views "economic interest" and whether IESO would be open to a variety of potential partnership arrangements insofar as the proponent and its partner can demonstrate how the economic interest of the Indigenous partner is equal to the threshold claimed.
- The expedited procurement timelines might not allow for enough time for projects to secure Indigenous participation prior to proposal submission. Instead of evaluating Indigenous Participation as rated criteria, the IESO should consider having a price adder for the various levels of Indigenous Participation that could be applied at any time during the contract term
- It will be helpful for IESO to further define economic interest. For example could economic interest include the value of supply/construction related contracts awarded by the project to Indigenous owned companies?

Thank you for the feedback. While the IESO is looking to incentivize Indigenous participation and is proposing it be treated as rated criteria under the LT1 RFP, the IESO is continuing to consider options to encourage meaningful engagement and/or partnership formation with Indigenous communities as part of the Expedited Process.

How would the Indigenous Participation rating work if during the course of construction, after a contract is awarded, another non-Indigenous equity investor funds the project. The percentage ownership structure has changed from the time the rated criteria was used to award the contract.

Where rated criteria for Indigenous participation is included in the LT1 RFP or Expedited Process, that rated criteria will be based on a specified percentage of "Economic Interest" (as such term has been used in prior IESO/OPA contracts) of the project that is held by Indigenous parties and the form of long-term reliability services contract for the applicable procurement will require that such minimum level of "Economic Interest" in the supplier under such contract be maintained by an Indigenous party until some material period of time after the commercial operation date of the applicable project, similar to the approach utilized under later versions of the FIT program.

Considering that not all physical connection points and connection arrangements are equal in terms of resiliency, reliability, availability and overall system benefit other than just providing capacity, stakeholders recommended that the IESO allocate points to projects that demonstrate these capabilities as set-out in their proposed connection arrangement, SIA and/or the Deliverability Test.

The Deliverability Test assesses the ability of the project, as a capacity resource, to deliver the intended reliability-based service value during a commitment period or contract term, and will not consider potential transmission congestion or other market parameters outside the demand periods defined in the testing parameters.

Recommend that the IESO consider allocating points for project readiness, such as:

- Projects that have completed development milestones such as a completed environmental permits and/or approvals.
- Completed SIA that matches or is greater than what was approved under the Deliverability Test.

Thank you for this feedback. The IESO will take these recommendations into consideration as it work to finalize requirements, including rated criteria for the Expedited Process and LT1 RFP.

Is it appropriate to compare rated criteria points across criterion? For instance, will being located in Toronto (3 points) have an equal evaluation weighting as having a duration of 8+ hours (also 3 points). Will the evaluation include an additional weighting system where, for example, location is worth 10% of overall score, and duration only 5%, making being located in Toronto twice as important as having an 8+ hour duration?

The IESO has provided indicative values for individual rated criteria in past engagement sessions and welcomes stakeholder feedback. The number of points for each criterion is still under consideration.

It may be the case that the projects successful in the Expedited RFP (and Same-Tech Expansions) resolve some of the issues the rated criteria are looking to address. For instance, the rated criteria for the Expedited RFP incent projects located in the West; if that RFP results in significant new build in the West, it may be appropriate for the IESO to revisit the Location rated criteria for the LT RFP.

The IESO will consider adjusting rated criteria for the LT1 RFP based on the results of the Expedited Process Deliverability test.

LT1 RFP and Expedited Process: Proposed Contract Design

Feedback IESO Response

For natural gas fueled generators we strongly recommend a capacity payment adjustment mechanism that reflects the real time cost of natural gas, electricity, carbon charges and maintenance costs to determine the actual net revenues generated as measured against the heat rate stated by the proponent. This either based on deemed or actual running hours.

Thank you for your feedback. The IESO is currently evaluating technology specific considerations in the capacity contract design and will provide further information at a later Stakeholder Engagement meeting.

A stakeholder recommended the IESO consider utilizing an energy storage specific contract for the Expedited Process, which would be similar to the contract structure used in the IESO's Phase 2 Energy Storage Procurement process. The Phase 2 contract was a capacity based contract and included a mechanism to incent energy storage facilities to charge and discharge in accordance with market pricing. If the IESO were to make such a consideration, we would strongly recommend making modifications to the Phase 2 Energy Storage Procurement to ensure the contract has been updated to reflect commercially reasonable round-trip-efficiencies and termination and liquidated damage conditions considering that the size and scale of the Expedited Process and LT1RFP and LT2RFP are significantly larger than the size and scale of the Phase 2 Energy Storage Procurement Process.

Thank you for your feedback. The IESO is currently evaluating technology specific considerations in the capacity contract design and will provide further information at a later Stakeholder Engagement meeting.

Based on feedback received to date the IESO has decided to move forward with a separate capacity style contract that also accounts for certain provisions for energy storage facilities, applying lessons learned from past IESO procurements for energy storage, including contract design. The capacity contract will not include the Capacity Payment Adjustment Mechanism proposed at the June 9 Stakeholder Engagement.

A stakeholder suggested dealing with projects that have both expansions and facility upgrades at the same site bilaterally. The IESO's 2022 AAR describes the range of procurement mechanisms that will be utilized to meet system needs in the short, medium, and long-term timeframe.

The LT1 RFP and Expedited Process are focused on procuring capacity from new build facilities, which also includes the addition of electricity storage to existing generation sites (e.g., variable generation facilities). For all other same technology upgrades, proponents will have the opportunity to compete under the Same Technology Expansions procurement mechanism.

Bilateral arrangement will not be considered under this competitive process.

A stakeholder recommended that the IESO acquire new capacity through a net revenue put option style contract, such as the Long-Term Energy Services Agreement for storage and generation developed in New South Wales, Australia. This will allow the IESO to take steps to simplify the contract structure, achieve an efficient risk allocation between projects and Ontario electricity consumers, and encourage projects to participate efficiently as IESO transitions through Market Renewal.

Thank you for your feedback. The IESO is currently evaluating technology specific considerations in the capacity contract design and will provide further information at a later Stakeholder Engagement meeting.

Based on feedback received to date the IESO has decided to move forward with a capacity style contract. A separate capacity style contract will be developed for energy storage resources.

A stakeholder suggested that timeframes for appropriate and meaningful engagement with Indigenous communities was short for both Expedited and LT 1 RFP. The IESO should add a contractual provision that would allow for a price adjustment at any point in time that an Indigenous partner is added to the project.

The IESO acknowledges that the timeframes for meaningful engagement with Indigenous communities are short, particularly for the Expedited Process.

The IESO is actively working with Indigenous communities on how best to be engaged with throughout procurements processes, and also how Indigenous partnerships should be rewarded as part of the evaluation process.

A Stakeholder recommended consideration for potential rising equipment costs. For example, that the contract includes a cancellation provision that would allow suppliers to cancel without penalty within a reasonable period of time (e.g., 16 months) from contract award if overall equipment prices increase beyond a set threshold (e.g., 20%). Alternatively, the IESO could implement a capital cost adjustment for storage.

Thank you for your feedback. To address stakeholder concerns surrounding current rising equipment costs, the IESO is considering indexing provisions as a means to provide developers with a hedge against inflation and commodity price hikes. The IESO is seeking stakeholder feedback on the notion of indexing and what indices are the most appropriate to consider.

A stakeholder recommended the IESO should recognize that energy arbitrage could be a significant revenue stack and the proposed approach could lead to increased costs if those revenue streams are exposed to merchant risk for both the sale and purchase of electricity. From a debt modeling perspective, lenders take an aggressive stance and will assume the most conservative capacity revenues.

IESO should explore best practices from other jurisdictions, recognizing that it is possible to acquire capacity through a CFD-style contract. For example, the Long-Term Energy Services Agreement for storage and generation developed in New South Wales, Australia, provides a top-up to market revenues including energy.

If a priority objective of the IESO is to encourage market participation, the IESO should explore revenue sharing for IESO-Administered Markets (IAMs) services above a net-revenue requirement (similar to the Phase II energy storage RFP contracts from 2014). Under this concept, energy storage resources are encouraged to maximize IAM service revenue throughout the contract term.

The IESO appreciated feedback provided on the revenue mechanism proposed at the June 9 Stakeholder Engagement, and is currently evaluating technology specific considerations in the contract design.

Throughout the first half of 2022, the IESO explored different procurement mechanisms with proponents, which also included a bundled Contract for Difference (CFD) approach. Following the IESO's presentation on a potential CFD style contract, there was limited stakeholder support. Upon further examination the IESO determined that a bundled CFD contract was not best served to satisfy a procurement for capacity

A stakeholder questioned that the IESO has said that it acknowledges bidders may simply bid what is effectively their fixed capacity price and set the collar to eliminate risk of claw back based on energy prices, but no explanation was offered by the IESO with respect to why it believed bidders would be positioned to forecast future prices and model associated risk under a market design that's yet to be approved and implemented when the IESO itself has said this task is not possible to perform until after MRP. Skepticism with respect to forecast accuracy is further warranted because the IESO is proposing to prepare its price forecast prior to evaluating bids and announcing the successful LTRFP proponents. Accordingly, the IESO's forecast will not have any information with respect to what share of new generation will bid to select exposure to real-time market prices. The forecast will also not consider the characteristics of the supply mix being procured by the IESO over the next two to three years.

The IESO in its role as market operator is also uniquely positioned to amend market rules to benefit its entitlements under the contract since the market rules for which it has authority to approve directly impact pricing and price formation in the IAM. The IESO's governance and rule amendment framework does not adequately protect the suppliers' interests that market rules will not prejudice their position vis-a-vis the buyer under future contracts.

The IESO has also not provided detail describing how it will evaluate and rank proposals from proponents bidding a range of technologies, with a range of different operational characteristics and per MW break-evens, in a process where parties are bidding both collar price spread and discount to fixed capacity prices. With respect to these procurements, Capital Power's expectation is that a process where parties bid price on an energy collar is more likely than not to result in perverse outcomes and generate inefficient and costly pricing risk since the awards will be primarily allocated based on the IESO's forecast of quarterly market prices for the next 20+ years.

The IESO appreciates the feedback on the revenue mechanism proposed at the June 9 Stakeholder Engagement, and is currently evaluating technology specific considerations in the contract design.

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The IESO has provided too little guidance on how it would like proponents to qualify their project capacity. The IESO recommends that proponents base that qualification on UCAP documents and "additional information". This can be particularly challenging in the case of hybrid resources, where the IESO has provided no UCAP guidance. In many cases, the "additional information" needed to properly assess risk of delivering less than qualified is not available. Terms of default and non-performance/nondelivery charges are not known at this time, and yet proponents are being asked to lock in their project capacity at the RFO stage, at least for the Expedited RFP. Given this dearth of information, the IESO should - at a minimum – allow proponents the flexibility to adjust their project capacity after RFQ submission, but prior to completion of the Deliverability Assessment. This would seemingly have no impact on the integrity of the RFQ process.

The IESO has been responsive to stakeholder feedback with respect to the need for a hedge on uncertain market revenues. That said, the Capacity Payment Adjustment Mechanism proposed by the IESO is problematic.

Capacity payments are intended to address the "missing money" problem in which net revenues from the energy market are insufficient to recover the investment costs of new capacity. Only net revenues – profit – serve to recover these costs. The fundamental problem with the IESO's proposed approach is that capacity payments are adjusted based on an index of energy market prices, which more accurately reflect gross revenues, as opposed to net revenues.

Consider the high-priced natural gas environment we currently inhabit; electricity prices may very well print at historically high prices, but only as a result of the increase in the marginal cost of gas-fired resources, which remain the market price setters. Yes, gross revenues increase, but net revenues do not. This is the reason existing CES-and CHP-style contracts utilize a deemed profit structure.

Under the IESO's proposed framework, these resources would be making little to no additional net revenues, but

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their capacity payment would be reduced because their gross revenue appears higher. This dynamic is true for all non-zero marginal cost resources, including those with opportunity costs, such as storage and hydro. Bidding in a non-zero adjustment factor to the RFP serves to increase risk to these projects, not reduce it.

The proposed hedge structure only benefits zero marginal cost resources such as wind and solar (or those with stable marginal costs, such as run-of-rive hydro), which the IESO has effectively regulated out of the Expedited and LT RFPs through the 4-hour duration requirement.

On its June 9 stakeholder engagement call, the IESO suggested that resources could in effect decline the hedge by bidding an adjustment factor of 0%. This begs the question, if the hedge doesn't work for resources with a dynamic marginal or opportunity cost, and zero marginal cost resources are effectively prohibited from participating, who is the hedge for? The structure proposed by the IESO serves to complicate the bid and award process, while providing little to no actual hedge value.

The IESO's proposal faces further challenges due to its all-or-nothing design; a cent above the upper threshold and lower contract payments are triggered, a cent below and they're not. This is particularly problematic considering the IESO's impact and control over the market clearing price of energy. Deliberate interventions (such as the out-of-merit use of Lennox), and inadvertent mistakes by the IESO have a material impact on price.

For instance, there was an 11-month period in which the IESO was erroneously double counting demand from demand response resources (Chapter 3, Section 2.1: https://www.oeb.ca/sites/default/files/msp-monitoring-report-20191219.pdf). The Market Surveillance Panel estimated that this error caused market prices to increase by an average of \$4.50/MWh over the 11 months in question. Now suppose the IESO's proposed hedge structure were in place during this period, and the high price threshold was surpassed by something less than \$4.50/MWh, resulting in proponents receiving reduced capacity payments. Months or years later, the double

counting demand issue is discovered, would the IESO resettle historic contract payments? As the contract counterparty, the IESO not only has significant control over the market price, but on whether its own errors should trigger a resettlement. This seems inappropriate.

On its June 9 call, the IESO reassured stakeholders that the risk of IESO price intervention and errors exists with current contracts. While that's true, these contracts are not all-or-nothing hedges, they're closer to a 1-to-1 hedge. For instance, if the IESO decides to bring on Lennox for reliability reasons and suppresses the energy market price by \$3/MWh as a result, FIT contract holders are indifferent as their contract revenues increase by a corresponding \$3/MWh.

For the aforementioned reasons, a contract with no hedge would be preferable to the hedge proposed by the IESO. Better yet, the IESO should continue to work with stakeholders to design a hedge product that works for everyone.

Additionally, the contract should be designed such that the IESO shares inflationary risk with the developer – at least between contract award and COD. In jurisdictions where developers bear the entirety of this risk, such as New York, projects that were bid as little as a year ago are now financially unviable because the cost of all inputs has risen precipitously, making contracted rates insufficient. If forthcoming projects in Ontario were to face similar circumstances, it could cause serious project delays or cancellations.

Given the uncertainty around future inflation, contract payments should be indexed to inflation. Absent this hedge, proponents will need to bake this risk into their initial bid price, increasing overall costs.

A stakeholder felt there is still significant market design risk that adversely and disproportionally affects energy storage technologies: costs associated with Global Adjustment, Demand Charges, and Regulatory and Uplift Charges. These costs create constraints that significantly hamper the operational flexibility of energy storage projects and its revenues from net energy sales. A contract structure that either reimburses these costs, or a bundled CFD with a total revenue requirement would significantly help reduce the uncertainty surrounding these constraints, as well as other risks surrounding the Market Renewal Program.

Finally, the price volatility of lithium has rocked the battery storage industry over the last 6-12 months. In today's environment, cell manufacturers are still unwilling to lock-in pricing until 9-12 months before deliveries. For a COD in May 2025, orders would need to be placed in H1 2023 based on current lead times and order books, while ~60-85% of the price would only be locked-in sometime in Q2-Q3 2024, leaving 1 full year of exposure to the lithium index. While the market generally expects prices to start stabilizing, nobody can reliability predict the pace at which prices will stabilize, if at all. We appreciate this is a risk specific to battery storage. However, we encourage the IESO to consider sharing this risk with proponents.

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Based on feedback received to date the IESO has decided to move forward with a capacity style contract. A separate capacity style contract will be developed for energy storage resources.

The IESO should confirm as soon as possible that hybrid projects are able to participate in the Expedited Process.

The characteristics of hybrid projects (existing interconnect, land control, municipal relationships, Indigenous partners) make them excellent candidates to achieve the tight timelines set out by the IESO for the Expedited Process in particular.

In order to do so, the IESO should promptly finalize the rules for co-located hybrids, and allow hybrid projects to elect to become integrated upon expiry of PPA's and completion of the rules for integrated projects.

The LT1 RFP and Expedited Process are technology agnostic procurements that aim to meet Ontario's emerging capacity needs.

All resources that are fully dispatchable, able to inject energy for a minimum of 4 continuous hours during the availability window, and can become market participants are eligible to participate in the LT1 RFP and Expedited Process.

A stakeholder supports IESO's decision to enable proponents to provide and bid their own qualified capacity to form the contract capacity. We request that IESO define "Qualifying Hours."

IESO stated that a generator's inability to meet the four-hour duration of service requirement could result in a proportional claw back of a portion of the capacity payment. We request more detail on this claw back.

Thank you for this feedback. Further details on the capacity availability window and performance obligations within that window will be forthcoming.

A stakeholder felt the CPAM as proposed would introduce several new layers of uncertainty to an already unavoidably uncertain situation. For example,

- The CPAM still relies on LMPs yet to be determined or tested following MRP. This proposal does not mitigate the uncertainty that would have been present under a Capacity+CfD model
- The CPAM does not enable proponents to bid a CfD price they have modelled into their bid price. Instead, the CPAM makes all energy pricing subject to future evaluations by IESO, including of the mean pricing floor and ceiling and the average energy market price (LMP). Under CPAM, there is no known price that a proponent can model to determine whether its bid will cover its capital and operating expenditures with any certainty.
- The CPAM enables the proponent only to bid a percentage it is comfortable having its bid topped up or clawed back based on an unknown price value. Choosing a percentage value without knowing the mean pricing range values and without visibility into future LMPs introduces significant risk.
- Furthermore, IESO indicated that being a penny over or under the IESO-determined price ceiling or floor would trigger the full percentage claw back or top-up, as applicable. This represents enormous risk as compared to a CfD model.
- IESO has proposed to adjust top-ups or claw backs on a quarterly basis, whereas CfD is typically settled in much smaller increments. The CPAM introduces significant operational and market participation risk.
- The CPAM is an entirely new contract design with lots of unknowns for IESO, proponents and the financial community. Given the uncertainty regarding MRP and the extremely compressed RFP timelines, particularly under the Expedited Process, circumstances are not ideal to introduce untested economic models into the contract design.

The IESO appreciates the feedback on the revenue mechanism proposed at the June 9 Stakeholder Engagement, and is currently evaluating technology specific considerations in the contract design.

Throughout the first half of 2022, the IESO explored different procurement mechanisms with proponents, which also included a bundled Contract for Difference (CFD) approach. Following the IESO's presentation on a potential CFD style contract, there was limited stakeholder support. Upon further examination the IESO determined that a bundled CFD contract was not best served to satisfy a procurement for capacity

- Finally, it is not clear how proposals would be evaluated under CPAM. Information on this evaluation process would need to finalized and available as soon as possible, e.g., in early-July.

A stakeholder felt the proposed structure was not optimized for energy storage projects. The IESO should be incentivizing these projects to be more responsive to daily and hourly fluctuations in order to maximize asset value. Revising the contract, at least for this near term expedited RFP, would ensure that quickly deployable resources such as storage are more attractive for investment and better optimized for system needs.

With a stakeholder that felt it is worthwhile to consider including operating reserve revenues within the CFD structure. The large amount of energy storage potentially entering the Ontario market creates a significant level of uncertainty for future operating reserve prices. Historical OR clearing prices may no longer be relevant as large amounts of energy storage resources (i.e. a resource that can provide Operating Reserve at a very low marginal cost) enter the Ontario market. The impact of this change is very hard to predict and makes it difficult for proponents to forecast OR revenue.

\$/MW-month that includes both capacity revenues and energy market revenues is preferred.

it is in the best interest of the IESO and the Ontario rate payer to provide a contracting mechanism (e.g. a Bundled CFD) that provides revenue assurance to the developer/IPP while ensuring that the contract is bankable, can be financed at the lowest cost possible, which will foster competition and deployment of at-risk development dollars, ensure that projects are delivered timely to meet the capacity shortfall and will result in overall lower costs to Ontarians.

LT1 RFP and Expedited Process: Proposed Term Lengths

Feedback IESO Response

All stakeholders were supportive of Terms Lengths of 20 years or greater.

Thank you for the feedback.

On slide 30 the IESO states that, "in order to ensure commercial operation is achieved by required deadlines (2025, 2027), the IESO will apply liquidated damages and potentially draw upon proposal security in instances of delay that will be outlined in the contract." This suggests that the IESO will apply liquidated damages to projects awarded contracts through the Expedited RFP if those projects fail to reach COD by May 1, 2025. However, on slide 54 the IESO proposes that projects awarded through the Expedited RFP will receive an incentive payment for every month they're operational between May 1, 2025 and April 30 2026. Does the IESO also intend to apply liquidated damages to projects that reach COD between those dates? Having an overlapping penalty and incentive is unnecessary. Incentives that promote project economics will be more successful than penalties that endanger them.

The IESO intends to outline a declining benefit from May 1, 2025 to April 30, 2026 to incent resources to reach commercial date of operation early.

The IESO will begin to apply liquidated damages from May 1, 2026.

Another stakeholder commented that a hard stop at May 1, 2025 (e.g. contract cancelled and any securities forfeited) will be very hard for proponents to work with. There needs to be a defined process for managing project in-service delays and providing schedule relief for certain types of delays that are outside the proponents control. For instance as part of the contract, IESO could specify predefined schedule durations for key activities by third parties like the CIA/SIA process and related connection implementation work and grant schedule relief if the schedule durations are exceeded due to other involved parties (e.g. IESO, Transmitters, and LDCs).

Any new long-term contract with a carbon-emitting generator introduces significant risk that the IESO will be left with a stranded asset in 2035, a cost that will ultimately be borne by electricity rate payers. If the IESO ultimately pursues a 20-year term length, it is critical that the design of this procurement reflect this reality.

Thank you for this feedback on term lengths. The IESO appreciates the feedback provided. The IESO's acquisition mechanisms are focused on acquiring products and services required to meet emerging system needs, primarily capacity at this point in time. The RFP eligibility is still under development and will be refined as the procurement design is finalized.

Deliverability Assessment

Feedback IESO Response

Greater detail from the IESO is required with respect to deliverability assessments. For example, at what point in time will deliverability assessments be completed, and what guarantees will be provided to developers that the capacity will continue to be deemed deliverable through the RFP evaluation process. This stakeholder strongly recommends that the IESO identify the maximum capacity at each selected interconnection point instead of asking proponents to identify three project sizes.

All deliverability assessment conclusions should be published publicly.

Deliverability Test results will be announced prior to proposal submission.

The Deliverability Test will provide one of three project statuses:

- 1) "Deliverable"
- 2) "Not Deliverable" or
- 3) "Deliverable but Competing"

This status will remain valid throughout the applicable RFP process.

Considering that not all physical connection points and connection arrangements are equal in terms of resiliency, reliability, availability and overall system benefit, how will the IESO take these factors associated with each connection point into account in performing the Deliverability Test?

The Deliverability Test will assess the ability of the project, as a capacity resource, to deliver the intended reliability-based service value during a commitment period or contract term, and will not consider potential transmission congestion or other market parameters outside the demand periods defined in the testing parameters. The Deliverability Test will not distinguish between different connection arrangements for this purpose.

Where 2 qualified RFQ Applicants have both submitted Project X under the RFQ for the Expedited RFP, will both such RFQ Applicant submit Project X to the Deliverability Test?

Will both such RFQ Applicants be required to also submit Project X with the same project parameters (i.e. capacity and connection point options for such project)? Only one Deliverability Test request should be submitted for each respective project submitted for consideration under the LT1 RFP or Expedited Process. In the event that two or more Qualified Applicants have partnered on a project, project teams should coordinate to submit one Deliverability Test request, while listing all relevant Qualified Applicants in the single Deliverability Testing form.

Because the results of the Deliverability Test for the LT1 RFP come out after Expedited Process proponents find out if their project was awarded a contract, how will projects that were not awarded a contract under the Expedited Process but intend to participate under the LT1 RFP be able to ensure that their project is captured in the Deliverability Test for the LT1 RFP?

- Will the Deliverability Test for the LT1 RFP assume all projects submitted under the Expedited Process have been connected when conducting the Deliverability Test for the LT1 RFP?
- If a project that is submitted to the Expedited RFP is not awarded a contract will the Deliverability Test result ascribed during the Expedited Process Deliverability Test remain valid for such project to be submitted under the LT1 RFP?

The Deliverability Test for the LT1 RFP will be a separate process from the Deliverability Test for the Expedited Process. The Deliverability Test for the LT1 RFP will begin while the Expedited RFP process is underway. The Deliverability Test for the LT1 RFP will assume projects submitted under the Expedited Process have been connected only if they receive a status of "Deliverable" or "Deliverable but Competing".

Projects submitted to the Expedited Process Deliverability Test that receive a status of "Deliverable" or "Deliverable but Competing" will be rolled into the Deliverability Test for the LT1 RFP. Projects that have been rolled into the LT1 RFP Deliverability Test from the **Expedited Process Deliverability Test will** be reassessed in the context of all projects submitted to the LT1 RFP Deliverability Test. As such, the Deliverability Test result may change (e.g., a project that received a status of "Deliverable" under the Expedited Process Deliverability Test may get a result of "Deliverable but Competing" under the LT1 RFP Deliverability Test when additional projects are considered).

Given the considerable uncertainty around the deliverability assessment process, it will be critical for proponents planning to participate in the Expedited Process to be able to make changes to the detail for each project included in the RFQ when submitting their Expedited RFP response. We understand that IESO is hoping to have some clarity on the deliverability of those Expedited Process project proposals, so we recommend that proponents be free to reduce project size, reduce continuous hour duration, and make other changes insofar as such changes would not be likely to require new deliverability assessments.

Proponents may make changes to their project between the RFQ and the Deliverability Test. Proponents may not, however, make changes to their project between the Deliverability Test and the RFP. Please see section 3.2.1 and 3.2.2 of the Deliverability Guidance Document on the LT1 RFP Website for further details.

This is consistent with IESO's proposed deliverability assessment approach as IESO has stated that it will assess up to three versions of each project submitted for deliverability assessments – presumably the intent is to enable modifications to projects submitted in the RFQ stage, including under the Expedited Process.

The IESO should include all "preferred connection locations" across the province in its June document, not just those west of Chatham.

Projects deemed "Not Deliverable" in the Deliverability Assessment for the Expedited RFP should be permitted to modify their projects for the purposes of submitting them for the Deliverability Assessment associated with the LT RFP.

The IESO has indicated both global and local needs for capacity in the Annual Planning Outlook. Local needs are anticipated in the West of Chatham and East of FETT zones, as indicated in the Locational Considerations and Circuits to Avoid document.

Projects that receive a status of "Not Deliverable" under the Deliverability Test for the Expedited Process may be modified and resubmitted to the second Deliverability Test (provided they intend to participate in the LT1 RFP).

Given that the methodology for assessing deliverability is not public and participants are unable to run their own deliverability assessments, the unintended consequences of the current approach is that a viable project that has sufficient land to accommodate a large project and sufficient interconnection capacity at a certain POI may not show any deliverable MWs based the variations submitted to the IESO which would result in the project being excluded from bidding into the upcoming expedited procurement and potentially the L1 RFP.

The IESO's Deliverability Test process has been designed to balance flexibility for proponents with the meaningfulness of the test and management of intake volume by the IESO under a limited timeframe.

A project submitted to the Expedited Process for which the Deliverability Test results for all three size/connection variations are "Not Deliverable" could submit a new test request with revised size/connection variations to the LT1 RFP Deliverability Test.

The IESO should identify criteria by which they will choose between "competing" projects. These criteria should be equitable and designed to identify the projects that will be the most successful at being built on time. The IESO should move all "deliverable but competing" projects through a second process by which developers must meet additional criteria in order to move forward under the LTRFP. The IESO should require financial security of some kind, for example a letter of credit, or demonstration of meaningful progress toward development of the project. Clearly defining criteria that will "break the tie" between those competing projects is necessary to ensure that the IESO does not create a "race to the bottom" for projects at those locations on the system.

The IESO will use the proposal ranking based on the evaluated proposal prices of the set of projects labelled "deliverable but competing" to select the successful projects among those competing. All projects submitted to the LT1 RFP or the Expedited Process will be required to post security in accordance with rules that will be set out in the respective RFP documents.

Additional Acquisition Mechanisms: Same Technology Expansions

Are the descriptions of the different kinds of upgrades/expansions clear and reflective of the options?

Ten stakeholders submissions indicated the descriptions of the different kinds of upgrades/expansions are clear and reflective of the options. Several stakeholder submissions

included suggestions for consideration and/or points requiring clarification. These points are summarized in the table below.

Feedback IESO Response

One stakeholder suggested the proposed process introduces significant complexity that may result in confusion, delay and/or undesirable outcomes. It was recommended to unify and simplify the process for same technology expansions. Consider upgrades and expansions holistically.

The Same Technology Expansions initiative is intended to provide existing contracted facilities which meet mandatory criteria with an expedited and streamlined opportunity to bid-in to provide additional firm capacity within the 2025 timeframe.

Specifically, the IESO envisions an upgrade to be a performance improvement that is done to the existing generation equipment to increase capacity. Proponents interested in pursuing a same-technology upgrade are expected to be provided the opportunity to bid-in to the existing contract an amended contract capacity, payment amount, and, if applicable, term length.

Proponents interested in pursuing sametechnology additions or expansions that are located at the same site as the existing facility are expected to be eligible to participate in the Expedited Process.

Additional guidance with respect to the Same Technology Expansions initiative will be communicated to Stakeholders and prospective proponents in the coming weeks.

One stakeholder submission included the following points for consideration:

- For upgrades that don't fundamentally alter the operating style of the facility, revising existing contracts is possible as the ongoing operating style will continue to match the contract structure.
- For expansions, such as adding a peaker unit to the site of an existing CCGT, revising the contract of the CCGT may not work as the operating style of the new peaker may not match the existing contract structure of the CCGT. Expansions of this nature will need to be metered and operated separately, as well as contracted separately.
- It would be most cost effective to have upgrades and expansions compete to serve the same need (as opposed to competing in two separate procurement mechanisms). However, the challenge will be for the IESO to compare upgrades and expansions on an apples-to-apples basis considering the potential for different contract structures and obligations. Ultimately this may necessitate two separate procurement mechanisms.

Thank you for your feedback. As noted, the IESO is proposing including facility upgrades within the existing contract structure, with an amended contract capacity, payment amount, and, if applicable, term length.

Facility same-technology expansions or additions are expected to be contracted separately and procured through the Expedited Process.

One stakeholder sought clarity on whether "Facility Upgrades" is also meant to capture cases where significant equipment and even foundation replacements are needed.

Facility upgrades refer to upgrades or performance-enhancements to existing generation equipment that would increase the operating capability of the existing contracted facility. Proponents who wish to pursue a facility upgrade or performance-enhancement project through the Same Technology Expansions initiative must be able to complete their facility upgrades within the specified timeframe (i.e., 2025 or as communicated by the IESO)

One submission indicated the LDC would need to discuss eligibility compliance if determined they need to keep current generation capacity on Kingsville distribution station and any new/additional generation capacity needs to go to Leamington (not by choice) as this would require separate metering and subsequent metering plan. We would welcome a direct discussion opportunity with IESO to talk this through as soon as possible.

Thank you for your feedback. Locational considerations for proposals under the Same Technology Expansions initiative will be assessed during the deliverability-assessment phase set to commence in Q3 2022; as such, the outcomes of this assessment will be communicated to proponents with sufficient time to enable them to plan for and implement their upgrade/expansion by the target inservice date (2025).

Further information is provided in the Deliverability Guidance Document posted on the LT1 RFP Website.

What are the interdependencies between the existing contract, any upgrades and on-site expansions that need to be considered?

Stakeholder submissions identified the following interdependencies between the existing contract, any upgrades, and on-site expansions that need to be considered.

Feedback IESO Response

Expansion

Best option to expand the power output of existing greenhouse CHP plants is by adding more engines to the site. For most sites this will also require additional transformer capacity and additional metering to accommodate the increased power output. Identifying key areas where there are 230 KV lines as opposed to 500 KV lines would be efficient a to identify key areas where energy production could occur and more readily tie in.

Thank you for the feedback, the IESO will be providing guidance surrounding deliverability including an updated timeline. Proponents are encouraged to review the IESO's Locational Considerations document, and Deliverability Guidance document.

In Service Date

Generally, the timeline from obtaining CIA approval, to reaching COD is a period of 16-18 months. Allowing for 3 months to obtain CIA/SIA approvals, to meet a May 2025 COD, contracts should be offered by no later than July of 2023.

These timelines generally align with the IESO's anticipated timeline for procurement and contracting under the Same Technology Expansions initiative.

The efficient operation of a facility necessitates that the existing asset and any upgrades and expansions be considered as one system. To parse out these elements is an artificial exercise that cannot be achieved efficiently. Financing considerations for an expansion may require having a new contract for the added equipment. A separate contract would allow the proponent to finance that part of the project individually or as a whole with the rest of the project.

However, there are key areas of overlap between the upgrades and expansions. For instance, any time difference between awarding contracts will delay permitting of the project as proponents won't be able to start permitting process without knowing the totality of the change at site. Additionally, construction for one part could affect the functioning of the rest of the site. These and other issues could make it difficult for proponent to meet May 2025 COD timetable if the whole project is not addressed in the same process.

Recommendation: unify and simplify the process for same technology expansions. Consider upgrades and expansions holistically.

The Same Technology Expansions initiative is intended to provide existing contracted facilities which meet mandatory criteria with an expedited and streamlined opportunity to bid-in to provide additional firm capacity within the 2025 timeframe.

As noted, the IESO is proposing including facility upgrades within the existing contract structure, with an amended contract capacity, payment amount, and, if applicable, term length.

Facility expansions or additions are expected to be contracted separately and procured through the Expedited process.

Additional procurement opportunities (e.g., LT2 RFP) are expected to be available for proponents who are unable to participate in the Same Technology Expansions initiative.

The IESO should clarify the ability of to expand duration, capacity, or both at existing facilities.

The IESO envisions that in order to participate in the Same Technology Expansions initiative, existing facilities must be dispatchable with a minimum of 8 hours of load-following capability.

Any Facility Upgrades/Expansions need to meet revised 2016 Noise Protocols, not previous, outdated protocols/guidelines.

Existing noise/other complaints with the project/proponent need to be evaluated and corrected by the proponent before any project/proponent is eligible for a new contract/extension. This encourages good community-minded behaviour.

Thank you for your feedback. The IESO will require that proponents participating in the Same Technology Expansions initiative adhere to all required protocols and obtain all necessary permits as required for projects of this nature.

As a starting point the following would need to be considered:

- Term length
- Price
- Settlement mechanisms
- Impact to any OM&A compensation under the contract
- Impacts to operating covenants
- Impacts to any project finance arrangements with respect to the existing facility and site
- Supplier estimates of fixed costs
- Risk allocation under existing agreements

Thank you for your feedback. The impacts of these elements will be taken into consideration when finalizing the process for the Same Technology Expansions initiative.

Could the IESO confirm whether same technology expansions deliverable after May 1, 2025, will be considered in the same technology expansion process?

A later in service date may be considered, but this has yet to be determined given the need to expand capacity to meet emerging system needs within the 2025 timeframe.

It appears that IESO's intent is that these proponents would add or upgrade equipment of the same technology for a term length of 10 years (option #2) or, in many cases, shorter (option #1). We do not believe these term lengths offer sufficient time to recover the investment of major equipment additions or replacements/upgrades.

Enbridge appreciates IESO's consideration of existing assets and recommends that IESO also offer existing resources the ability to participate in future long-term RFP processes with 20-year contracts to enable major repowering and/or expansions of existing resources, potentially under LT2 and/or future RFPs. We request clarification on the timing and nature of such RFPs as soon as possible as maintenance and operational decisions are being made now for existing assets with contract expiry dates in the late-20s/early-30s.

The Same Technology Expansions initiative is intended to provide existing contracted facilities which meet mandatory criteria with an expedited and streamlined opportunity to bid-in to provide additional firm capacity within the 2025 timeframe.

As mentioned, additional procurement opportunities (e.g., LT2 RFP) are expected to be provided for proponents who are unable to participate in the Same Technology Expansions initiative.

A clear definition of what is in the existing contract is required and what the upgrade will be. This becomes important in the event that a facility will need to take additional outage time in order to install the uprate. This will add a financial burden to the facility that is attempting to come into service on May 1, 2025. A provision to the current contract could be made to help alleviate the extra unexpected financial burden of the uprate. An approach needs to be determined to identify and track incremental capacity over and beyond the existing contract. This is especially important for Hydroelectric projects as this affects revenues and costs, for example, on the cost front this particularly affects GRC.

Thank you for your feedback. To the extent that additional outage time is required beyond regularly scheduled outages, the IESO intends to propose a mechanism that should address contractual implications related to the calculation of Availability and Contingent Support Payments.

A process will also be developed to track and validate the incremental capacity being procured through the Same Technology Expansions initiative.

On slide 83 the IESO presents options for how it may allow upgrade proponents to bid contract revisions. Both cost and term are reasonable terms to bid along; however, the assessment of competing projects will be tricky. In the case of gas-fired resources, each facility has a different contracted heat-rate, start-up cost, etc. These contract terms greatly impact the expected payments under the contract. Accordingly, when assessing competing upgrades, the IESO cannot simply choose the option with lowest absolute price, it must consider other contracted operating parameters to arrive at the lowest expected payments under the contract. This will be challenging and require the IESO to take a forward view on energy prices.

Thank you for your feedback. The IESO recognizes the challenges of developing a fair and transparent evaluation process for proponents which may have different existing contract terms or structures.

Additional guidance with respect to evaluation parameters under the Same Technology Expansions initiative will be communicated to Stakeholders and prospective proponents in the coming weeks.

A Stakeholder was supportive of the IESO providing proponents optionality regarding term/extensions and we support both optional bid parameters presented by the IESO.

As stated in the stakeholders submission in response to the April 20, 2022 webinar, the existing base contract term needs to align with the term commitment for the incremental capacity. The stakeholder maintains that a minimum commitment to 2035 be considered.

In the case of uprates at existing CCGT facilities, the complexities arise around timing of the next scheduled major maintenance of the unit(s) and OEM lead time for parts. If a resource does not have a major maintenance outage planned prior to the proposed May 1, 2025 inservice date, then the facility owner may be required to take additional outages to install the upgrades outside of its existing planned maintenance schedule. Not only would this increase the cost to implement but, in addition, it would expose contract holders to increased commercial and financial risk. As such, the stakeholder would recommend that should contract holders (i.e. CES style) require an additional outage(s) that is outside of their major maintenance plan (or an outage extension is required) that they be provided relief on the Availability provision in order to install the upgrade components to make the May 1, 2025 proposed in-service date.

The IESO should afford proponents the opportunity to bid in seasonal uprate capability. In addition to installing the upgrade component on the turbines, other enhancements can be made at the facility that could create increased output however only seasonally (i.e. increase summer output only).

Additionally, existing contract holders will require to submit an SIA application for any potential upgrades, which would likely not be submitted until after a contract is awarded. Should the SIA/CIA reveal that the incremental capacity is not feasible (for any reason), a provision needs to be included into the existing contract

Thank you for your feedback. As noted, the IESO is considering providing proponents interested in pursuing a same-technology upgrade with optionality, including the opportunity to bid-into a contract extension to 2035.

Proponents interested in pursuing sametechnology additions or expansions that are located at the same site as the existing facility are expected to be eligible to participate in the Expedited Process.

With respect to outages and availability calculations, to the extent that additional outage time is required beyond regularly scheduled outages, the IESO intends to propose a mechanism that should address contractual implications related to the calculation of Availability and Contingent Support Payments.

Feedback	IESO Response
that allows for the termination of the uprated MWs without penalty to the proponent.	
The stakeholder recognizes that this process is not an opportunity to re-negotiate the existing contract; however, certain terms may need to be reassessed beyond the current term of the contract (for the extension period).	
Upgrades and expansions are likely to be integrated and operated in conjunction with the existing facility such that they may be operated from a shared control room and other costs including operations and maintenance may be shared between the existing facility and the upgrade and/or expansion.	This is permissible, provided the facility has the ability to: - increase the capacity rating of the facility by at least 10%, or 10 MW (if the existing capacity of the facility is greater than 100 MW), with an absolute minimum increase of 1 MW (if the existing capacity of the facility is less than 10 MW).
	and
	- be dispatchable with a minimum of 8 hours of load-following capability
	and
	- be in service by 2025

Are any interdependencies missing/not fully captured?

Stakeholder submissions indicated several interdependencies that were either missing or not fully captured. Dispatchability was mentioned several times. Outage management was referenced in two stakeholder submissions. Another two submission sought clarity on eligibility. These points are summarized in the table below.

Dispatchability:

 Existing projects are automatically dispatched in response to market price or VPP running hours.
 Installations can run uninterrupted for days or weeks, far exceeding the minimum 8-hour energy duration threshold. This would appear to align with the minimum 8-hour duration criteria for participating in the Same Technology Expansions initiative.

Outage management:

- Outage management for the uprate/expansion needs to be defined fully.
- How can proponents participating in the Same Technology Expansions/Uprates procurement be confident that the necessary outages required to install the upgrade components will be approved in order to meet the May 1, 2025 in-service date?
 If an outage were not approved, what would be the consequence of not meeting the in-service date?

Thank you for your feedback. To the extent that additional outage time is required for same-technology upgrade proponents beyond regularly scheduled outages, the IESO intends to propose a mechanism that should address contractual implications related to the calculation of Availability and Contingent Support Payments.

Confirmation required:

 Are projects currently installed behind-the-meter under the Save-on-Energy program eligible for the Same Technology expansions?

 We are not clear whether an expansion that is dependent on the operations of the existing plant with respect to operating resources such as staff, equipment and costs ought to be treated as separate from the existing plant.

Projects currently installed behind-themeter under the Save-on-Energy program would not be eligible for the Same Technology Expansions initiative, as they are not considered an IESO-contracted generation facility which meets the minimum requirements for the initiative. Expansion and Upgrade projects are differentiated based on their integration with the existing generation equipment, and not necessarily by their effect on the facility's operations. Specifically, the IESO considers an upgrade to be a performance improvement that is done to the existing generation equipment to increase capacity.

Any additions or expansions that are not related to the existing generation equipment but located at the same site would be eligible to participate in the Expedited Process.

One stakeholder submission included a recommendation that the same technology expansions should include the ability to add energy storage to provide firm capacity at existing supply resource sites. Proponents considering participating in the Same Technology Expansions Initiative must meet the following criteria:

Operate an existing contracted facilities with a capacity-style contract (\$/MW) in good standing, with the ability to:

- Implement a same-technology upgrade, to increase the capacity rating of the facility by at least 10%, or 10 MW (if the existing capacity of the facility is greater than 100 MW), with an absolute minimum increase of 1 MW (if the existing capacity of the facility is less than 10 MW). and
- be dispatchable with a minimum of 8 hours of load-following capability

and

- be in service by 2025

Through the Same Technology Expansions initiative, the IESO is prioritizing the acquisition of capacitystyle resources which provide longduration load-following capability. Future procurements may focus on the acquisition of energy resources, which may be a better fit for some Proponents and resource-types.

What are the considerations for participating in the Expedited Process or LT1 RFP?

Stakeholder submissions indicated the following considerations for participating in the Expedited Process or LT1 RFP. Some stakeholder submissions indicated concern around timelines, and these points are also summarized in the table below.

Existing projects have operating experience under existing contracts. Highest probability for success of expansion projects is by maintaining a similar compensation structure for the expansion project as what is in place for the existing project. A significant departure from the existing compensation structure may make it difficult to assess the long-term potential and risk of a new contract, which in turn can cause reluctance in pursuing an expansion project.

Thank you for your feedback. The IESO intends to leverage the existing agreement structure for sametechnology upgrades. For on-site additions or expansions, the IESO intends to offer a new agreement consistent with the agreement provided for the Expedited Process.

Recommended contract amendments:

- Align term with expedited RFP (up to 22 years)
- Provide inflation adjustment to monthly capacity charge based on COD of existing project and projected COD of expansion project
- Remove UHO metering/reporting requirements. It is an unnecessary administrative burden that does not produce a meaningful result.
- Allow for self-generation (powering grow lights) during non-dispatch hours
- If VPP, or deemed running model is applied, increase maintenance cost allowance to be aligned with actual maintenance costs
- If VPP deemed running model is applied, include recognition of gas distribution costs and carbon charges in facility operating costs

Thank you for your feedback. The IESO intends to leverage the existing agreement structure for sametechnology upgrades. For on-site additions or expansions, the IESO intends to offer a new agreement consistent with the agreement provided for the Expedited Process.

Ability to achieve COD by the required timelines is the most important distinction between the two processes. As time passes, it becomes increasingly difficult and more expensive to plan a project that can meet the desired outcome. Many components that require significant capital investments have long lead-times that cannot begin until commercial certainty is achieved.

The IESO recognizes the challenges with bringing a project to fruition under tight timelines. IESO will continue to work to move the initiatives forward in an expedited manner.

Feedback	IESO Response
Expected return on and of capital, impact to existing agreements, opportunity costs, project deliverability risks and associated penalties.	Thank you for your feedback. The IESO will take these into consideration.
The IESO should recognize the benefits in contracting for non-emitting vs. fossil fired technologies, and consider evaluating the non-emitting bids from the Expedited Procurement prior to committing to fossil-fueled Same Technology Expansions.	The IESO appreciates the feedback provided. The IESO's acquisition mechanisms are focused on acquiring products and services required to meet emerging system needs, primarily capacity at this point in time. The RFP eligibility is still under development and will be refined as the procurement design is finalized.
Consider the same rated criteria for same technology expansions as with the Expedited Procurement, so that the IESO can compare 'apples-to-apples' on the value from new projects under the expedited procurement (including location and proposed additional criteria for Indigenous economic participation and non-emitting resources).	The IESO is considering how best to evaluate proposals under the Same Technology Expansions initiative, recognizing the nuanced nature of existing IESO agreements, and recognizing the critical role that these will play in meeting system needs beginning in 2025. Additional details regarding the Same Technology Expansions evaluation process will be shared with Stakeholders and prospective proponents in the coming weeks.

The IESO intends to have Same-Technology Expansions participate in the same Deliverability Assessment as the Expedited RFP. Does the IESO intend to assess projects from both procurements against one another? How will the IESO establish priority amongst projects deemed to be "Deliverable but Competing" considering the "competing" portion is intended to occur during the RFP stage which Same Technology Expansions won't be participating in.

The IESO should only assess the deliverability of Same-Technology Expansions against competing Same-Technology Expansions. These projects should be given priority over any Expedited RFP project competing for interconnection due to the relative certainty that an expansion can deliver on the May 2025 COD deadline. This will help ensure the IESO is allocating interconnection to the projects that it can most confidently rely on.

With respect to the question of whether Same Technology Expansions should be participating in the Expedited and LT RFP, the IESO should proceed with the separate procurement mechanism as planned.

Upgrades and expansions will be the most reliable option for meeting the 2025 capacity need, and thus their procurement should not be delayed to the LT RFP with 2027 deliverability.

Furthermore, as outlined in the answer to a previous question, the contract design proposed for the Expedited and LT RFPs is not conducive to a resource with a dynamic marginal cost, such as gas.

Furthermore, the contract term offered to an upgrade or expansion needs to match the contract term of the existing asset as those facilities will share land, staff, BOP costs, etc. In the case of existing gas resources, many are scheduled to come off contract around 2030, whereas contracts awarded through either the Expedited or LT RFPs will expire in 2047. The IESO would need to extend

Thank you for your feedback regarding deliverability. The IESO intends to give priority to same-technology upgrade proposals deemed 'deliverable but competing'.

As noted, Proponents interested in pursuing a same-technology upgrade are expected to be provided the opportunity to bid-in to the existing contract an amended contract capacity, payment amount, and, if applicable, term length.

Facility expansions or additions will be contracted separately and procured through the Expedited process.

Additional guidance with respect to the Same Technology Expansions initiative will be communicated to Stakeholders and prospective proponents in the coming weeks.

Feedback IESO Response the term on existing contracts out to 2047, something that seems imprudent for gas resources in particular. A stakeholder is concerned about the timelines for the The IESO's past experiences have shown expedited process and continues to recommend that the that having a pre-qualification stage to a IESO forgo an RFQ stage to speed up the procurement, procurement ensures a more efficient permitting and construction process. process in a number of ways: • It focuses the overall engagement process and the design discussion of the RFP and contract. • It ensures downstream processes (deliverability, CIA and SIA, etc.) are limited to qualified proponents, ensuring the IESO, transmitters and LDCs are in a better position to manage the volume within the proposed schedule. • The proposal evaluation process will be more efficient as higher quality proposals will come forward and the evaluation can be narrowed to fewer criteria. Impacted third parties (municipalities, indigenous communities, ministries, LDCs) can prioritize and focus their processes on those who are qualified.

What other key considerations/risks need to be included to help ensure this initiative is successful?

The following table summarizes the additional key considerations/risks identified via stakeholder submissions.

Feedback	IESO Response
If natural gas cogeneration projects are supported, confirmation and commitment from all levels of government is necessary, and explicitly stated that they support further leveraging of NG resources. Although natural gas is the only feasible way to create this amount of energy in an agriculture setting, any awarded recipients should be responsible to provide a plan indicating steps taken to approach operating under net zero (or as close to).	Thank you for the suggestion, we will take that into consideration as we define the RFP materials.
Simplicity, clarity and commercial certainty are essential to achieve the desired outcomes. If the process becomes too complicated or contracts are awarded beyond Q4 2022, it will be very difficult to meet the IESO's timeline for additional capacity.	Thank you for your feedback. The IESO understands the concerns and risks associated with extended timelines, and expects to move forward expeditiously pending Government direction.
Existing projects have operating experience under existing contracts. Highest probability for success of expansion projects is by maintaining a similar compensation structure for the expansion project as what is in place for the existing project. A significant departure from the existing compensation structure may make it difficult to assess the long-term potential and risk of a new contract, which in turn can cause reluctance in pursuing an expansion project.	Thank you for your feedback. The IESO intends to leverage the existing agreement structure for sametechnology upgrades. For sametechnology additions and expansions, the IESO intends to offer a new agreement consistent with the agreement provided for the Expedited Process.

Only those facilities/operators who have met ALL existing REA requirements, e.g. noise emission testing should be allowed to apply. This may hasten the tying-up of loose ends and resolving of ongoing problems at existing project locations.

If the excuse is that the existing project cannot meet its requirement for 95% of capacity before testing occurs, maybe there is insufficient wind to expand the facility.

Thank you for your feedback. The IESO will require that proponents participating in the Same Technology Expansions initiative adhere to all required protocols and obtain all necessary permits as required for projects of this nature.

Furthermore, only facilities which meet the minimum requirements (e.g., 8 hours of dispatchable load-following capability) will be considered under the Same Technology Expansions initiative.

A stakeholder strongly encouraged the IESO to address opportunities and potential to expand and upgrade existing facilities directly with existing suppliers. These are confidential commercial arrangements that are existing and binding today. It is neither appropriate nor realistic to expect an open discussion of their terms, obligations, and remedies as part of a broader public stakeholder engagement process.

The IESO will continue to uphold confidentiality and does not plan to engage publicly on commercially sensitive or confidential agreement terms.

As the IESO has proposed an incentive to meet the May 1, 2025 in-service date under the Expedited RFP process, a stakeholder suggested that the same incentive should be afforded under the Same Technology Expansions procurement. As mentioned above, existing generators may be required to take additional outages that are not in their major maintenance plan in order to install the upgrade components to meet the May 1, 2025 in-service date, in which case these added outages would increase the cost to implement and expose contract holders to increased commercial and financial risk.

Thank you for your feedback. We will consider incentives or penalties which appropriately balance risks and supports on-time achievement of commercial operation.

To the extent that additional outage time is required beyond regularly scheduled outages, the IESO intends to propose a mechanism that should address contractual implications related to the calculation of Availability and Contingent Support Payments.

The current proposal outlined for this initiative is limited to upgrades or expansions to existing resources that provide firm capacity to the system. Only existing gasfired generators would likely qualify based on this limitation. Such an expansion would run counter to the Minister of Energy's directive to explore a moratorium on new natural gas generation, and federal and provincial climate goals more broadly.

At minimum, if pursued, any efforts targeted at expanding capacity at existing facilities should not be restricted to firm capacity to ensure that multiple resources can participate in this initiative.

Thank you for that feedback. Given the emerging system needs forecasted to begin in 2025-26, minimum criteria for this initiative has been set to ensure that system reliability can be maintained. The RFP eligibility is still under development and will be refined as the procurement design is finalized.

Project proponents need a reasonable timeline and lead time to participate in this initiative. We are concerned that the timelines that the IESO is seeking to qualify proponents is too short and occurring concurrently with the development of the program. This is very rushed, confusing, and serves to increase risk for interested project proponents.

Thank you for your feedback. The IESO understands the concerns and risks associated with extended timelines, and expects to move forward expeditiously pending Government direction.

Additional guidance with respect to the initiative is expected to be communicated to Stakeholders and prospective proponents in the coming weeks.

Additional Acquisition Mechanisms: Forward Capacity Auction

Is expanding eligibility to variable generation, self-scheduling and co-located hybrid facilities in the FCA and ACA a priority for stakeholders?

Four stakeholder submissions indicated that expanding eligibility to variable generation, self-scheduling and co-located hybrid facilities in the FCA and ACA is a priority for stakeholders. Two stakeholder submissions indicated it's not a priority, and several submissions included qualifying points. These points are summarized in the table below.

Feedback	IESO Response
Yes, as long as it's economic for both sides and contract requirements are being met.	Thank you for the feedback.
One stakeholder submission indicated a need to ensure you can keep and utilize your current IESO meter for new generation.	Thank you the feedback, the IESO will take this into consideration.
One stakeholder noted that while they support expanding opportunities for hybrid facilities, they are unconvinced that an expanded capacity auction approach would lead to more cost-effective outcome relative to an RFP/contract approach for the acquisition of required resources.	Thank you for your feedback. The IESO will consider this feedback as decisions relating to enabling variable generation and co-located hybrids in the Capacity Auction are made.
Other stakeholders suggested the forward capacity auction is not an attractive procurement mechanism for variable generation or co-located hybrid facilities. The contract length is too short to provide revenue certainty for new investments.	

What other design features should be considered to increase the attractiveness of a Forward Capacity Auction as part of IESO's suite of acquisition mechanisms?

Two stakeholder submissions noted other design features for consideration. These points are included in the table below.

Feedback	IESO Response
One stakeholder suggested a performance incentive framework could increase the attractiveness of the FCA and as part of the IESO suite of acquisition mechanisms.	Thank you for the feedback, the IESO will a take performance incentive framework into consideration.
One stakeholder submission indicated a need to ensure you can keep and utilize your current IESO meter for new generation.	Thank you for the feedback, the IESO will a take this need into consideration.

General Comments/Feedback

Feedback	IESO Response
While the IESO has confirmed that the Foundational model for Hybrids will be available for the LT 1 RFP, the IESO should also confirm that hybrids will be eligible as part of the Expedited Procurement as well.	All resources that are fully dispatchable, able to inject for a minimum of 4 continuous hours during the availability window, and can become market participants, are eligible to participate in the LT1 RFP and Expedited Process.

If an existing Wind project has the capacity to deliver additional energy to the system, i.e. the turbines are rated at 4.2MW but for an existing project they are operating at 3.45MW under Noise Reduction Mode 2, could they apply to deliver additional electricity to the grid, without revisiting noise requirements/ incurring additional environmental assessments? Would they be required to use the 2016 Revised Noise Protocols??

If REA conditions have not been met, i.e. noise emission/ imission testing is still outstanding, or complaints have not been addressed, the proponent/ contractor should not be allowed to apply for a new contract or expansion. Past performance is the best indicator of future performance. The role of the IESO in this procurement is to procure the products and services required to reliably operate Ontario's electricity grid. Permitting requirements for a particular project may be resource or location specific. As such, the IESO will not be outlining permitting requirements that may be applicable to a given project as part of the procurement process. The IESO expects all proponents to familiarize themselves with the permitting requirements and timelines that may be applicable to their resource type and project location prior to submitting a proposal.

The IESO should clarify how any federal funding will factor into these procurements. With the potential for significant financial support for non-emitting projects, the IESO should consider how this will impact the competitive nature of the procurement. Other jurisdictions can serve as an example for possible approaches.

The role of the IESO in this procurement is to procure the products and services required to reliably operate Ontario's electricity grid. It is not anticipated at this time that the procurements will require evidence on what financing arrangements are proposed for a given project.

Project Evolution - The consultation and procurement are exceptionally fast-moving with companies actively engaged in development as well as acquisition and partnership discussions. The IESO should allow the maximum flexibility possible to allow these discussions to continue until the RFP bid dates. Project descriptions will also need to evolve, even for the expedited RFP, in response to the deliverability assessments as well as in response to the final RFP (mandatory and evaluated criteria) and form of contract (pricing/revenue mechanism).

Applicants are encouraged to include as much information as possible on potential projects they would like to pursue in the LT1 RFP or Expedited Process. The IESO is considering permitting certain options or alternatives in respect of Nameplate Capacity and Connection Point for projects under the Expedited Process in order to facilitate deliverability assessment.

Projects will be required to identify their effective capacity without the benefit of operating experience and without final contract details on operability and penalties. This is another reason to allow projects to evolve the project descriptions between RFQ and RFP for the expedited process.

Applicants are encouraged to include as much information as possible on potential projects they would like to pursue in the LT1 RFP or Expedited Process. The IESO is considering permitting certain options or alternatives in respect of Nameplate Capacity and Connection Point for projects under the Expedited Process in order to facilitate deliverability assessment.

While the IESO has indicated a desire to remain technology agnostic, it may be more appropriate to ensure that the unique considerations of each technology be considered in procurement design. One approach could be to develop a specific RFP for energy storage and hybrids recognizing these technologies are likely to be most developed in the future.

The IESO will not be developing a separate RFP that is specific to energy storage and hybrids. Based on feedback received to date the IESO has decided to move forward with a capacity style contract. A separate capacity style contract will be developed for energy storage resources.

Where is the place for nuclear energy to apply for these proposals/ contracts?

The LT1 RFP and expedited process are procuring capacity resources for in service dates of 2027 and 2025 respectively.

This short forward period may be difficult for some technologies to meet the requirements of this procurement.

The IESO will continue to engage with stakeholders on future RFP opportunities.

Feedback IESO Response It appears that unsolicited proposals have not been Review of unsolicited proposals is included in these mechanisms - are they included in the undertaken in accordance with the IESO target capacity and will it be adjusted going forward? and Ministry of Energy's Unsolicited Proposal Assessment Process. Potential capacity associated with proposals under review through this framework are not included in the Annual Planning Outlook, nor will they be counted towards the capacity targets set out for the competitive procurements underway or planned. One stakeholder requested confirmation that the Hybrid All resources that are fully dispatchable, Integration Project model will be able to participate in the able to inject for a minimum of 4 LT RFP. continuous hours during the availability window, and can become market participants are eligible to participate in the LT1 RFP and Expedited Process.