SAME TECHNOLOGY UPGRADES SOLICITATION – CALL FOR SUBMISSIONS v4

Heading	Provisions	
1. Purpos Backgr	(a)	After more than a decade of strong supply, Ontario is entering a period of emerging electricity system needs, driven by increasing demand, the retirement of the Pickering nuclear plant, the refurbishment of other nuclear generating units, as well as expiring contracts for existing facilities. Recognizing the necessity to address these needs in a timely, cost- effective and flexible manner, the IESO has engaged with stakeholders in the development of a Resource Adequacy Framework. As Ontario's electricity system evolves to become more diverse and dynamic, procurement processes must evolve along with it.
	(b)	To address these needs, the IESO is seeking to competitively secure 4,000 MW of capacity through the first Long-Term Request for Proposals ("LT1 RFP"), complementary expedited procurement process "the Expedited Process" ("E-LT1 RFP"), and this Same Technology Upgrades Solicitation. The 2022 Annual Acquisition Report ("AAR") and the Resource Eligibility Interim Report describe these mechanisms and needs in more detail.
	(c)	It is expected that upgrades and efficiency improvements to existing contracted facilities should provide for timeliest and most cost-effective capacity increases to the electricity system. Therefore, the Same Technology Upgrades Solicitation is a targeted call for new cost-effective capacity upgrades from existing contracted facilities to meet system needs in a timely manner. The



	 streamlined process aims to incent additional output from dispatchable resources that can deliver a continuous amount of electricity for at least eight consecutive hours, and is expected to be in service between January 1, 2025 and May 1, 2025 and in any case no later than May 1, 2026. (d) The IESO will administer a process to enable Suppliers of Eligible Facilities to propose increases to their facility's capacity through this Same Technology Upgrades Solicitation.
2. Overview of Same Technology Upgrades Solicitation	(a) Suppliers will be invited to make submissions to the IESO to increase the capacity of their facility (a " Submission ") by means of a Permitted Upgrade (as defined in Section 3). The IESO intends to engage with Suppliers whose Submissions satisfy the eligibility criteria and for which the IESO has determined to be worth pursuing, in its sole discretion. The factors that will be considered by the IESO in deciding whether to pursue a Submission are set out below.
	(b) This call for Same Technology Upgrade submissions is not a formal procurement and does not constitute a request for proposals or tender process. However, the Submission is not an invitation for a bilateral negotiation and Suppliers are expected to submit parameters, as further described in Section 4, on the basis that they are able to contractually commit to those parameters.
3. Permitted Upgrades	(a) Only those upgrades which are permitted in accordance with the terms of this Call for Submissions will be eligible to be proposed through the Same Technology Solicitation (a " Permitted Upgrade "). A Permitted Upgrade means an upgrade to the existing contracted facility which:
	(i) uses substantially the same technology and fuel type as the existing facility or the addition of auxiliary balance of plant equipment, and that does not involve the installation of new generating equipment except where such new generating equipment is a replacement or upgrade of existing generating equipment. Where it is technically possible to separately meter the modifications, it will not generally be considered a Permitted Upgrade. For clarity, a Permitted Upgrade must be incremental to both the existing Contract Capacity and any existing uncontracted capacity;

		 (ii) is at the same connection point(s) as the existing contract facility, which should be unchanged from the existing connection point unless the connecting authority requires the existing facility's connection point to be changed to accommodate the Permitted Upgrade;
		(iii) will be dispatchable with load-following capability for a minimum of eight hours; and
		(iv) is expected to have an in-service date between January 1, 2025 and May 1, 2025, and must be in service no later than May 1, 2026.
	(b)	Other submissions that increase capacity that are not Permitted Upgrades, such as the installation of new generating equipment or improvements that would necessitate a new metering or connection point may be eligible in the E-LT1 RFP or the LT1 RFP.
4. Submissions	(a)	Each Submission should:
		(i) Provide an increase to the applicable Contract Capacities (the " Uprate Capacity ") by way of the Permitted Upgrade. The Submission should include a narrative description of the proposed upgrade, including a description of how the upgrade is a Permitted Upgrade and how it will achieve the Uprate Capacity for the Facility within the timeframe as described in Section 3(a)(iv). As well, the Submission should provide details regarding any new equipment, its impact on Facility capability, OEM quotes, feasibility studies, and technical drawings. Along with the evaluation criteria outlined in Section 6, the IESO will review the Submission from a technical feasibility perspective;
		 (ii) specify the Net Revenue Requirement (NRR) (in 2025 \$/MW-month) that the Supplier is seeking to recover the cost of completing the Permitted Upgrade (the "Upgrade NRR")¹. From and after the completion of the Permitted Upgrade, (1) the NRR in the applicable contract shall be adjusted to the average of the Upgrade NRR and the existing NRR, weighted based on the existing Contract Capacity and the Uprate Capacity, and

¹ Although NRR is used throughout this document, for contracts that provide for a different type of capacity payment, the Submission should specify that amount, in 2025 \$/MW-month.

	(2) the Contract Capacity shall be increased to account
	for the Uprate Capacity;
(ii	 i) provide, on an open-book basis, the derivation of the Upgrade NRR. This should be in the form of a financial model which outlines the Supplier's assumptions for project cost, revenues, financing, amortization, taxation, return on investment, etc., as well as documentation to substantiate these assumptions. It is the IESO's expectation that Suppliers will work with their vendors or suppliers to enable the information requested by the IESO to be provided on a confidential basis for the purposes of substantiating the Upgrade NRR proposal(s);
(iv	 provide a work-back schedule to design, permit, construct and commission the Permitted Upgrade, with critical-path items, including new and planned outages, and major milestones;
(v) provide a description of all major equipment purchases required to implement the Permitted Upgrade, highlighting items with long lead times;
(v	i) provide a description of any required changes to interconnection equipment;
(\	ii) provide a description of key risks associated with implementing the Permitted Upgrade and proposed mitigation approaches;
(v	iii) provide a summary of the funding sources to be leveraged in implementing the Permitted Upgrade;
(i)	(*) provide a description of the anticipated timing, duration and number of outages incremental to existing planned outages required to complete the Permitted Upgrade, including the incremental work intended to be performed in each outage, as well as the duration (in hours) of requested relief (if any) from the Availability calculation in the existing contract;
(x) indicate the proposed in-service date, between January 1, 2025 and May 1, 2025

	 (xi) for contracts where gas delivery and management costs are fully or partially to the IESO's account, provide such incremental costs on an open book basis; and (xii) provide any other details that the Supplier believes the IESO should consider in its assessment of the Submission.
	(b) Submissions in respect of Facilities with contracts expiring on or before December 31, 2032 may include an alternative proposal (the " Extension Alternative ") where the contract term expiry is extended to April 30, 2035, including the applicable NRR that would apply (the " Alternative NRR "). In the case of an Extension Alternative, the Alternative NRR would be applicable from the completion of the Permitted Upgrade until the end of the term, as extended. For clarity, this would replace the existing NRR rather than be blended with the existing NRR. An Extension Alternative may be in addition to or in lieu of a submission for the balance of the existing contract term, provided that where it is in lieu of a submission for the balance of the existing contract term, all of the other information listed in Section 4(a) other than the Upgrade NRR in 4 (a) (ii) is provided.
	The IESO confirms that any Submissions or Extension Alternatives will be maintained subject to and in accordance with the relevant provisions of the existing contract relating to Confidential Information.
5. Eligibility Criteria	(a) Each Submission should be in respect of a facility ("Eligible Facility ") that:
	 (i) is the subject of a contract in good standing with the IESO, from one of the following initiatives: CES, ACES, PGC, EMCES, CHP I, CHPSOP I and II, Phase II ESA, and NUG;
	(ii) has participated in a Deliverability Assessment for the Uprate Capacity and receives a designation as either "deliverable" or "deliverable but competing"; and
	(iii) has not been the subject of an offer of a contract by the IESO or any other governmental authority in the preceding 24-months.

6.	Evaluation	(a)	In d	deciding whether a Submission is worth pursuing, the
		• •		O may consider, without limitation, the following factors:
			(i)	whether the costs submitted are reasonable and the extent to which the Upgrade NRR and/or contract extension and Alternative NRR provides for ratepayer value;
			(ii)	the duration of Availability relief requested in Section $4(a)(ix);$
			(iii)	the extent to which the requested outages could affect system reliability;
			(iv)	the size of the Uprate Capacity offered. The following is provided as guidance to inform of the IESO's expectations for an upgrade worth pursuing under this initiative:
				• 1 MW for an Eligible Facility with an Annual Average Contract Capacity of less than 10 MW,
				• 10% of Contract Capacity for an Eligible Facility with an Annual Average Contract Capacity between 10 MW and 250 MW, and
				• 25 MW for an Eligible Facility with an Annual Average Contract Capacity greater than 250 MW;
			(v)	the extent to which the Uprate Capacity is available during the following periods (from most preferred to least preferred): (A) both summer and winter peaks, (B) primarily during summer peaks, and (C) primarily during winter peaks;
			(vi)	the degree of IESO resources (effort and cost) that will be required to finalize a contract amendment, taking into account the amount of additional capacity that would be secured;
			(vii)	the level of risk associated with the Permitted Upgrade and the risk of not being in-service by May 1, 2025 or May 1, 2026;
			(viii) whether the proposed upgrade would have the effect of reducing the overall heat rate (i.e. increasing the efficiency) of the facility; and

	(iv) such other factors as the IECO considers in its sale
	(ix) such other factors as the IESO considers, in its sole discretion, to be relevant.
	(b) The IESO may engage on a bilateral basis with any Suppliers that have made a Submission to better understand the particulars of the submission, including how it aligns (or could be amended to better align) with the IESO's priorities, and such other matters as the IESO considers relevant.
7. Submission Review Process	The IESO will undertake a two-stage review process, which will culminate in the commencement of bilateral Contract Amendments.
	 (a) Stage 1 – Eligibility Review – a Submission will be assessed against the Eligibility Criteria outlined in Section 5.
	(b) Stage 2 – Determination of whether to Pursue a Submission: Taking into account the IESO's priorities for this initiative, the IESO will determine whether to further pursue a Submission, including any Extension Alternative.
	While a Submission is in Stage 2, any capacity attributed to that Submission in the Deliverability Assessment will be held pending the completion of Stage 2. Where multiple Submissions that are "deliverable but competing" and compete with one another proceed to Stage 2, the criteria identified in Section 6 for the purpose of evaluating Submissions will be used to decide which Submission will have priority.
8. Contracting Process	(a) Submissions which pass Stage 2 shall be deemed to be a "Selected Submission", and the Supplier and the IESO shall enter into a contract amendment (the "Uprate Amendment") as follows:
	(i) For each Submission (other than in respect of an Extension Alternative) that the IESO elects to pursue, the Uprate Amendment shall provide for an increase to the Contract Capacity in each Season (or other period) by the Uprate Capacity and for the existing NRR to be blended with the Upgrade NRR, effective from Uprate In-Service for the remainder of the contract term.
	(ii) For each Extension Alternative the IESO elects to pursue, the Uprate Amendment shall provide for an increase to the Contract Capacity in each Season (or other period) by the Uprate Capacity, an extension to

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	the term to April 30, 2035, and for the existing NRR to be replaced by the Alternative NRR, effective from Uprate In-Service for the remainder of the contract term, as extended.
	(iii) Upon execution of the Uprate Amendment, the Supplier shall be required to increase the amount of Completion and Performance Security by an amount equal to \$[40,000] per MW of Uprate Capacity (the "Uprate Security"). The Uprate Security must be in the form of Completion and Performance Security required under the particular contract prior to Commercial Operation (typically a letter of credit). Following Uprate In-Service, the amount of Uprate Security is reduced to \$[20,000] per MW of Uprate Capacity, and will be blended with the existing Completion and Performance Security (and as such, may be in any form of Completion and Performance Security that is permitted following Commercial Operation). ²
	(iv) The Uprate Amendment will revise Exhibit A to include a summary of the Permitted Upgrade. The Supplier will be required to complete the Permitted Upgrade and (A) pass a Capacity Check Test demonstrating that the Uprate Capacity has been successfully achieved, and is incremental to existing contract and merchant capacity and (B) provide a certificate from an Independent Engineer confirming the Permitted Upgrade has been completed and received its Final Registration Authorization Notice (RAN) (" Uprate In-Service "), by no later than May 1, 2025. If Uprate In-Service has not been achieved by May 1, 2025, but is achieved by May 1, 2026, the sole consequence to the Supplier will be the corresponding delay before the increased monthly payments apply. If Uprate In-Service has not been achieved by May 1, 2026, the Supplier will forfeit the Uprate Security as the IESO's sole remedy for this failure, and the Uprate Amendment will be unwound.
	(v) The dates set forth in Section 8(a)(iv) shall be subject to extension by up to one year for events of Force Majeure, after which either party may terminate the

² For contracts that do not provide for post-Commercial Operation Completion and Performance Security, the Uprate Security will be standalone security, and up to 90% of the amount can be provided in the form of a parent company guarantee from a sufficiently creditworthy entity (as set forth in the standard CES contract language).

	Uprate Amendment and the Uprate Security shall be returned.
	(vi) The Uprate Amendment will provide for any required amendments to the Test Protocol, Capacity Check Test parameters, and Metering Plan to account for the implementation of the Uprate Capacity.
	(vii) The Uprate Amendment will also provide for the exclusion from the Availability calculation of the duration of Outage taken to complete the Permitted Upgrade, up to the maximum amount requested in Section 4(a)(iv) (or as otherwise agreed).
	No other amendments to existing contractual terms or obligations are anticipated, except as expressly provided for in this document.
9. Milestone Dates	Solicitation Phase:
	(a) Deliverability Assessment Submission Deadline: August 30, 2022
	(b) Draft Outline Document Posted: September 2, 2022
	(c) 2nd Draft Outline Document Posted: September 26, 2022
	(d) 3rd Draft Outline Document Posted: October 17, 2022
	(e) 4th Draft Outline Document Posted: November 1, 2022
	(f) Deliverability Test Results: November 30, 2022
	(g) Deadline for Final Call Document Posting, and Beginning of Acceptance of Submissions: December 5, 2022
	(h) Submission Deadline: December 20, 2022
	(i) Selected Submission Notification: [January 31, 2023]
	Uprate Amendment Phase:
	(j) Commencement of Uprate Amendment Phase: [February 15, 2023]
	(k) Conclusion of Uprate Amendment Phase: [March 31, 2023]

"Alternative NRR" has the meaning given to in Section 4(b) of this document
"Eligible Facility" has the meaning given to it in Section 5(a) of this document.
"Extension Alternative" has the meaning given to it in Section 4(b) of this document
"Permitted Upgrade" has the meaning given to it in Section 3(a) of this document
"Selected Submission" has the meaning given to it in Section 8(a) of this document
"Submission" has the meaning given to it in Section 2(a) of this document
"Upgrade NRR" has the meaning given to it in Section 4(a)(ii) of this document
"Uprate Capacity" has the meaning given to it in Section 4(a)(i) of this document
"Uprate In-Service" has the meaning to it given in Section 8(a) (iv)