

This document was originally posted on October 1, 2020 and will be updated as additional questions and answers are available. New questions and responses are indicated in blue text.

Updated: October 27, 2020

FREQUENTLY ASKED QUESTIONS (FAQ)

Competition

1. Can the LSSi competition REOI and RFP proposal deadlines be extended?

The expected dates for competition stages are identified in the LSSi Request for Expressions of Interest (REOI) document found on the AESO's LSSi procurement webpage [here](#). The REOI forms and the RFP proposal submission dates have been selected to support the January 1, 2022 Import Load Shed Agreement (ILSA) service period commencement.

2. Do I need to submit an EOI Form in order to participate in the RFP stage of the LSSi procurement competition?

No, submitting an Expression of Interest (EOI) Form is not a prerequisite to participate in the Request for Proposals (RFP) stage of the LSSi procurement competition. During the REOI stage, the AESO is gauging interest and seeking information and feedback and may use the information provided to refine elements of the LSSi competition.

3. How do we communicate with the AESO regarding the LSSi procurement competition?

Prior to the RFP stage of the LSSi competition opening on October 28, 2020, interested parties are required to communicate with the AESO by sending an email to LSSi@aeso.ca. To maintain the integrity of the competition, once the RFP stage opens and the RFP document has been posted, proponents will be required to communicate with the AESO through a Bonfire procurement site utilizing the appropriate communication protocol, as will be outlined in the RFP document.

4. What are the next steps for the competition?

The EOI Form Submission, and if applicable, ILSA Key Provision Feedback Form, is due on October 7, 2020 at 3:30 p.m. MDT. After October 7, 2020, the registration process for Bonfire will open, which will be the procurement site used for the RFP stage of the LSSi competition. The RFP stage of the competition is targeted to open on October 28, 2020, at which time the RFP, including a draft of the Import Load Shed Agreement (ILSA), will be posted to the Bonfire site. The RFP stage Proposal(s) are due on December 10, 2020 at 3:30 p.m. MST. Further detail will be provided in the RFP document which will be available through the Bonfire procurement site once the RFP stage opens. Any further updates to the competition will be posted on the AESO website [here](#).

5. When do I need to access and use the Bonfire procurement site and how can I do that?

The RFP stage is planned to open on October 28, 2020 and will be managed through a procurement site called Bonfire (“Bonfire Site”), which can be accessed using a web browser. Interested parties wishing to participate in the RFP will need to obtain access to the Bonfire Site to view the RFP documents.

To obtain access to the Bonfire Site, interested parties will need to register and execute an access agreement. The registration process for the Bonfire Site will open after the REOI submission deadline of October 7, 2020 and the access agreement will be made available to interested parties. Further information regarding accessing and using the Bonfire Site will be posted on the AESO’s LSSi Procurement Page [here](#). During the REOI stage, any further questions can be directed to LSSi@aeso.ca.

6. What changes have been made as compared to the previous ILSA?

The AESO hosted an information session on September 23, 2020, where some of the proposed changes were highlighted. Please note that this was not a comprehensive list. The information session presentation slides and recording are available [here](#) and [here](#). All interested parties are encouraged to review the Import Load Shed Agreement (ILSA) Key Provisions and the LSSi Eligibility and Requirements for further detail, both of which are included in the REOI. Feedback on these documents can be provided during the REOI stage using the Expression of Interest Form.

A draft ILSA will be provided when the RFP stage opens on October 28, 2020 and proponents are invited to provide comments through the Draft ILSA Feedback Form by November 12, 2020. The final ILSA will be provided to proponents on November 26, 2020.

7. How will the AESO select the successful proponents in the LSSi competition?

In the RFP stage, the evaluation criteria will be provided and a fair and transparent evaluation process will be conducted to select the proponent’s proposal(s) that meet all eligibility criteria based on lowest bid prices, subject to the terms of the RFP. The selected proponents will enter into an ILSA with the AESO.

8. Will the AESO provide historical LSSi available, armed and trip data?

The AESO has posted historical aggregated hourly data on available, armed and tripped volumes of LSSi from the period of January 2013 to August 2020 [here](#). For further information on data requests, please see the data request page on the AESO website [here](#).

9. How many LSSi trip events have occurred historically?

During the entire Load Shed Service for imports service period (January 1, 2012 through to the September 23, 2020 information session), there have been four trip events and these occurred in 2012, 2013, 2015 and 2020.

Payment Mechanism

10. Will the AESO entertain different commercial terms for the import load shed agreement?

The AESO included the proposed key provisions in the REOI as Appendix A Import Load Shed Agreement (ILSA) Key Provisions. Should any interested parties have feedback on the ILSA Key

Provisions, please submit an ILSA Key Provisions Feedback Form which can be found on the AESO's website. Further instructions are contained in the REOI document. Note that a draft ILSA will be provided when the RFP stage opens and proponents will be able to provide feedback on it using the Draft ILSA Feedback Form.

11. How was the Trip price set for LSSi?

The Trip price for LSSi has been set to align with the energy market price ceiling.

Eligibility Requirements

12. Can Distribution connected loads participate in the LSSi competition?

Provided the facility's load meets all eligibility requirements outlined in the LSSi Eligibility and Requirements, distribution connected loads can participate in the LSSi competition. A draft of the LSSi Eligibility and Requirements has been included in the REOI as Appendix C.

13. Are loads located in Medicine Hat eligible to participate in the LSSi competition?

Provided the facility's load meets all eligibility requirements outlined in the LSSi Eligibility and Requirements, loads connected to the City of Medicine Hat's electrical system can participate in the LSSi competition. A draft of the LSSi Eligibility and Requirements has been included in the REOI as Appendix C.

Technical Requirements

14. How will the arming merit order be set?

For proponents awarded ILSAs during the LSSi competition, the arming merit order will be set from the lowest arming priced volumes to the highest arming priced volumes. When arming is necessary, Service Providers will be dispatched based on the merit order of the available volumes.

15. What is SCADA used for in the context of LSSi?

SCADA is the primary communication means for service providers to submit offers, communicate with the AESO, and receive dispatches and directives. SCADA data is also used for both compliance assessment to the terms of the Import Load Shed Agreement and the LSSi Eligibility and Requirements as well as for settlement.

16. Under what conditions would the AESO send a SCADA Trip Signal to a Facility?

Use of the SCADA Trip Signal is an infrequent occurrence historically and all such events are included in the number of trip events specified stated in FAQ question number 9 above. If the System Controller is required to shed load after a trip of the intertie and the frequency of the system did not reach the frequency of 59.5 Hz, the System Controller can send a trip signal via SCADA to armed LSSi provider(s) and the armed volume must trip within ten (10) minutes.

INTERESTED PARTY QUESTIONS AND ANSWERS

17. Do any facilities that have already been tested in the past need to be tested again?

All proponents that are successful in the RFP stage and that are awarded an ILSA, must complete testing and submit a certification report by October 1, 2021. Further details regarding testing and certification report requirements are included in the LSSi Eligibility and Requirements as Appendix C of the REOI.

18. Can battery energy storage participate?

No, the current competition is for Load Shed Service for imports only. Please stay tuned to communications from the AESO's energy storage road map as there will be further updates regarding new technology and potential eligibility to provide fast frequency response.

19. Will there still be an availability factor included in the availability payment (as it was in the current iteration of LSSi)?

For context, the Availability Factor was an adjustment factor in the current iteration of the LSSi payment mechanism and it was calculated by dividing the actual volume by the contract volume. The AESO has removed the Availability Factor in the proposed ILSA Key Provisions included in the REOI. Please refer to the ILSA Key Provisions for further detail on the proposed payment mechanism.

20. Can a Service Provider arm the load shed to trip a portion of plant load when a trip is required?

A Service Provider can offer a portion of their load, up to and including their contract volume. The armed volume is based on the load made available by the Service Provider. When armed, the Service Provider must trip the entire armed volume. For clarity, the armed volume may be a portion of a facility's load configured as a part of the LSSi scheme. For more information, please refer to the ILSA Key Provisions and LSSi Eligibility and Requirements which are included with the REOI. Further detail will be provided in the Import Load Shed Agreement during the RFP stage.

21. For aggregators - is the list of facilities included in the RFP/REOI forms final? Or can facilities be added/subtracted post-RFP?

The information presented to the AESO in the REOI forms is for information purposes and is non-binding. The facility information submitted in each proposal during the RFP stage will be evaluated and will determine the facilities in the Import Load Shed Agreement. The AESO is not proposing to allow the addition or subtraction of one or more facilities by a proponent after submission of the RFP proposal. Further detail regarding any material modification to facilities will be provided in the ILSA during the RFP stage.

22. If the plant is down, but still has a load below 5 MW can that load be offered in or should the offers go to zero?

Offers to make volume available for LSSi can be made by a Service Provider at any level up to and including the contract volume. Please refer also to the Minimum Offer Requirement which is included in the ILSA Key Provisions.

23. Is the MAG (minimum arming guarantee) coming back?

For context, the Minimum Offer Guarantee (MAG) was a component of the payment mechanism in historical agreements prior to that used in the 2018 procurement. For the LSSi competition, the AESO has considered a range of payment mechanism options and is not proposing to include the MAG.

24. Is there a pre-requisite to have an existing DTS Contract with the AESO, in order to be considered a 'service provider' of LSSi?

A Service Provider of LSSi must meet the eligibility requirements as provided in the LSSi Eligibility and Requirements. These include that the Service Provider must comply with all applicable laws, including but not limited to ISO Rules.

25. How do we get information on what changes are required to the load shed scheme and who will implement the changes (i.e.: will it be AESO or the participant)?

Please refer to the ILSA Key Provisions and the LSSi Eligibility and Requirements included in the REOI as Appendix C for further detail. Any facility modifications necessary to comply with the Import Load Shed Agreement and satisfy the LSSi Eligibility and Requirements are the responsibility of the proponent in the RFP that is awarded an ILSA.

26. With respect to participants that have onsite generation and behind the fence loads that can be eligible for LSSi - will time synched SCADA data be required from the generators, the point of connection, and the LSSi load itself? Namely as speed responsive governors of the generators will increase generation per their droop curves and the net change at the point of supply metering point may not show a corresponding reduction of power at the point of connection.

The LSSi requirements include (but are not limited to) the under frequency trip requirement of the armed volume being disconnected at breakers configured under the LSSi scheme from a facility connected to the Interconnected Electric System within 0.2 seconds of detecting a frequency of 59.5 Hz. Please refer to the draft of the LSSi Eligibility and Requirements included with the REOI as Appendix C. Requirements regarding time synchronization of SCADA data and the measurement points for data recording are also included in the LSSi Eligibility and Requirements.

27. Can an LSSi provider specify that an entire block of power, say 20 MW, must be fully armed and cannot be partially armed?

A Service Provider of LSSi can offer a volume of load for LSSi up to and including the contract volume and does not have to offer their full contract volume. The volume offered by a Service Provider for LSSi is deemed to be a firm block. If the offered volume is armed, the entire volume offered by a Service Provider in accordance with the ILSA will be dispatched. Further detail including compliance requirements for the armed volume will be provided in the Import Load Shed Agreement.

28. Does the AESO have a list of EPC firms that can help providers build the capability for LSSi?

The AESO cannot provide a list nor make any specific recommendations with regards to EPC firms that can help providers build the capability for LSSi.

29. Will the number of PAMs 'reset' to zero every calendar year or will they carry over?

The Performance Adjustment Mechanism (PAM) is calculated on an annual basis and will reset to zero at the start of each calendar year. For further information, please review the Key Provisions document included with the REOI.

30. Can a single proponent provide multiple blocks of LSSi at different arming prices in their RFP submission to align with physically distanced loads/relays within their system? In other words, can a proponent offer one block with an arming price of X\$ and a second arming price of Y\$ within the same RFP proposal, or does an RFP proposal need to bid only a single arming price?

Each proposal submitted during the RFP will bid a single arming price. Should an interested party wish to have a different arming price for a portion of their facility's load, they should submit more than one proposal during the RFP stage. Each portion of the facility's load bid as a separate proposal would form a separate Service Provider with its own ILSA and must independently comply with the terms of the ILSA, including the LSSi Requirements. Note that the LSSi facility load attributed to each proposal must be distinct and separate from the LSSi facility load of any other proposal.

31. Will facilities be able to submit multiple RFP prices and/or multiple contracts?

Parties may submit more than one proposal in the RFP stage and execute more than one ILSA with the AESO, however, the facility's load identified in each proposal must be unique and distinct from any other proposal. Each successful proposal would form a single Import Load Shed Agreement (ILSA) with a Service Provider, and each LSSi Service Provider that is awarded an ILSA must be able to directly and individually communicate with the System Controller and trip as described in the LSSi Requirements.

32. Are there requirements to be an "aggregator" or can a single market participant aggregate multiple small sites of their own to meet the 5MW minimum requirement?

An interested party can aggregate its load from multiple facilities to become a Service Provider and satisfy the eligibility criteria in the LSSi Eligibility and Requirements, including the 5.0 MW Minimum Participation Requirement.

33. When do protection and control upgrades need to be completed after being successfully chosen as a service provider?

All proponents that are successful in the RFP stage and are awarded an ILSA must complete testing and submit a certification report by October 1, 2021. Further details regarding testing and certification report requirements are included in the draft LSSi Eligibility and Requirements included as Appendix C of the REOI.

34. Are there times during the year when an LSSi provider is not able to make availability offers? Roughly how frequent would this be?

An LSSi Service Provider may submit offers as outlined in the ILSA Key Provisions included in the REOI as Appendix A. There are no specific times during a year when a Service Provider cannot make offers, however the AESO will not pay the Service Provider for hours when the combined available transfer capability of the British Columbia and Montana interties is less than or equal to 65 MW, as described in the ILSA Key Provisions.

35. Do offers need to be made every hour? Do they expire every hour, or carry through until a new offer is made?

The Service Provider may submit an offer in MW to one decimal place and up to the contract volume in any given hour. Once an offer is submitted by a Service Provider, it remains active until it is amended and resubmitted. The last offer value received by the AESO by twenty-five minutes before the next hour (i.e., XX:35), becomes a commitment of offered volume for the next scheduling hour. Further detail will be provided in the draft ILSA that will be made available during the RFP stage.

36. Does AESO have a preferred number of providers and contracts they seek?

During the RFP stage, proposals that meet all eligibility criteria will be selected for the consideration of being awarded an ILSA, based on lowest bid prices through a fair and transparent evaluation process. In the REOI the AESO provided a target procurement volume of between 300 MW and up to 500 MW of LSSi, but the AESO may procure more than, less than or none of the target procurement volume.

37. Is it feasible for the smaller consumers to participate?

The AESO is not able to comment on the feasibility for the smaller consumers to participate. However, the AESO notes that an LSSi Service Provider's load must be able to provide a minimum of five point zero (5.0) MW of LSSi. The load may be an aggregation of several individual loads from various facilities throughout Alberta that are connected to the System irrespective of whether the individual loads are electrically separated from each other via transmission or not. Further detail is available in the draft LSSi Eligibility and Requirements included with the REOI as Appendix C.

38. Are last year's providers also allowed to be providers again this year?

This LSSi Competition is for the service period starting January 1, 2022 to the end of 2024. Any proponent that satisfies the eligibility requirements of the RFP and can satisfy the requirements in the LSSi Eligibility and Requirements (subject to the terms and conditions of the RFP), can participate in the competition irrespective of currently being an LSSi Service Provider or not. Further detail will be provided during the RFP stage, and a draft of the LSSi Eligibility and Requirements has been included with the REOI as Appendix C.

39. Is the GPS synchronized time stamp required on all SCADA data described in Section 2.1 a) from the service provider to the AESO, part i) and from the AESO to the service provider, part ii)?

A time stamp indicating time synchronization by GPS clock is expected for all SCADA data that is provided from the Service Provider to the AESO, per section 2.1 of the LSSi Eligibility and Requirements (which is included with the REOI as Appendix C). Signals from the AESO that are received by the Service Provider do not require time synchronization since the applicable feedback points associated with each will already be time-stamped.

40. Will the GPS synchronized time stamp provided by the service provider on the Offered Volume (Section 2.1 a) i) B) govern what the last valid Offered Volume was at 25 minutes before the hour, as referred to in section 3.6 and in Appendix A - LSSi Service - Offers?

As outlined in the ILSA Key Provisions, the Service Provider's Offer must be received by the AESO by 25 minutes prior to the start of the next hour (i.e., XX:35). The assessment of the XX:35 cut off time will be based on the AESO's time stamp.

41. Specifically, what performance is to be demonstrated at the Point of Delivery for facilities with behind the fence equipment and must this portion of the Trip event record also be captured with a rate of at least 30 frames per second?

As per section 4.4 of the draft LSSi Eligibility and Requirements, the Trip event record must include the frequency, timing and real power (in MW) at the following locations: each isolation device triggered by the under frequency relay scheme; and, for any facilities with behind the fence equipment, also at the facility's Point of Delivery (as defined in the AESO's Consolidated Authoritative Document Glossary). All necessary Trip event recorders shall have a recording rate of at least 30 frames per second.

42. When will a Settlement excel worksheet that reflects the changes in the 2021 procurement be made available? Does and will the AESO accept variations in the monthly Settlement worksheets for payment or must the format, columns, rows, calculations, etc. be as prescribed by AESO?

An updated excel settlement template that aligns with the revised Import Load Shed Agreement (ILSA) will be provided to successful proponents following the execution of the ILSAs. The ILSA describes the settlement and invoice requirements, one of which is that invoices need to be provided in the format prescribed by the AESO.

43. Do the new and legacy proposals require a GPS time clock?

All Service Providers must GPS time synchronize SCADA data provided by the Service Provider to the AESO, with time stamped accuracy as described in ISO Rule 502.8 and the LSSi Eligibility and Requirements, of which a draft is included with the REOI as Appendix C and will also be provided in the draft and final ILSA during the RFP stage.

44. Can you tell me if an existing LSSi provider enrolled in the current 2019 LSSi program is required to submit a functional specification for approval?

For further detail on the requirements of the current LSSi competition, please refer to the ILSA Key Provisions and the draft LSSi Eligibility and Requirements included in the REOI as Appendix C. Further detail on the LSSi requirements will be provided in the draft and final ILSA that will be made available during the RFP stage.

45. I missed the AESO's LSSi information session. Where can I find the presentation and recording?

The presentation slides and the recording of the LSSi procurement competition information session that took place on Sept. 23, 2020 are available on the AESO's LSSi procurement webpage [here](#).

46. Can the AESO provide information regarding the Fast Frequency Response pilot?

As a part of the energy storage roadmap general update presentation provided on October 14, 2020, the AESO announced that it is exploring the possibility to conduct a Fast Frequency Response pilot from new technology. Please refer to the update presentation (see slides 30 – 32) and recording that is available on the AESO’s energy storage progress updates webpage (link [here](#)).

47. I have some follow up questions regarding the AESO’s Fast Frequency pilot. Where can I find more information?

Further updates will be shared when available. The AESO encourages anyone interested to monitor the energy storage progress updates website for the most up-to-date information (link [here](#)).

48. Can more than one proponent sign up under the same account on the Bonfire site in order to participate in the LSSi competition?

No. Each party that would like to participate as a proponent in the LSSi Request for Proposals (RFP) will require a separate user account for the Bonfire site. Further information about obtaining access to the Bonfire site is available on the AESO’s Load Shed Service for Imports webpage (link [here](#)) including the Bonfire site [Access Instructions](#), [Access and Participant Agreement](#), and [Frequently Asked Questions](#).