System Access Service Request (SASR) Guide

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1. Purpose

This document is meant to guide applicants as they complete the system access service request (SASR) application form. Additional guidance and information will be added to this document as required. Fields with updated guideance have been highlighted.

2. General Information

To request new or amended system access service (SAS) on the transmission system, a completed SASR may be submitted to the AESO. The AESO relies on the information provided in the SASR to determine which process the project will follow. For more information, see the AESO website and ID #2018-018T, *Provision of System Access Service and the AESO Connection Process*.

For any questions regarding the content or submission of a SASR, or for questions about the AESO Connection Process in general, please contact Customer Connections at customer.connections@aeso.ca or (403) 539-2793.

2.1 What requires a SASR?

A SASR is expected to be submitted to the AESO for any of the following:

(a) load, generation, or energy storage projects that connect to the transmission system;

(b) reliability projects which involve enhancements to the transmission system;

(c) increases or decreases in contract capacity, or termination of an existing system access service agreement;

(d) equipment changes within a market participant's facility currently receiving system access service;[1] and

(e) generation or energy storage projects that connect to an electric distribution system on a feeder,

(i) that have a maximum capability of greater than or equal to 5 MW;

(ii) that require a new or amended system access service agreement as determined by the legal owner of a distribution facility;[2] or

(iii) that involve an equipment change.[1]

A SASR is not required for:

- Generation or energy storage projects that connect to an electric distribution system that have a maximum capability (MC) of less than 5 MW and do not require a new or amended SAS agreement as determined by the legal owner of a distribution facility (DFO);
- Changes at an existing point of connection (POC) that do not require data submissions under Section 502.15 of the ISO rules, *Reporting Facility Modelling Data*; or
- The energization of an existing breaker.

[1] A SASR is only required for changes to existing points of connections that require data submissions under Section 502.15 of the ISO rules, *Reporting Facility Modelling Data*.

[2] For example, the legal owner of a distribution facility may determine that a generating unit with a total maximum capability of 2 MW requires a system access service agreement.

2.2 Who submits the SASR?

The SASR is submitted by the market participant that holds the existing SAS agreement, or the party that will be the holder of a new SAS agreement, herein referred to as the Applicant. The Applicant is the party that is accountable for compliance with and accepts the Rate DTS or Rate STS terms and conditions per the ISO tariff. If the Applicant is not the DFO, the Applicant may have to request the incumbent DFO to grant approval pursuant to Section 101 of the *Electric Utilities Act* (Section 101 Waiver) before the AESO can accept the SASR. See section 4.5 of this document for additional information on the Section 101 Waiver.

An Applicant requesting to add generation to an electric distribution system should consult with their respective DFO to determine whether a SASR is required, in which case the DFO will be the Applicant. For any questions regarding distribution-connected generation or the process for obtaining a Section 101 Waiver, please contact the applicable DFO. A list of DFOs and their contact information can be found in the Large Distribution-Connected Generators section on the Joining the energy market page on the AESO website.

2.3 When should a SASR be submitted?

A SASR should only be submitted when the Applicant is ready to move their project forward. The Applicant is expected to review the *AESO Connection Process* and associated required deliverables and timelines prior to submitting a SASR. Once a SASR is accepted, it must adhere to the timeline requirements outlined in ID #2018-018T, *Provision of System Access Service and the AESO Connection Process*, failure to do so may result in cancellation of the SASR and the related project. For more information on the different project and process types, as well as the associated required deliverables, please refer to Connecting to the Grid on the AESO website.

3. Application Process

3.1 Submission

Completed SASRs and all required attachments are submitted to the AESO by email at customer.connections@aeso.ca. All required sections in the SASR need to be completed. Other supporting information may be submitted with the SASR, such as a preliminary single line diagram or geographic map to assist the AESO in understanding the details of the request.

Once a SASR is submitted, the AESO reviews it for completeness. If the SASR is incomplete or incorrectly filled out, the Applicant is notified of the deficiencies and is expected to resubmit an updated SASR once all deficiencies have been addressed. If the Applicant fails to resolve the deficiencies the SASR will be rejected.

A SASR is considered deficient in the following cases:

- The SASR is not the current version of the template posted on the Templates page on the AESO website
- The SASR is not locked
- The SASR contains handwritten corrections
- The Applicant has not made clear the nature of their request
- The Applicant is not duly registered and authorized to carry on business in Alberta
- The Applicant does not have an existing SAS agreement with the AESO, and has not been granted a Section 101 Waiver or written confirmation by the DFO, if the Applicant is not the DFO

- The Applicant has not identified a study consultant licensed to practice engineering in Alberta, if a study consultant is required
- The Applicant has not completed all required sections of the SASR
- The Applicant has not included all required documents with the SASR

3.2 Review

Once a SASR is deemed complete by the AESO, the Applicant receives an email confirming that the completed SASR has been received, and the AESO then performs a review. During the review process, the AESO may contact the Applicant to clarify the project information or to discuss project complexity.

A SASR may be rejected during the review stage, at which point the Applicant is notified of the reasons for rejection, and instructions on how and when to resubmit a SASR may be provided.

3.3 Acceptance

Upon completion of the review, the Applicant receives an email containing a letter confirming that the SASR has been accepted by the AESO.

The letter includes the project name and number assigned by the AESO, as well as the confirmed project type. The project type determines which process a project will follow. For more information on the project types and corresponding processes, please see Connecting to the Grid on the AESO website. The letter also contains the Integrated Project Manager (IPM) and the AESO Project Manager contact information. The IPM is expected to schedule the project kick-off meeting and coordinate next steps required for Stage 1 completion.

4. Guidance for completing the SASR

The SASR application form is designed to only display fields applicable to the project. As a result, the fields described in the sections below may or may not be visible depending on the selections made by the Applicant as the SASR is completed.

4.1 Section 1 – Contact Information

Title	Details
Applicant	The Applicant submits the SASR and is the party that holds the existing SAS agreement or will be the holder of a new SAS agreement. The Applicant is the party that is accountable for compliance with and accepts the Rate DTS or Rate STS terms and conditions per the ISO tariff. The Applicant must be duly registered and authorized to carry on business in Alberta.
Study Consultant	The Study Consultant is the party that will work with the AESO on behalf of the Applicant to perform connection studies for the project. A Study Consultant must be identified for all projects that require an independent assessment to be performed. A Study Consultant is not required for projects that will follow the cluster assessment process. Contact customer.connections@aeso.ca if you are unsure if a Study Consultant is required for this SASR. The Study Consultant must be licensed to practice engineering in Alberta.
Customer Facility Owner	The Customer Facility Owner is the party that owns the generation, energy storage, or industrial facilities that are being connected or modified with the

Title	Details
	request, and will provide the details of those facilities to the Applicant for inclusion in the SASR.
Integrated Project Manager (IPM)	The Integrated Project Manager (IPM) is selected by the Applicant, and is responsible to coordinate activities through the life cycle of the project, and ensure the project moves at the pace required by the Applicant while following ID #2018-018T, *Provision of System Access Service and the AESO Connection Process* and the appropriate AESO project process. The AESO retains the role of governing gate requirements. The IPM is expected to schedule the project kick-off meeting and coordinate next steps required for Stage 1 completion. Note that projects that will follow the cluster assessment process will always have the AESO designated as the IPM.

4.2 Section 2 – Request Information

Title	Details
Description	Provide a description of your request. Include any relevant details related to what is being connected or modified, timing, preferred connection locations, interactions with any existing facilities, unusual ownership or operational setups, desired reliability requirements, etc.
Future Development	List any future development that is planned or considered for the site, such as expansions, changes in operational nature, the addition of generation or storage, etc.
AUC Application or Decisions	If the SASR involves a related application or decision from the AUC regarding a power plant or industrial system designation, explain the nature of the application or decision. Include details such as how it relates to the SASR, if it is a new application or amendment to an existing decision, what is being requested (for example if a power plant is meant to self-supply or self-supply and export), the current status of the application or decision, if the SASR applicant is a different party than the holder of an AUC approval or order, etc.
Distribution Deficiency Report (DDR)	For DFO Applicants, a DDR must be included with the SASR for projects that will require new transmission facilities due to a distribution deficiency. This deficiency may be caused by load growth, reliability concerns, or the addition of distribution-connected generation. A DDR provides information about the DFO's decisions relating to the electric distribution system, including the DFO's reasons for submitting a SASR to the AESO. The DDR assists the AESO in determining how to respond to the DFO's SASR, and supports the content in the AESO's need approval process. Guidelines for the preparation of the DDR can be found in the DDR Author's Guide posted on the Templates page on the AESO website.
Location	The Facility Name is the name of the facility that is part of the request (e.g. the name of the wind farm, solar farm, petrochemical facility). This facility name should be used in communications with the AESO going forward. It can be the proposed facility name that is or will be included in the power plant application

Title	Details
	filed with the Alberta Utilities Commission. If a substation name or number is known for the facility, include this here as well. The legal land description for a transmission-connected aggregated generating facility should be the location of the collector substation. The distribution feeder is the name or number of the distribution feeder that is part of the request. If the request includes multiple distribution feeders, include them all in this field.
Market Participant Choice (MPC)	See the Market Participant Choice page on the AESO website for more information.
Are you injecting 5 MW or more into the AIES?	Generation and storage projects injecting 5 MW or more into the Alberta interconnected electric system (AIES) at the facility's connection to the AIES (i.e. the transmission or distribution system, as applicable) must follow the cluster assessment process. Injection must be caused by the addition of 5 MW or more of MARP (or storage equivalent) at the facility.
50% Site Control	Projects following the cluster assessment process must confirm that ownership, a lease, or an option to lease in place for at least 50% of the site required for the generation or storage facility at the time of application.
Stage 0 PDUP	Projects following the cluster assessment process must submit a Stage 0 PDUP. See the Stage 0 PDUP Supplement on the Project Data Update Package Submissions page for more information.
Contact Information for Fee Invoicing	Projects following the cluster assessment process must provide the contact information to put on the fee invoice, as well as the Accounts Payable e-mail that the fee invoice should be sent to. Company information will be taken from the Applicant contact section.

4.3 Section 3 – Generation Information

Title	Details
Installed Capacity (MVA)	The nameplate or expected nameplate rating of the generation being added and total facility rating. If there area multiple generating units, include the Installed Capacity of each unit in the Additional Details.
Maximum Authorized Real Power (MARP)	The maximum gross real power that may be delivered to the collector buses or the stator winding terminal. The value of MARP is typically for an individual generating unit or an individual aggregated generating facility. For this field on the SASR, please include the sum of all applicable MARP. If there area multiple generating units, include the MARP of each unit in the Additional Details.
Maximum Capability (MC)	The maximum real power that is physically capable of being provided by the generating asset under optimal operating conditions. Every generating asset

Title	Details
	registered in the energy market has a MC value to indicate the maximum MW the asset can offer in the market. If MC is less than 5 MW, a maximum of 2 significant digits is required. If MC is equal to or greater than 5 MW, a whole (integer) number is required. If MC is on the cusp of 5 MW, it can be rounded up or down as decided by the generator owner. Note that MC is associated with the pool asset. If there will be multiple pool assets for the proposed facility, include the MC for each asset in the Additional Details.
Annual Energy Production	An estimate of the total energy production of the generator during a one-year period.
Grid Connection Date	Provide the date the facility is expected to have an energized connection to the AIES (transmission or distribution) and is **capable** of exchanging energy (regardless of if any energy is planned to flow on that date or not).
Generation Connection Date	Provide the date that the generating unit (or the first turbine or string of solar panels of an aggregated generating facility) will be energized and **capable** of supplying energy (regardless of if any energy is planned to flow on that date or not). For example, this may be the energization of the generator step up transformer (GSU) from the high voltage side.
Commercial Operation Date (COD)	The date the generating asset may submit an offer greater than $0 in the energy market. After commissioning, upon request of the GFO, the AESO will issue a Commissioning Certificate letter to mark the commercial operation date (COD). Until this time, if the GFO submits offers, they must submit offers of zero dollars ($0) in accordance with subsection 4 of Section 203.1 of the ISO rules.
Conceptual Facility SLD	A conceptual single line diagram (SLD) for the generating facility must be submitted with the SASR. The SLD must include the details of all switching devices. The SLD must be submitted in Visio format.
Intended Market Operation	Describe the intended operation of the generation in the market. Include relevant details such as the number of assets, asset-to-generator relationships/groupings, interactions with existing assets, interactions with on-site loads or storage, self-supply details, any ancillary services you wish to provide, etc.
Additional details	In the field for additional details, the following may be included: • The Installed Capacity and MARP for multiple generating units • The MC for multiple pool assets • The on-site load which is the load at the site that is not related to generator operation

Title	Details
	• The station service or auxiliary load which is the power required to operate the generation • Staging information if generation will be connected in phases. • Any other information not included elsewhere in the SASR

4.4 Section 4 – Energy Storage Information

Title	Details
Installed Capacity (MVA)	The nameplate or expected nameplate rating of the storage being added and total facility rating. If there area multiple storage units, include the Installed Capacity of each unit in the Additional Details.
Annual Energy Production	An estimate of the total energy production of the generator during a one-year period.
Grid Connection Date	Provide the date the facility is expected to have an energized connection to the AIES (transmission or distribution) and is **capable** of exchanging energy (regardless of if any energy is planned to flow on that date or not).
Storage Connection Date	Provide the date that the storage unit will be energized and is **capable** of exchanging energy (regardless of if any energy is planned to flow on that date or not).
Commercial Operation Date (COD)	The date the generating asset may submit an offer greater than $0 in the energy market. After commissioning, upon request of the GFO, the AESO will issue a Commissioning Certificate letter to mark the commercial operation date (COD). Until this time, if the GFO submits offers, they must submit offers of zero dollars ($0) in accordance with subsection 4 of Section 203.1 of the ISO rules.
Conceptual Facility SLD	A conceptual single line diagram (SLD) for the storage facility must be submitted with the SASR. The SLD must include the details of all switching devices. The SLD must be submitted in Visio format.
Charging and Discharging Operation	Explain the planned operation of your energy storage, including how and when the storage will be charged or discharged, interactions with existing or new generation, if discharge and generation can occur simultaneously and if there are any capacity limitations on simultaneous operation, etc.
Intended Market Operation	Describe the intended operation of the storage in the market. Include relevant details such as the number of assets, asset-to-storage relationships/groupings, interactions with existing storage or generation assets, interactions with on-site loads, self-supply details, any ancillary services you wish to provide, etc.
Additional details	In the field for additional details, the following may be included: • The on-site load which is the load at the site that is not related to energy storage operation

Title	Details
	• The station service load which is the power required to operate the energy storage

4.5 Section 5 – SAS Agreement Information

Title	Details
MPID	MPID is the measurement point identification. The MPID can be found on an existing SAS Agreement, or on the measurement point definition record (MPDR) associated with the existing SAS Agreement.
Section 101 Waiver	A Section 101 Waiver is applicable to non-DFO Applicants, which are submitting a SASR with a load component. According to Section 101 of the *Electric Utilities Act*, the Applicant must obtain prior approval from the DFO in their service area to enter into an arrangement directly with the AESO for the provision of system access service. For a SASR with only load components (no generation), the SASR must be accompanied by a Section 101 Waiver. For a SASR with load components that also include generation components, the SASR must be accompanied by: • A Section 101 Waiver; or • written confirmation from the DFO that they have no objections with the SASR being submitted (Note: If the SASR is submitted with this written confirmation, the Section 101 Waiver will need to be completed later, prior to signing the SAS agreement.)
Requested Capacity and Capacity Start Date	In the table, indicate the requested capacity (or capacities, if staged) together with the associated capacity start date(s), and include the capacity of the existing System Access Service (SAS) Agreement, if applicable. Note: **the capacity start date must be the 1st of the month**. If more than one STS or DTS SAS Agreement are part of the request, include this information in the additional details field.
Payment in Lieu of Notice (PILON) Waiver	If the request may require a payment in lieu of notice (PILON) and the Applicant would like to request that the PILON be waived, a PILON waiver request may be submitted. For more information, refer to Appendix 5 and Appendix 5A of ID #2020-007, *Waivers and Variances Requests*.

5. Changes to the SASR

At any time during the AESO Connection Process, if any information provided in the SASR has changed, the Applicant is expected to inform the AESO of the change in a timely manner and submit a Project Change Proposal Form. The Project Change Proposal Form and Project Change Proposal Guideline can be found on the Templates page on the AESO website.