

Information Documents are not authoritative. Information Documents are for information purposes only and are intended to provide guidance. In the event of any discrepancy between an Information Document and any Authoritative Document(s)¹ in effect, the Authoritative Document(s) governs.

1 Purpose

This Information Document relates to the following Authoritative Document:

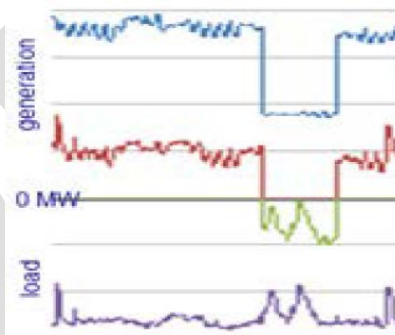
- Section 206.2 of the ISO rules, *Self-Supply Configurations* (“Section 206.2”).

The purpose of this Information Document is to provide additional information in relation to:

- (a) self-supply designations;
- (b) the difference between net-to-grid and gross-to-grid metering;
- (c) diagrams of sample configurations; and
- (d) changing a self-supply status.

2 General

Self-supply is a capacity market mechanism to accommodate new and existing cogeneration and other sites in Alberta where load is served by onsite generation. A self-supply site can participate in the capacity market as either a demand response asset or a generating asset, but not both, in the same obligation period. Determination as to whether the self-supply site should provide demand response or supply capacity is dependent on whether the site is net long or net short generation. This is easily determined by comparing the meter volumes of the net load pool asset and net generation pool asset over the course of time. If the site produces more generation than it consumes then it would be a capacity supplier. If the site consumes more than it produces then it would be a candidate for demand response. This is graphically represented in the diagram below where the red line represents the net generation from the site and the green line represents the net load. The site in this example is best suited to be a capacity supplier rather than demand response.



3 Self-supply designations

Designation as a self-supply site enables a load with onsite generation to use that generation to provide capacity for the load rather than having it provisioned from the capacity market. In order to do so, the site

¹ “Authoritative Documents” is the general name given by the AESO to categories of documents made by the AESO under the authority of the *Electric Utilities Act* and associated regulations, and that contain binding legal requirements for either market participants or the AESO, or both. AESO Authoritative Documents include: the ISO rules, the Alberta reliability standards, and the ISO tariff.

must meet the requirements set out in subsection 2 of Section 206.2. If a capacity market participant wants to self-supply capacity, they must submit to the AESO an application to self-supply prior to the base auction for an obligation period, in accordance with the timing indicated in the *Capacity Market Auction Guidelines*. The primary requirement for self-supply is the site's measurement point is configured in a net-to-grid configuration. This configuration is described below.

4 Net-to-grid vs. gross-to-grid

For the self-supply option, where a load is served by on-site generation, the measurement point must be at the interconnection point to the interconnected electric system in order for the configuration to be considered a net-to-grid or self-supply configuration. If the measurement points are located at the terminus of the generator and do not include site load, and the site load is measured separately, then the site is not in a self-supply configuration and is considered gross-to-grid.

Additionally, sites configured in a net-to-grid (self-supply) configuration may choose to offer into the energy and ancillary services markets on a gross basis even though they are measured on a net basis for the purpose of settlement. For those assets in that configuration, the AESO converts the available capability values the pool participant submits to a net-to-grid value for the purposes of determining a uniform capacity value. (See the information document for Section 206.3 of the ISO rules, *Uniform Value Capacity Determination* for further information on the conversion.)

For existing transmission connected load, the metering configuration is defined in the AESO's measurement point definition record. For each self-supply site, 2 pool assets are created, one for each direction of flow. A source asset is created to capture any outflow from the site; and a sink asset is created to capture any inflow to the site, regardless of whether the site is long or short generation.

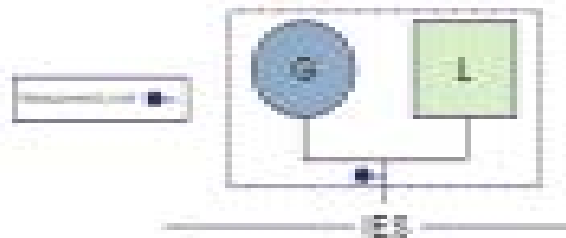
5 Sample configurations

The following simplified diagrams illustrate the 2 possible measurement configurations for a load with onsite generation. The measurement point does not necessarily match the physical location of the meters. Meter math and compensation calculations often determine the energy (MW) at the measurement point. Deductive totalization is a manner of summation used to determine the un-metered load indirectly by subtracting the value of all metered loads from the value of the total metered load. This form of measurement is not permitted according to Measurement Canada's current standards.²].

² S-E-08 — Specifications for the Installation and Use of Electricity Meters - Measurement Canada Standard Drawings for Electricity Metering Installations

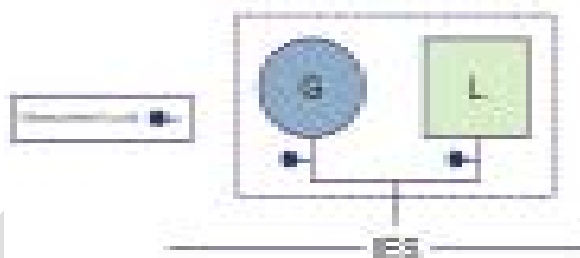
Below are illustrative examples of the two possible measurement point configurations a capacity market participant can alternate between.

Net configuration – site must self-supply:



Load and generation on the same site but the measurement point is the same.

Gross configuration – site cannot self-supply:



Load and generation on the same site but the measurement points are separated.

6 Changes to self-supply status

A capacity market participant with a self-supply site may use the form provided on the AESO website to submit an intention to change self-supply status. If a capacity market participant submits a change form within 4 years of being designated a self-supply site, the capacity market participant must meet the requirements set out in subsection 5 of Section 206.2. The timelines for submitting the form are set out in the *Capacity Market Guidelines*. A change in metering configuration will impact:

- the site's measurement point definition record;
- the site's uniform capacity value;
- the demand curve for future capacity auctions; and
- capacity and pool asset configurations.

As a result, the change must be coordinated with the government agencies and wire organizations involved in making this measurement change. Additionally the change must be effective for the start of an obligation period. [NTD: The next draft version of this information document will contain more information.]

Information Document Self-Supply Designations ID # [xxxx-xx]



Revision History

| Posting Date | Description of Changes |
|--------------|------------------------|
| xxxx-xx-xx | Initial release |

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