

Get Paid to Reduce Energy with Alberta Load Shed Service for Imports (LSSi)

What is the LSSi program?

The Alberta Electric System Operator (AESO) has designed the Load Shed Service for Imports Program (LSSi) to improve the capacity of its interconnection with British Columbia. Conditions on the Alberta electric system have reduced the amount of power that can be transferred across the intertie. The LSSi program will increase the import capability of the Alberta-B.C. intertie to help AESO deliver reliable, cost-effective service to Alberta's electricity users.

In the long term, this program will provide another source of supply that has the potential to lower the cost of electricity in Alberta, mitigate extreme price fluctuations, and make the electric grid more reliable.

How do I participate in LSSi?

Enel X works with you to determine a custom participation plan that best suits your site's operating schedule and financial objectives. Our goal is to maximize your earnings while making participation as simple and hands-off as possible.

Participating businesses will work with Enel X to schedule their potential energy reduction. Enel X adds these reduction commitments into our portfolio and submits the total to the AESO on an hourly basis.

What triggers an armed event?

When the AESO arms our portfolio due to import levels on the Alberta-B.C. intertie, our customers receive notice to maintain their armed energy volume at **95% or greater of the volume they scheduled for that hour.**

We estimate that customers can anticipate being armed 15-20% of the hours that they are available. Most arming periods will fall within normal business hours, and are anticipated to be 1-8 hours in duration.

Enel X will notify customers via email when their loads are armed, when the amount of armed load changes, and when they are disarmed. During an armed period, participating customers must maintain their load at 95% or greater of the load that was offered.

What happens when a load is tripped?

If the grid frequency drops below 59.50 Hz due to conditions along the Alberta-B.C. intertie, Under-Frequency Relays (UFRs) at armed sites detect the change and respond by automatically tripping their associated breakers to remove the armed loads from the grid in under a second.

Enel X will detect this occurrence and will notify all customers that a trip is in progress. **Only loads that are opted-in and armed will experience the trip.**

When a restore signal is issued by the AESO, Enel X will notify all customers that it is safe to bring the loads back online, and will reset the UFRs. Loads must remain disconnected from the grid until the signal to restore is received from Enel X.

Backup generators may be used during trip dispatches, as long as no portion of the load is reconnected to the grid before the restore notification.

How frequently will trips occur?

A trip is unlikely. Historically, the AESO LSSi program has tripped our portfolio on average **once every 4-5 years**. If a trip does occur, typical downtimes are anticipated to be 15-20 minutes, with a maximum of 60 minutes.

How does my business benefit?

Maximize payments to your bottom line

Enel X will work with you to establish your earnings potential based on your specific participation plan including the load and the total hours you commit. Each participant will receive substantial compensation in the form of three payments:

- > An availability payment
- > Payments when the AESO arms our portfolio
- > A bonus payment in the event that the portfolio is "tripped"

Protect valuable equipment

Decaying frequencies can have detrimental effects to the equipment at your site. The LSSi program provides frequency protection to the AESO grid and will also prevent costly damage to your processes and equipment resulting from a power trip. In essence, this program will pay you to protect your operations.

What are the costs to participate?

Enel X pays for all metering equipment, controls, and connectivity fees associated with enrolling your site in the LSSi program. We leverage our state-of-the-art Network Operations Center (NOC) to meet AESO's strict telemetry, bidding, and dispatch requirements, thereby eliminating any technical costs to our customers.