

AESO Operating Reserves Program

Generate Earnings as a Standby Resource for the Alberta Electrical Grid

What are Operating Reserves?

The Alberta Electric System Operator (AESO) relies on Operating Reserves (OR)—a network of resources that help balance electrical supply and demand in real-time—to maintain the security and reliability of Alberta’s electrical grid.

Program participants are on standby to deliver capacity by reducing load from the grid within minutes of being notified. In return, they earn payments for being available to stabilize the grid during these critical periods.

Who can participate?

Large electricity users that can reduce electricity consumption—either by curtailing load, or switching to properly permitted on-site generation—are eligible to provide Operating Reserves. Ideal participants have the following characteristics:

- > 24x7 or 24x5 operations
- > Stable, predictable load profile
- > On-site generation with centralized control
- > Capable of reducing at least 300 kW load within 10 minutes, most commonly using Enel X control solutions

How much can I earn?

Earnings depend on several factors including hours enrolled in the program, MW reduced, and energy prices. The more you are available, the more you can earn. Enel X will work with you to evaluate earnings potential and optimize your participation based on your operational capabilities.

Operating Reserves Overview

Program Period:

Year-round with day-ahead commitments

Program Hours:

24x7x365, you choose when your site participates

- > **On-peak:** 7:00 a.m. — 11:00 p.m. MT
- > **Off-peak:** 11:00 p.m. — 7:00 a.m. MT

Dispatch Notification:

10–minutes

Payments:

\$70—\$100k/MW-yr, depending on settlement pricing

Dispatch Duration:

Ranges from 10–60 minutes

Dispatch Frequency:

Typically 5–10 per year



How else does my business benefit?

- > **Reduced Energy Bills:** Since Operating Reserves prices are tied to the AESO Pool Price, you can participate in the program to hedge against high retail energy charges.
- > **Protect your Operations:** The advanced notice you receive provides a window to prepare and prevent costly damage to your processes and equipment preceding a potential blackout.
- > **Full Control and Customization:** You decide when and how many MW to bid into the market. You can opt-in and -out of the market with just one day's notice. Participate only when it makes sense for your business.

How do I participate in OR?

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.

- > Enel X submits daily market offers on your behalf for the following day (weekend and Monday offers are submitted on Friday).
- > When your offers clear, you earn payments for being available to reduce load, if called upon.
- > If your capacity is needed, Enel X will notify you to reduce your load within 10 minutes.

What triggers a dispatch?

OR dispatches are triggered by short-term imbalances between supply of and demand on the AESO grid. These imbalances are typically caused by a sudden loss of a generating unit, an unexpected increase in demand, or an issue with an interconnection that links Alberta to a neighboring jurisdiction.

What happens if I cannot meet my commitment?

Enel X shields its customers from owing penalties associated with non-compliance. While failure to meet your commitment may result in lower program payments, you will never be required to make any out-of-pocket payments.

What are the costs to participate?

Enel X pays for all metering equipment, controls, and connectivity fees associated with enrolling your site in the Operating Reserves 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.