BC Hydro Demand Response Program

Reducing Demand for Office Buildings

WHAT IS DEMAND RESPONSE?

Demand Response (DR) is a program that encourages electricity users to temporarily reduce or shift their energy use during BC Hydro peak demand periods. It helps balance the grid, improves system reliability, and can be carried out manually or through automated systems.

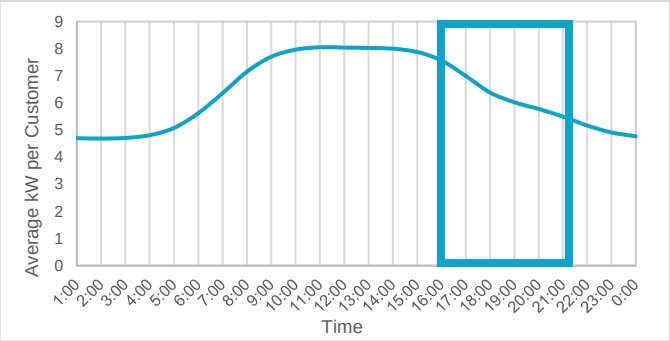
WHY DO DEMAND RESPONSE?

- To reduce energy costs without disrupting operations.
- To help BC Hydro maintain a more resilient, efficient power system.
- To accelerate the transition to a cleaner energy future.

DEMAND OPPORTUNITY

Commercial office buildings offer strong demand response potential due to:

- Both high- and low-rise office buildings have consistent daily energy use patterns.
- DR events are typically scheduled near the end of the workday when it is often more feasible to adjust or shut off equipment.
- Most facilities are equipped with building automation systems (BAS) that may enable load adjustments with minimal operational and occupant disruption.



Typical Load Profile for Office Buildings

PROGRAM OVERVIEW

Program Incentive	$50 per average kilowatt (kW) of demand reduction per season
Event Duration	Up to 20 events per season, no more than four hours each
Event Season	November - March
Advanced Notification	One day notification prior to an event
Participation	Must participate in at least 50% of all events to be eligible for incentive

PARTICIPATION BENEFITS

FINANCIAL INCENTIVES

NO COST TO ENROLL

RISK-FREE

DEMAND RESPONSE OPPORTUNITIES FOR OFFICE BUILDINGS

Building System Adjustments

- Integrate a DR sequence into the BAS to adjust HVAC schedules in office areas during events.
- Reduce static pressure setpoint in air handling units, resulting in a reduction of fan speed.
- Raise cooling setpoint temperature or lower heating setpoint temperature on electric HVAC equipment and refrigeration equipment for occupied office spaces and meeting rooms.
- Limit humidification.
- Lockout back-up electric heating sources (e.g., baseboard heaters) in offices, meeting rooms and breakrooms.
- Relax demand controlled ventilation setpoints.

Behavioural Changes

- Discourage people from using space heaters in individual office areas and unplug unused kitchen equipment.
- Reschedule energy-intensive activities such as cleaning and building maintenance.
- Turn off non-essential lighting in unoccupied areas such as office spaces and meeting rooms.
- Turn off unused laptops, computers, and chargers at desks.

BC Hydro Power smart

CASE STUDY: JAWL PROPERTIES

Jawl Properties joined BC Hydro's DR program to improve energy performance and get rewarded. They saw it as a **low-risk** opportunity, especially since most DR events occurred after core business hours, minimizing tenant disruption.

To address initial concerns about tenant impact, Jawl Properties started with a pilot at two buildings where tenant disruption would be minimal. Through discussion and engagement with building operators, both buildings were updated with time-based programming, helping identify suitable DR activities.

During the 2024/25 event season, Jawl Properties took part in five out of seven DR events. Each ran smoothly, with no tenant disruptions or complaints. Participation in the program helped staff find new ways to reduce demand, such as optimizing building controls.

The program delivered several benefits:

- Improved tenant engagement.
- Rewards outweighed costs and effort.
- Fast access to post-event results.
- New operational insights on building performance.
- A bill credit of approximately $1850.

"Go for it. It's a pretty easy reward for minimal risk."

"It's kind of fun to try it out. It keeps you engaged on a daily basis."

- Jason, Jawl Properties

The program also justified new capital investments, like installing automated baseboard heating controls to improve demand flexibility. Jawl Properties plans to expand its participation in the DR program due to the extraordinary value it provides.

FAQS

HOW DO I SIGN UP?

Enroll in the program by following the enrollment link on our webpage, **Demand Response for Business**, and logging into your MyHydro account. You'll need the following information:

- A list of the sites you want to enroll.
- The name and contact information for the person on site who will receive event notices.

HOW WILL I KNOW HOW IT WENT?

Within 48 hours after the event, we'll send you an email letting you know the results of the event.

HOW ARE MY INCENTIVES CALCULATED?

BC Hydro monitors your kW demand during each demand response event compared to the kW demand value from the five eligible days prior to the event. Your incentive is calculated based on your average kW demand reduction across all demand response events in a season and you receive $50/kW for all savings, with no penalty if there are none.

HOW DO I GET MY INCENTIVES?

At the end of each event season, you will receive a season ending email outlining your overall performance along with eligible incentives. Your total rewards earned during the season will be applied as a rebate on your subsequent BC Hydro bill.