

New rate plans, new choices, **new savings**



Alectra Utilities partnered with the Ontario Energy Board (OEB) to develop the Advantage Power Pricing (APP) program, which compares the effect of three new time-of-use (TOU) rate plans on customers' behaviour, energy use and energy costs. TOU pricing, with one standard rate structure, was introduced in Ontario more than a decade ago to reduce electricity consumption during "peak" times of the day by shifting energy usage to non-peak times. The APP rate plans provide consumers with more choice, empowering them to further reduce their energy consumption.

Innovating & collaborating together to:

- ✓ Determine the optimal price structure to achieve efficient electricity system operation and investment
- ✓ Offer consumers incentives and opportunities to reduce their electricity bills
- ✓ Provide more energy use choices for consumers to fit their lifestyle needs
- ✓ Enhance consumer energy literacy and response through non-price tools

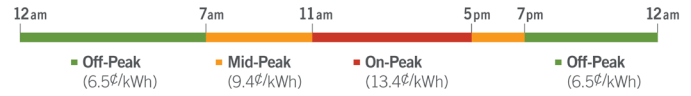
The Challenge

Consumers make energy use decisions that suit their lifestyle needs, financial needs, and new smart home technologies. TOU rate options need to balance these consumer needs while reducing peak-time demands on the grid to achieve efficient system operations. Programs need to evaluate the impact on both the grid and related effects on consumers' conservation and demand management behaviours.

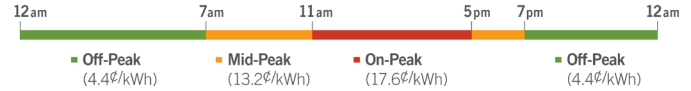
The Solution

The APP program tests three alternative TOU pricing schemes across 9,000+ consumers: an Enhanced plan, a Dynamic plan and an Overnight plan. Shadow bills and nudge reports also test conservation and load-shifting behaviours for a subset of participating customers. Results are compared with a control group that uses Ontario's Standard TOU plan. Preliminary results showed substantial decreases in consumption during peak times for users on the Overnight plan and the Dynamic plan. Evidence further suggests that nudge reports are a successful way to reduce consumption during peak hours.

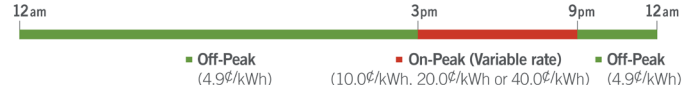
Standard TOU: For comparison



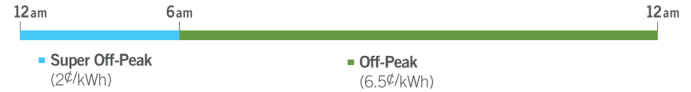
Enhanced: Same structure & times as TOU, but with greater differential between on/off peak



Dynamic: Variable Peak Pricing rate plan with peak period 3:00-9:00 pm



Overnight: Similar to Enhanced but with a 4th, super off-peak rate from 12:00 am - 6:00 am



NOTABLE RESULTS RELATED TO NUDGE REPORTS INCLUDE

- ✓ Decreased peak time consumption relative to the standard control for both the Enhanced and Dynamic plans.
- ✓ For participants in the Enhanced plan, nudge reports resulted in a 1.5 percent decrease in peak time consumption and no change in the non-peak time consumption.
- ✓ For Dynamic plan customers, the reports reduced consumption during Critical Peak Price hours by 3.5 percent but did not significantly decrease consumption for peak time or non-peak time hours.

The Benefits



More choices for consumers



Reduced electricity bills



A more efficient Ontario energy system



Data insights for future services and options

In collaboration with



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