

Briefing Note: Regulated Price Plan Pilots Summary of Applications

Issue: The Ontario Energy Board (OEB) is undertaking time-of-use (TOU) pilots as a part of its Regulated Price Plan (RPP) review. The RPP pilots include both price and non-price elements to meet two of the objectives of the RPP Review: implementing price pilots and empowering consumers.

Pilot Summaries:

- The RPP pilots are being funded through the IESO's Conservation Fund, as per the December 16, 2016 Direction to the IESO.
- The OEB has selected London Hydro, Alectra Utilities, Oshawa PUC Networks Inc., Hydro One and Customer First to run RPP Pilots in their service territories
 - Combined, the RPP pilots will be accessible to approximately 26,500 customers
 - Details of the 13 RPP pilots are provided in the table below.

	London Hydro	Alectra Utilities	Oshawa PUC	Hydro One	Customer First
Date Approved	April 19, 2017	April 25, 2017	July 27, 2017	October 23, 2017	December 8, 2017
Pilot Start Dates*	May 1, 2018	March 1, 2018	April 1, 2018	June 1, 2018	June 1, 2018
# Customers	2,000	14,000	2,000	4,555	3,934
Pricing Element	1. Quick-Ramping Critical Peak Pricing	1. Enhanced Time-of-Use 2. Enhanced TOU with Low Overnight (for shift workers & EV or thermal storage owners) 3. Variable Peak Pricing with CPP	1. Super Peak TOU 2. Seasonal TOU with CPP	1. Enhanced TOU 2. Two period TOU 3. Variable Peak Pricing 4. Real Time Pricing 5. Flat Rate **	1. Enhanced TOU 2. Seasonal TOU
Non-Price Element	1. Appliance and Load Control Technology 2. Real-time information feedback through a home energy management system	1. Real-time information feedback through a home energy management system 2. Targeted communications intended to reduce on-peak consumption	1. Real-time information feedback delivered through the customer's choice of e-mail, web, text, or physical report.	1. Real-time information feedback 2. Appliance/Household Automation	1. Real-time information feedback

*Pilot dates are as communicated by OEB staff as of February 6, 2018.

** Hydro One is also offering an “Optional rate protection fee” for all of its pricing treatments, ranging from \$3 to \$8 per month, which allows customers to pay the lower amount between their pilot bill and their standard TOU bill.

Price Pilot Types:

- *Critical peak pricing (CPP)* - increases prices for a fixed number of days/hours of the year when demand is expected to be high. This price is overlaid with the current TOU price structure. May include short notice (“quick ramping”) of a price increase during peak period.
- *Enhanced TOU* - increases the current on-to-off peak TOU ratio.
- *Super Peak TOU* - eliminates the mid-peak period and drastically increase the on-to-off peak ratio in the summer and winter periods.
- *Variable Peak TOU* - eliminates the mid-peak and only has an on and off-peak price. The on-peak price can vary depending on forecasted day ahead demand.
- *Seasonal TOU* – offers flat rates in shoulder seasons of spring and autumn, eliminates the mid-peak period, and increases the on-to-off peak ratio in the summer and winter.
- *Two-Period TOU* - eliminates the mid-peak period and increases the on-to-off peak ratio.

Non-Price Elements:

- *Real-time information feedback* - Customers will receive either a smart thermostat or an in-home display to better control their energy usage and receive instantaneous feedback on their energy usage.
- *Behavioural communication messaging* - Customers will receive access to personalized data and reports that will track energy usage, savings, provide TOU price alerts and energy advice/tips.

Bill Presentment

- On December 15, 2017, ENERGY amended O. Reg. 195/17 and 196/17 under the *Ontario Fair Hydro Plan Act 2017*, which requires all customer bills to show the savings as a result of the OFHP.
- RPP pilot customers were exempted from the new messaging regarding OFHP bill savings in the regulation. This was done to avoid negatively impacting the integrity of the pilot results.
- Below are the LDC bill presentment strategies for RPP pilot customers:
 - London Hydro plans to use their existing bill and display both current TOU prices and pilot prices.

- Alectra plans to use existing bills and provide participants with monthly bill reports (with a one month lag) on their savings or increased costs as a result of the pilot prices. Alectra is also offering bill protection for all customers for the first six months.
- Oshawa is designing new bills for pilot participants that would show only the pilot prices.
- Hydro One and Customer First are working on their bill presentment proposals.

Background

- The OEB is undertaking a review of the RPP.
- On November 16, 2015, the OEB released its RPP Roadmap identifying a 5-point plan for redesigning the RPP. The OEB expects to implement this plan over 3 to 5 years.
 1. Renewing RPP Objectives: OEB will update the RPP objectives to place a greater focus on peak demand reduction, efficient system operation and long-run system costs.
 2. Empowering Consumers: Enhancing energy literacy and non-price tools: OEB will explore opportunities to improve TOU communication, launch benchmarking pilots and undertake data collection initiatives aimed at enhancing consumer understanding and ability to respond to a pricing plan.
 3. Price Pilots: OEB will design and execute pilots to assess customer response to alternative price structures.
 4. Engaging with Low Volume Business Consumers: OEB intends to undertake a significant data collection initiative to better understand the needs of small business consumers.
 5. Working with Government to Reduce Barriers: OEB will work with the government and IESO to reduce barriers to set optimal pricing.
- The RPP Roadmap requires participating LDCs to conduct evaluations and to publicly report on the results of their pilots. The OEB expects the evaluations follow the IESO's Conservation First EM&V protocols and Requirements, and include:
 - Analysis on impacts on peak demand, total electricity use, customer acceptance and retention;
 - Results of customer surveys on customer understanding and energy literacy.
- With support from Ontario's Smart Grid Fund and the IESO's Conservation Fund, Powerstream (now Alectra) and Hydro One piloted different TOU price and non-price treatments between 2014 and 2017. They have built on these pilots in their RPP pilot proposals.

- PowerStream partnered with Energate to pilot their Advantage Power Pricing (APP) that combined CPP and variable TOU price treatments with real-time information non pricing treatment. The results are not available.
- Hydro One partnered with McMaster and Blue Line Innovations to combine a variety of TOU price plans with real-time information and behavioural communications messaging non-price treatments. The pilot tested customer response to the information and price signals, and measured customer's electricity demand shifting. The results are not available.
- In preparation for the RPP Roadmap, the IESO and OEB have conducted multiple analyses found that TOU pricing is achieving its intended objective to reduce electricity usage during peak times in Ontario.
 - For example: the IESO completed a three year study (prepared by the Brattle Group), to investigate the impact of TOU on load shifting, conservation and peak demand in Ontario.
 - Based on data from over 100,000 residential customers, final results of the study indicate that TOU pricing reduced consumption by residential customers during summer peak periods by 2.27 percent in 2012; 2 percent in 2013; and 1.18 percent in 2014.

Regulatory Amendment and Direction

- The ENERGY amended Ontario Regulation 95/05 on January 1, 2017 to support the OEB in delivering the RPP pilots, which are part of the OEB's RPP Roadmap.
 - Previously, Ontario Regulation 95/05 required an off-peak period that began no later than 7 pm and ended no earlier than 7 am on weekdays and all day on weekends and holidays.
 - The amendments removed this off-peak timing requirement for the purposes of pilots, enabling more effective testing of alternative pricing structures.
- On December 16, 2016 ENERGY issued a direction to the IESO to fund the RPP Pilots through the IESO Conservation Fund.