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Sent: 2017-06-02 4:08:10 PM
To: Kimberly Veeneman [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=6dad76ee6723486c8bf97ec2552a4c8c-Kimberly Ve]
Subject: Re: Investigations into Demand Response (DR), Load Shifting and Conservation Opportunities

Hi Kimberley:

Thanks for taking my call. I was working with Eric on a few proposals prior to him going on secondment. Evelyn Lundhild has been given the information. I am arranging to contact Evelyn for an update.

In the meantime, the Government passed Bill 132, The Fair Hydro Act, 2017. I had a few suggestions with respect to introducing an additional TOU bin from 11 p.m. to 7 a.m. and eliminating demand charges during this same period. I did not get an chance to get these comments to the committee reviewing the Bill.

While the opportunity to influence the Bill has passed it would be helpful to know if the IESO supports the position in principle. And if so, be willing to undertake investigations to determine the effectiveness of the recommendations in targeted field trials. .

Regards

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Comments to Removing Barriers and Promote Opportunities that Improve The Performance Of The Electricity System in Ontario.

Background:

Ontario has passed legislation to reduce electricity bills by 25% on average for all households across the province, starting this summer. We would like to see an even greater reduction in a new off-peak rate at the same time.

We have identified several barriers that inhibit customers from shifting energy to low-priced off-peak periods. We have encouraged the Government to modify the current time-of-use (TOU) pricing model to expose surplus night-time power to consumers. This would help advance of load shifting and conservation technologies, reducing costs for all.

Primary Recommendation - New TOU Electricity Bin 11p.m. to 7 a.m.:

Current TOU rates have resulted in approximately a 3% shift in consumption. We predicted this poor result, based on exiting TOU rates. We should be able to do much better. To help to manage & market our night-time surplus supply and shift more energy to the off-peak we recommend a new TOU Bin from 11 p.m. to 7.a.m 7 days-a-week. The current rates do not reflect the true cost of power. In addition, making weekends and holidays flat rate does not encourage investment in storage technologies, since the on-peak hours are limited by ~20%.

***NOTE:** We do not advocate raising on-peak prices to lower off-peak rates. We also understand that any long-term rate reduction in the off-peak period will need to be recovered. Instead, the proposed pilot rate is to investigate lower off-peak rates for those customers that use-enabling technologies to shift load. Thus these targeted customers should see lower bills while experiencing essentially the*

same comfort. If the load-shifting improves the operation of the electricity system, then savings should occur for all customer classes. This is what we need to implement ASAP.

Surplus Off-Peak Power:

"We have surplus power at night and need strategy to deal with the issue"

I think most with an insightful knowledge of the electricity industry feel we need to develop and research additional strategies to load-shift into the off-peak.

Issues that Distort Electricity Pricing & Customer Response

Fixed Price Contracts

Fixed-price contracts for generation and generation services continue to distort the true-market price for electricity based on the demand throughout the day. If this continues TOU rates become disconnected from the market price.

Recommendation: Generators should not receive the same price for power from 11 to 7 when demand is low. Otherwise, they have no incentive to help manage demand.

Transmission & Distribution (T&D) Charges

Interval Metered Customers have three demand charges

Distribution Charge: Anytime Peak kW or 90% of kVA (barrier to load shifting)

Transmission Network Charge: Peak kW (7 a.m. to 7 p.m.) (OK)

Transmission Connection: Anytime Peak kW or 90% of kVA (barrier to load shifting)

Recommendation: No T&D demand charges for peaks set between 11 p.m. to 7 a.m. This recommendation has been consistently made since the Market opened. Customers should not be penalized for shifting load to the off-peak.

LDC Issues

Given that the LDCs are basically wires companies; the commodity portion of the bill is a pass-through for them. They have no skin-in-the-game when it comes to TOU rates. While they have Conservation Targets to drive energy efficiency they have no mandate to encourage demand-response (DR) or load-shifting to the off-peak, based on conversations with LDC executives.

Recommendations: It appears LDCs only respond to targets set by the regulator. We need to set demand management targets to encourage load shift then give LDCs the authority and support to field-test load shifting technologies in their service areas. .

Commercial, Small Industrial & MUSH Sectors:

The commercial, small industrial and municipalities, universities, schools and hospitals (MUSH) sectors are not being seen, by Government, as an opportunity to implement load shifting technologies. Load shifting in these sectors help reduce costs across all customer groups.

Recommendation: Initiate field-trials for these sectors to evaluate load shifting technologies especially in government buildings.

Consumer Representative & R&D:

Where is the consumer advocate in the various industry groups? Now that the IESO & the OPA have merged this new group have the best overall knowledge of the electricity sector and the operation of the bulk power system. It is possible that the IESO could be more proactive and less independent in the issues affecting the industry? It also seems that proactive R&D previously supported by Utilities to help customers has disappeared and been replaced by ineffective programs, where proof of the theory is needed before approval of the research experiment.