Rate Design for Commercial/ Industrial Customers EB-2015-0043
Staff Discussion Paper, March 31, 2016

A.1 Introduction

Board staff make many unfounded assertions such as “advancements will enable greater consumer autonomy”, “changes will emerge ... and the way consumers engage with the energy market and service providers”. No examples were provided.

In the policy for the all-fixed residential rates the Board states 3 objectives;

To enable customers to leverage new technologies. No new technologies were identified.

Manage costs through conservation. The all fixed rate undercuts conservation efforts by eliminating the kwh distribution charges.

Customers cannot see the “value” of distribution services because distribution costs are buried in the delivery line of the simplified bill.

Removes any disincentive to promote energy conservation.
As stated previously LDC contribution to energy conservation is minuscule. The big move now is to replace mercury CFLs with long lasting LED lighting, supported occasionally by IESO rebates. When purchasing a major appliance, the Energuide label is a factor in the decision. The average Ontario consumer has no idea of their average kwh costs, again because of the simplified bill, although they are now much higher than the US average.

The all-fixed rate certainly benefits the LDCs by enhancing revenue stability, but provides no benefit to consumers.

Perverse Effects of all-fixed rates

The all-fixed rate creates a perverse financial incentive for LDCs to drag their feet on outage restoration. Residential revenue is the same whether the network is delivering energy or not. A cost conscious LDC manager could ban weekend outage restoration to cut overtime costs.

And apart from enhancing the rate base, there is no incentive to enhance system reliability by adding redundancy, load transfer capability and keeping up with preventive maintenance.

Customers will become more dependant on OEB reliability measures and the application of administrative penalties on LDCs that fail to meet them.

The Future of Renewable Generation for Urban LDCs

The underpinning of the move to all-fixed distribution rates appears to be preparation of LDCs for distributed generation.

For urban LDCs, that future is very cloudy for the following reasons:

1. The 450 m setback for wind turbines from property zoned residential, coupled with the high value of industrial land, pretty well precludes wind generation from all urban settings.
2. Homeowners thinking about roof mounted solar are now required to sign an affidavit saying they understand the downsides which are many: Any net income from rooftop PV is fully taxable by the CRA. The resale value of homes with rooftop PV is greatly diminished because the pool of potential buyers shrinks to a handful of “prosumers”. As well the cost of periodic shingle replacement is greatly increased.

For these reasons, one can expect that virtually all renewable generation to be in the service territory of Hydro One and a tiny handful of LDCs that have significant rural territory.

Electric vehicles

The acceptance of EVs will be very slow in Ontario because;

1. The price points are beyond middle income consumers.
2. The range of EVs before recharging is still in the 100 km range (much less in the winter) making them impractical for long highway trips.
3. Highway charging stations are few and far between. If developed there will have to have an indoor lounge for drivers and passengers to pass an hour or two while the vehicle is being charged.

The Demand Component of Distribution Costs

In the discussion paper, board staff now recognizes there is a significant demand component for the GS classes.
The rejection of demand costs for residential classes cannot be squared with the new proposed rates for GS customers.
Either there is a demand component or there is not. If there is, it should be applied to all classes.

Boundary Issues

Bill shock at the heavily populated 50kW level is a problem. All fixed rates shift a major portion of DX costs from the highest to lowest consumption levels in the class. If adopted for the GSe and GSd classes, the bill shock at the 50 kw level will be greatly exascerbated.
Similar shocks will occur at the intermediate and large user boundaries.

It is interesting to ponder the effects of all fixed transmission charges. The smallest LDCs would pay the same $ amount for transmission services as Toronto Hydro and Hydro One distribution. This would trigger massive M&A activity reducing the number of Ontario LDCs down to 2 or 3 of equal size.

Recommendations

1. Introduce a sub transmission class for all customers required to provide their own transformation (typically all customers >500kW demand). This would eliminate the intermediate and large user classes, associated boundary issues and transformer ownership discounts.
2. Revert to a nominal fixed charge for all classes to cover only customer costs such as metering, billing, collection and call centres. At present this design is used only for DG and micro fit customers.
3. For demand billed customers, re-introduce power factor billing. This is done most easily be billing based on kVa (the greater of kW 90, 95 or 100% of kVa demand), Many components of distribution systems are sized for kVa, not kW demand).

All of which is respectively submitted

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