

## Chapter 3

### Section 3.07

# Smart Metering Initiative

## Standing Committee on Public Accounts Follow-Up on Section 3.11, 2014 Annual Report

The Committee held a public hearing in May 2015 on our 2014 audit of the Smart Metering Initiative. It tabled a report in the Legislature resulting from this hearing in November 2015. The full report can be found at [www.ontla.on.ca/committee-proceedings/committee-reports/SmartMeteringInitiative](http://www.ontla.on.ca/committee-proceedings/committee-reports/SmartMeteringInitiative).

The Committee made eight recommendations and asked the Ministry of Energy (Ministry), the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO) to report

back by the end of March 2016. The Ministry, the OEB and the IESO formally responded to the Committee on March 22, 2016, on March 23, 2016, and on March 14, 2016, respectively. A number of issues raised by the Committee were similar to the observations we made in our 2014 audit. The status of the Committee's recommendations is shown in **Figure 1**.

**Figure 2** shows the recommendations and the status details that are based on responses from the Ministry, the OEB and the IESO, and our review of the information they provided.

**Figure 1: Status of Actions Recommended in November 2015 Committee Report**

Prepared by the Office of the Auditor General of Ontario

|                  | # of Actions Recommended | Status of Actions Recommended |                                 |                       |                         |
|------------------|--------------------------|-------------------------------|---------------------------------|-----------------------|-------------------------|
|                  |                          | Fully Implemented*            | In Process of Being Implemented | Little or No Progress | Will Not Be Implemented |
| Recommendation 1 | 1                        |                               |                                 |                       | 1                       |
| Recommendation 2 | 1                        | 1                             |                                 |                       |                         |
| Recommendation 3 | 2                        | 2                             |                                 |                       |                         |
| Recommendation 4 | 1                        | 1                             |                                 |                       |                         |
| Recommendation 5 | 1                        | 1                             |                                 |                       |                         |
| Recommendation 6 | 2                        | 1                             |                                 | 1                     |                         |
| Recommendation 7 | 1                        | 1                             |                                 |                       |                         |
| Recommendation 8 | 1                        | 1                             |                                 |                       |                         |
| <b>Total</b>     | <b>10</b>                | <b>8</b>                      | <b>0</b>                        | <b>1</b>              | <b>1</b>                |
| <b>%</b>         | <b>100</b>               | <b>80</b>                     | <b>0</b>                        | <b>10</b>             | <b>10</b>               |

\* Some recommendations required the Ministry/IESO/OEB to provide information to the Committee. The cases in which they provided the information as required we have counted as "fully implemented."

**Figure 2: Committee Recommendations and Detailed Status of Actions Taken**

Prepared by the Office of the Auditor General of Ontario

| Committee Recommendation  | Status Details  |
|---|---|
| <p><b>Recommendation 1</b><br/>The Ministry review the role of the OEB as an independent regulator when ministerial directives that impact electricity rates are issued and report back to the Committee on its results.<br/><b>Status: Will not be implemented.</b></p>  | <p>The Ministry did not review the role of the OEB as an independent regulator when ministerial directives that impact electricity rates are issued. The <i>Energy Statute Law Amendment Act, 2016</i>, proclaimed into force on July 1, 2016, changed the electricity planning process in Ontario. Under the new legislation, the Ministry is responsible for developing and updating Long-Term Energy Plans for Ontario while the OEB is responsible for preparing an implementation plan when the Ministry requests it. Although the new long-term energy planning process includes a role for the OEB in facilitating the implementation of the Long-Term Energy Plan objectives, it does not enable OEB to review and approve the Ministry's plans as an independent regulator.</p>  |
| <p><b>Recommendation 2</b><br/>The Ministry should work with the OEB and report back to the Standing Committee on Public Accounts on its completed review of TOU pricing design.<br/><b>Status: Information has been provided.</b></p>  | <p>The OEB completed its review of the electricity price plan including time-of-use (TOU) pricing design and released a report on November 16, 2015, which outlined a multi-year plan in five action areas. These actions include:</p> <ol style="list-style-type: none"> <li>1. updating the pricing plan's objectives, including a greater focus on peak demand reduction;</li> <li>2. improving consumers' understanding of the TOU program and how to effectively respond to TOU pricing;</li> <li>3. conducting pricing pilots to determine an optimal pricing structure;</li> <li>4. engaging low-volume business consumers to discuss TOU concerns; and</li> <li>5. working with the government to reduce regulatory barriers that limit OEB's ability to change the TOU periods and the allocation of the Global Adjustment.</li> </ol> <p>The OEB has already incorporated new objectives into its pricing plan (action 1). It is currently in the process of implementing the remaining four actions. For example, the OEB issued a request for proposals to retain a consultant to assist with the redesign of its consumer website to help consumers better respond to pricing signals and manage their energy consumption. The OEB also engaged an internationally-recognized expert to help set up pricing pilots to assess options for new TOU designs. The OEB estimated that it will take about three to five years to fully implement all five actions.</p>   |
| <p><b>Recommendation 3</b><br/>The OEB shall report back to the Standing Committee on Public Accounts on the most recent results of its consumer research program. This response must include results on:</p> <ul style="list-style-type: none"> <li>• consumer awareness with respect to TOU;</li> <li>• consumer response to TOU pricing.</li> </ul> <p><b>Status: Information has been provided.</b></p> | <p>The OEB commissioned a consumer researcher to gather evidence on consumer awareness about TOU. Key findings from the consumer research, completed in January 2015, were as follows:</p> <ul style="list-style-type: none"> <li>• consumers have a moderate level of awareness of the TOU program;</li> <li>• residential and business consumers displayed confusion and a lack of understanding about the electricity system in Ontario;</li> <li>• many consumers do not understand the charges on their electricity bills;</li> <li>• beyond knowing the names of the TOU periods, consumer awareness falls off drastically; and</li> <li>• even consumers who are aware of TOU pricing may still not understand when and how it operates or what behaviours are necessary to reduce their electricity bills.</li> </ul> <p>The OEB also commissioned a review to assess the ways in which consumers are, and are not, responding to the current TOU pricing structure in Ontario. Key findings from the December 2014 report included:</p> <ul style="list-style-type: none"> <li>• the perceived or actual monthly savings accrued as a result of shifting consumption behaviours may not be enough of an incentive to warrant sustained behaviour change;</li> <li>• the behaviours required to shift from high- to low-peak hours are perceived as being too complex and time consuming; and</li> <li>• automatic or routine behaviours are hard to change—even those who understand TOU pricing and intend to shift their consumption behaviour may not end up doing so because of scheduling hassles.</li> </ul> |

| Committee Recommendation  | Status Details  |
|---|---|
| <p><b>Recommendation 4</b><br/>The Ministry shall work with the OEB and report back to the Standing Committee on Public Accounts on how to improve the structure and presentation of customers' bills.<br/><b>Status: Information has been provided.</b></p>  | <p>The OEB identified a number of ways to improve the structure and presentation of customers' bills. By October 2018, the OEB intends to make recommendations on how to make electricity bills easier to understand. The OEB also intends to undertake various pilots and assess mechanisms such as:</p> <ul style="list-style-type: none"> <li>• re-naming the TOU time periods;</li> <li>• re-designing the visual presentation of TOU time periods;</li> <li>• modifying the overall presentation of the bill; and</li> <li>• providing better information on different household appliances, such as the amount of electricity the appliance consumes, the cost of that electricity, and how use and costs can be managed under TOU pricing.</li> </ul> <p>The OEB has limited ability to mandate changes to the electricity bills of low-volume consumers because they are governed by Ontario regulations. The OEB intends to use the results of the pilots mentioned above to develop recommendations for changes to electricity bills. The OEB has also engaged in discussions with its new Consumer Panel to get feedback on how it can make electricity bills more user-friendly.</p>  |
| <p><b>Recommendation 5</b><br/>The OEB shall report back to the Standing Committee on Public Accounts on its review of consumer complaints at Hydro One.<br/><b>Status: Information has been provided.</b></p>  | <p>The OEB reported that the root causes of increased consumer complaints to Hydro One were billing issues that arose from Hydro One's new customer information system and its metering communication network.</p> <p>The OEB required Hydro One to develop plans and take corrective actions to fix the technical issues affecting its customer billing system and the smart-meter network. The OEB also required Hydro One to respond to all complaints within 10 business days, instead of the previous standard of 21 days. The OEB instructed Hydro One to stop all collection activities in cases that involved billing accuracy complaints, including late payment charges and disconnections, and to stop referring those accounts to collection agencies.</p> <p>The OEB has been holding regular bi-weekly meetings with Hydro One to ensure Hydro One is complying with the requirements above. The OEB reported that Hydro One returned to normal collection operations in mid-2015.</p>  |
| <p><b>Recommendation 6</b><br/>The Ministry shall report back to the Standing Committee on Public Accounts on:</p> <ul style="list-style-type: none"> <li>• its completed business case concerning costs, benefits, and implementation considerations of access to electricity usage data;<br/><b>Status: Fully implemented.</b></li> <li>• its efforts to reduce duplication of the processing costs of smart-meter data.<br/><b>Status: Little or no progress.</b></li> </ul> | <p>On October 15, 2015, at the Ministry's request, the IESO (in conjunction with the Advanced Energy Center) completed a business case for a project that allows access to electricity usage data to help the Ministry make informed decisions on energy policy, infrastructure planning and conservation programs. According to the business case, the potential benefits of the new data project will outweigh its potential costs. The business case also included an implementation plan which outlined several considerations, including ways of ensuring privacy and security of customer information. However, at the time of this follow-up, the Ministry had put implementation on hold until the IESO finished work on the provincial data system to collect additional information, such as postal code and occupancy change data in a non-personal manner.</p> <p>We found that the Ministry has made little progress in reducing the duplication of smart-meter processing costs. Specifically, the Ministry was unable to provide assurance that ratepayers are not paying for duplication of processing costs on smart-meter data. The Ministry indicated that the IESO has the exclusive authority to conduct validation, estimating and editing services for smart-meter data. If local distribution companies are duplicating the functionalities of the provincial data centre, they are acting contrary to government regulation. We noted that a large local distribution company with about 700,000 smart-meter customers (the same distribution company we identified in our 2014 report) was not transmitting any data to the provincial data centre although its customers were still being charged the monthly 79¢ Smart Metering Charge to recover the costs for doing so. This company has obtained approval from the OEB to fully integrate with the provincial data centre and has agreed to start using the provincial data centre to process TOU bills by September 2017. However, we noted that the amount collected from this company's customers for the provincial data centre the company had yet to start using totalled \$20.9 million as of mid-2016 (up from \$7.7 million at the time of our 2014 audit).</p> |

| Committee Recommendation  | Status Details  |
|---|---|
| <p><b>Recommendation 7</b><br/>The IESO shall provide the Standing Committee on Public Accounts a list of the functions that the IESO has exclusive authority over that are fulfilled by the provincial data centre.<br/><b>Status: Fully implemented.</b></p>  | <p>The IESO provided the Standing Committee on Public Accounts with the requested list of functions. According to Ontario Regulation 393/07, the IESO has the authority to:</p> <ul style="list-style-type: none"> <li>• collect, manage and store meter data;</li> <li>• perform validation, estimating and editing activities to identify and account for missed or inaccurate meter data;</li> <li>• operate one or more databases to facilitate collecting, managing, storing and retrieving meter data; and</li> <li>• prepare data that is ready for use by distributors to bill ratepayers.</li> </ul>   |
| <p><b>Recommendation 8</b><br/>The IESO shall report back to the Standing Committee on Public Accounts on steps it has taken to strengthen cybersecurity (i.e., use of encryption, etc.) with respect to smart-meter data at both the provincial data centre and locally with the LDCs.<br/><b>Status: Information has been provided.</b></p> | <p>The IESO and the Information and Privacy Commissioner of Ontario jointly developed a privacy and security framework for the provincial data centre. This framework includes steps to ensure that only local distribution company users and their authorized third-party vendors are able to retrieve smart-meter information.</p> <p>In November 2015, the IESO received its sixth consecutive annual clean audit. The audit, by an independent external audit firm, examined the Meter Data Management and Repository's operations, processes and procedures. The audit confirmed that appropriate controls are in place at the IESO. It also specified the controls that should be in operation at local distribution companies to prevent and detect unauthorized access to smart-meter data.</p> <p>The IESO also recently introduced the following new measures to help local distribution companies manage their users' access to the provincial data centre:</p> <ul style="list-style-type: none"> <li>• Distribution companies must respond to a security question they have previously created when requesting the IESO to grant a new user access to the provincial data centre.</li> <li>• Distribution companies must review their users' accounts annually and notify the IESO of any changes required in a timely manner.</li> <li>• The IESO conducted two webinar sessions to educate distribution companies about their responsibilities for establishing security controls within their own organizations to complement those in place at the IESO. Although only 14 people attended, the webinars were recorded and are available at any time to local distribution companies through the Smart Metering Entity's secure online information centre.</li> </ul> |