Comments

Board Staff Paper
Electricity Distribution System Reliability Measures and Targets
OEB File: EB-2014-0189

General Comments

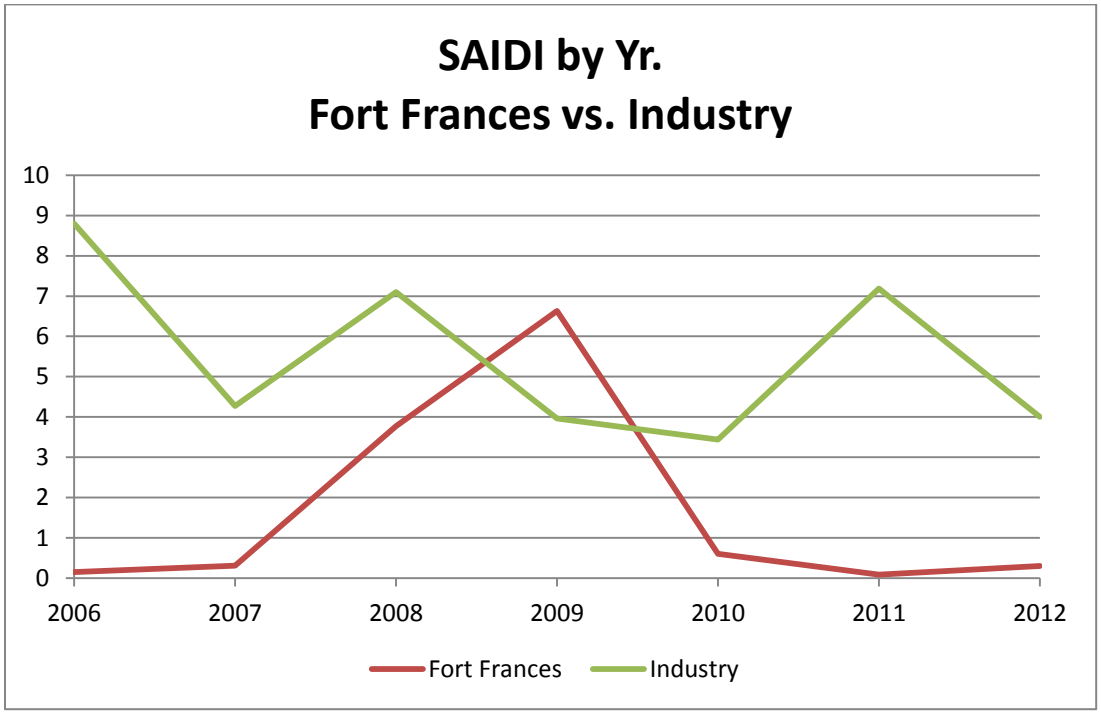
Comments have been provided for those sections where AMPCO believes changes may be required, as well as on the specific issues where Board staff has requested input.

Data quality is suspect

It is difficult to produce good conclusions based on questionable data, and some of the data used in this report should be more closely reviewed before being accepted.

For example, the PEG research noted the top end of SAIDI performance as 0.18hr. This is on a par with and perhaps better than the reliability of the Ontario transmission grid supply, which is an automated network system with high levels of component redundancy, which transmission components are also specified to a higher grade of reliability.

The chart of SAIDI data below was produced from the Electricity Distributors Yearbooks.



The intent here is not to single out Fort Frances. Reporting from some other LDCs show similar patterns. Fort Frances is a smallish LDC, but one with several distribution feeders. It is not a new LDC.

For Fort Frances, SAIFI shows a similar pattern. The point of the graph is simple.

A reported SAIDI of 0.09hrs (2011) is difficult to believe for an overhead distribution system that is not fully automated and fully networked. It is also difficult to see how one the performance of an LDC can change so radically in a single year.

Reporting accuracy can be affected in several ways. As has been noted in the working group, distributors that install SCADA systems typically see an increase in reported outages, as automated data collection collects outages that might otherwise not have been reported manually.

There are other sources of data discrepancy as well. While the Board is clear on defining an outage and when it is deemed to have started and ended, it may be that the reporting requirements in many cases have not been implemented at the field level. For example, crews may only define an outage as having started at the time the crew was dispatched, not when the customer first reported it. Likewise, work crews do not traditionally regard outages for switching operations during construction or maintenance to be a reliability issue.

It may be useful for the Board to do some review of outage reporting compliance before simply accepting the data being reported, especially where the data seems out of line with what would be expected.

Comments Requested by Board Staff

What approach should the Board take to establish performance targets for SAIDI and SAIFI?
AMPCO agrees that distributor reliability targets should be based on historical performance. Given the weather – driven variability that is inherent with overhead distribution, in AMPCO's view a rolling five year average is the best measure to use in setting and reporting on a target.

Should performance targets be distributor-specific, a single province-wide target for all distributors, regional or based on peer groups?
AMPCO believes a distributor-specific target is best. For the reasons provided in the Paper, a single province-wide target for all distributors, regional or based on peer groups is not recommended. (i.e.

Distributors should also be allowed to propose a different reliability target from a five year rolling average if there are valid reasons for doing so. For example, if a distributor has changed its reporting by implementing a SCADA system or bringing its outage reporting into line with standards, historical data may not be as useful as with an unchanged reporting environment.

At the same time, distributors seeking to raise their reliability targets significantly (i.e., to the point that a substantial increase in rate base or OM&A is required) should bear the onus of demonstrating that its customers are supportive of the cost. Such support should be quantitatively demonstrable, not anecdotal in nature.

Should performance targets be based on a specific target, or a target range?
Again, the Board will need to accept that reliability performance is not always in the full control of the distributor. Whether the Board sets a specific target with a tolerance band or a target range is largely a matter of communications. If the goal is to provide customers with useful information, it may be helpful if distributors report both the annual metric and the trailing five year average of the index.

What is the appropriate time frame for performance targets to be in place, i.e. should targets be fixed for a five year period or should a rolling target be used to adjust for the most recent performance?
A rolling five year average would be the best indicator, given weather variability.

Should the Board introduce a time line for the implementation of customer-specific reliability measures?
CEMI and CELD measures or something equivalent should be part of the reliability reporting of any distributor. Given the investments in new customer information systems, SCADA and smart meters over the past decade, it is frankly astonishing that so few distributors claim to have this capability.

The reported inability to report CEMI and CELD data may be less difficult to overcome than one may believe. Most utilities, certainly the large ones, need to have customer counts by feeder section (i.e., a switch hierarchy with customer counts) for planning and operational purposes. Obtaining or enabling the acquisition of CELD/CEMI data may be relatively simple, especially in the larger utilities with ERP systems and sophisticated outage management, such as Hydro ONE and THESL.

It should be noted that, in the most recent THESL COS application, evidence was provided that indicated a very sophisticated ability to acquire and quantify the customer impact of outages, down to the specific equipment level.

Would it be useful for the Board to undertake a pilot project with a number of willing distributors to explore the implementation issues related to the introduction of customer-specific reliability measures? What should be the objectives and/or goal of this project?
At a minimum, the Board should initiate a pilot program as suggested. As a complementary suggestion, the Board should also have a knowledgeable (i.e., in SCADA, CIS and OMS) third party investigate the relative difficulty of obtaining CELD and CEMI data from systems where the distributor claims this information is not currently available.

For those distributors unable to produce CELD/CEMI type information, the next best alternative may be to require reporting of the "worst feeders" type until CEMI/CELD data are available. Every distributor should be able to provide data on the reliability performance of its 10 worst feeders, including the number of customers served by these feeders. For distributors with less than 10 feeders, CELD/CEMI data may have limited value in any case.

Should distributors be required to develop and implement written practices and procedures for responding to customer complaints about momentary outages as part of their Conditions of Service?
The nature of electrical distribution design is that momentary interruptions are an inevitable and necessary consequence of system design. For those customers that are sensitive to momentaries, a variety of technical options are available.

There will always be customers that suffer larger numbers of momentary interruptions than other customers do, again as a consequence of distribution system design.

AMPCO does not believe that distributors should have to develop specific policies and procedures to address customer complaints about momentary interruptions. Regular customer complaint response processes should suffice, assuming the distributor is committed to assessing all complaints in a responsible manner.

Notwithstanding the above, customers should always be notified of upcoming *planned* interruptions, including momentary interruptions.