



August 20, 2014

Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, Suite 2700  
Toronto, ON M4P 1E4  
**Attention: Ms. Kirsten Walli, Board Secretary**

Dear Ms. Walli:

**Re: Initiative to Develop Electricity Distribution System Reliability Performance Targets  
EB-2014-0189  
Comments on Board Staff Discussion Paper**

On July 15, 2014, the Board posted a Staff Discussion Paper on Electricity Distribution System Reliability Measures and Targets ("Discussion Paper") and the Board invited comments from industry stakeholders, including from EnWin Utilities Ltd. ("EnWin"). Consistent with the philosophical underpinning of the Renewed Regulatory Framework for Electricity ("RRFE"), the Board invited stakeholders to both comment on the issues raised in the Discussion Paper and offer "other alternatives for achieving the objectives of the initiative." In this way, the Discussion Paper asks stakeholders to remain outcome oriented.

### **Context**

A principal outcome that we as a sector work on day-in and day-out is being customer focused. While there is renewed vigour in our collective quest to better serve customers through reliable system performance and otherwise, this is not a new quest. EnWin's original predecessor, the Windsor Hydro Commission, inaugurated its first substation on August 15, 1914. The community was connected to the provincial grid by the longest transmission line in the world at that time (250 miles) on August 20, 1914, exactly 100 years ago. While there were private sector alternatives (including Detroit Edison Company in rural Essex County), public power was introduced because customers demanded it. This was especially the case in an emerging industrial centre like Windsor.

When Sir Adam Beck ceremonially switched on Windsor's first electric street lights in front of the Windsor Armouries where recruits were preparing for the Great War, it was a "highlight" event at the Industrial Exhibition that showcased what power could do for people and industry. Just as the City of Windsor is now moving forward with LED Street Lights in pursuit of better quality at less cost, on September 12, 1914, it was the nitrogen filled tungsten lamps that were activated because they were the most economical way of lighting the night sky. Identifying and pursuing projects that add value to customers by delivering a quality of service that warrants the cost has always been central to the mandates of local public utilities, including EnWin.

The Board's initiative is in this same tradition. As part of the executive branch of the Ontario Government, the Board is further enhancing the framework and data points that it uses to ensure that the people and businesses of Ontario are getting good value from their electric utilities.

### **Regulated Reliability Performance**

The reliability of electricity is second only to safety in its importance to customers and utilities. Setting expectations for that reliability through targets, measuring performance in relation to those targets, and obtaining and publishing management discussion and analysis of that performance is appropriate and value-added work on the part of the Board as regulator.

The traditional industry metrics for reliability are the System Average Interruption Frequency Index ("SAIFI") and the System Average Interruption Duration Index ("SAIDI"). SAIFI provides a sense of how frequently customers experience an outage and SAIDI provides a sense of how long those outages persist. For many years, SAIFI and SAIDI information has been filed with the regulator through periodic filings, rate applications, and in relation to other regulatory files.

There are other avenues for customers to raise reliability concerns to the attention of the regulator. The Board has a Consumer Protection division that fields complaints and pursues resolution with the utility. The Board classifies reliability and outages within the "service quality category". In 2013, "service quality" was the third most frequent complaint received in relation to electricity utilities. However, there are numerous other service activities included within "service quality", so it is difficult to assess concerns about reliability relative to other concerns. It is also uncertain the degree to which concerns about reliability tend to arise in hard-to-serve territories, such as rural and heavily forested communities. Irrespective of the statistics, the Consumer Protection function at the Board provides a direct means by which the Board can become aware of and respond to customer complaints about inadequate reliability.

### **Utility Interest in Reliability Performance**

Importantly, irrespective of SAIFI and SAIDI metrics and engagement with the Board's Consumer Protection division, utilities are active operators of their distribution systems. As such, they are constantly attuned to grid performance. There is nothing to gain and everything to lose when the system is unreliable or outages occur. Particularly in the case of locally owned and operated distributors, the deep connection to the community serves a self-regulating function. When outages occur, the employees of the utility as well as their families, friends, and neighbours are often among those who are without power. Dispatched restoration crews are not only doing a job, they are helping themselves and those close to them. Similarly, the municipal shareholders, locally appointed board members, management, and staff have personal stakes in ensuring that the resources and arrangements are in place to avoid and quickly remediate outages.

Throughout Ontario, and especially in communities like Windsor, reliable electricity is critical to the local economy. There is enormous pressure exerted by customers to keep a steady stream of power flowing to their automotive plants, gaming facilities, shops, offices, and other places of business running smoothly. Increasingly these customers are using increasingly sensitive equipment that cannot withstand split-second voltage dips, let alone full-blown outages. Some of these reliability incidents are so slight they not register on the utility's equipment and would not qualify according to any of the measures set out in the Discussion Paper. Irrespective of the regulator's awareness of the incidents, EnWin and other utilities spend countless hours addressing these incidents with customers because of our acute awareness of the direct impact to our customers and the indirect impact to their customers. Whether the customer is operating locally or in the global marketplace, their success is critical to the success of the local community and the local distribution company. A utility is not sustainable without sustainable customers.

### **Bottom Line**

Local distributors have been focused on reliable service for their customers for a very long time. These utilities have every reason to continue to drive toward that outcome for their customers and for themselves. It is in the common interest of distributors and their customers to have a reliable local grid. Where the reliability is insufficient, in most cases customers bring those issues directly to the utility and the utility works with the customers to build understanding and ideally solutions to remediate the issue.

The Board has a valuable role in setting expectations for reliability through targets and in measuring performance against those targets. Where customers are not getting their concerns adequately addressed, the Board has a Consumer Protection division that will work with the customer and the utility to ensure the matter is attended to.

The Board's reliability targets exist in this broader context. They cannot and need not be grand guardians of electricity reliability in Ontario. There is a wide range of other factors that are all pressing distributors to ensure a high quality of service. The targets can, do, and should provide a benchmark to allow all stakeholders to get a sense of the relative degree of system reliability among Ontario's electricity distributors.

### **Responses to Discussion Paper Inquiries**

- 1) What approach should the Board take to establish performance targets for SAIDI and SAIFI (i.e. historical or projected performance)?

EnWin supports the Board **setting reliability performance targets**. Doing so helps all stakeholders set expectations with respect to the quality of service.

EnWin supports setting targets based on **historic performance**. As the PEG research reaffirms, reliability performance as measured by SAIFI and SAIDI is highly variable. It is significantly impacted by a wide range of controllable and uncontrollable events that occur within and beyond a distributor's grid. Targets that are rooted in this volatile history is a simple and clear way to illustrate the nature of the challenge of delivering electricity reliably. Targets that are based on future projections would need to be tied to historic performance in any event and they risk suggesting a degree of control that simply does not and cannot exist.

EnWin agrees that the ethos of continuous improvement must permeate a distributor's work and be reflected in these targets. Using historic performance as the basis for the target transparently illustrates that principle.

- 2) Whether the performance targets should be distributor-specific, a single province-wide target for all distributors, regional or based on peer-groups?

EnWin agrees with the input from the distributors on the Working Group, PEG, and Board Staff that the Board set **distributor-specific targets**. In the context of over 70 distributors with extremely diverse service areas, setting distributor-specific targets is the approach that is most likely to correspond to customer needs and wants.

EnWin agrees that there be a **default target**, but that the Board should be willing to set a **modified target on application** by the distributor. This would best be addressed in a utility's Distribution System Plan ("DSP"). Since the Board typically considers a DSP during a utility's Cost of Service Rate Proceeding ("COS"), this would allow the utility, regulator, intervenors, and customers to have a worthwhile discussion about the interrelationship of the reliability value proposition in the context of a particular service area.

- 3) Should performance targets be based on a specific target, or a target range?

EnWin supports setting a **specific target** in the same way as the Board sets targets for each of the Service Quality Requirements (e.g. telephone accessibility).

To EnWin, a range is illogical and an inherited anomaly. It suggests that reliability performance can be "too good". It cannot. Utilities and customers agree on that. Without a doubt, the cost per unit of reliability may be too high. However, that is not what these targets are measuring. These targets simply and exclusively set ceilings that the number of outages and duration of outages should not exceed. This point is made obvious in the Board's scorecard template which places these targets in System Reliability not Cost Control.

From a consistency perspective, if the Board adopts a range for reliability, it should also adopt ranges for the other targets in the scorecard.

- 4) 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?

EnWin agrees that a **five year target** is appropriate in that it is consistent with the historic reference point used elsewhere on the scorecard. EnWin submits that as higher quality data accumulates over time, the Board, customers, and utilities would be well served by expanding the historic reference points for reliability and the other targets.

Distribution systems are large and relative static in respect of their component parts. Many assets have useful lives of greater than 50 years and even when replacements occur, those replacements generally perpetuate the nature of the grid. For example, overhead poles are generally replaced with overhead poles and the replacements are situated less than a meter from the retiring asset. However, this stability belies a very fluid environment that is unpredictable and uncontrollable. Assets that have barely aged can and do perform very differently from year to year, as do the crews that serve them during an outage. The change in performance does not necessarily warrant replacement assets or additional headcount. Rather, what is required to assess reliability performance is a longitudinal review and trend assessment to ascertain why reliability is faltering.

EnWin also agrees with using a **rolling target**. EnWin is mindful that some of our peers are in favour of a fixed target. From EnWin's perspective, scorecards and other performance assessments almost always have regard for the most recent comparative period available. This is possible and desirable in relation to reliability performance.

For the reasons above regarding the stable system that operates in an unstable environment, EnWin does not agree that a rolling target will "demonstrate the distributors' effectiveness in implementing its asset management plan" as suggested by Board Staff.

What a rolling target does do is provide the utility a better reference point in describing the utility's performance relative to recent years. For example, where a target is not met, a distributor might discuss the impact of a particularly significant storm and note that the community had not had storms that significant in the 5 years prior. That would be much more meaningful than explaining that the storm was unlike anything seen during an arbitrary 5-year period that ended a few years ago.

EnWin also recognizes that it diverges from some of its peers in recommending that the target encompass **controllable and uncontrollable interruptions**. EnWin does agree that the target should **exclude loss of supply**. The distinction between controllable and uncontrollable interruptions is not a settled matter. Even if there was a single definition, it could only be applied going forward, which would negate the historic reference point used to establish the target.

Moreover, the MD&A is the appropriate forum to explain the reasons why the target was or was not met. The purpose of the scorecard is to illustrate what occurred on the distribution system. It is for that same reason that the SAIFI and SAIDI metrics used should exclude the loss of supply. It is not reflective of distributor performance or the performance of its grid. The inclusion of loss of supply would make comparison among distributors more difficult. Stakeholders would need to sort through MD&A filings to compare the loss of supply excluded figures, assuming all distributors chose to report that.

Interruptions classified as “uncontrollable” may be of interest to stakeholders. For example, a SAIFI (including uncontrollable events) that is relatively high compared to other distributors may suggest the need for more robust infrastructure that can withstand more uncontrollable events, such as hardening assets, or more aggressive preventative maintenance. It illustrates the reality. In doing so, it sets the stage for discussion among stakeholders. Why it is at that level? Should be higher or lower, having regard to the cost of that alternative?

EnWin submits that the **target must be simple to understand, easily replicable, and tangible**. Customers are unlikely to embrace SAIFI and SAIDI targets that use standard deviations. Those are abstract and difficult to replicate. While an average is much better, it is still an abstraction. That is, there was no actual year that looked like what the average suggests should be attained. There is no tangible reference point to identify the number of storms or other events that are associated with the target.

EnWin submits that the Board should set the **third best year out of the five year historic reference years** as the target. Admittedly, selecting the third best year could be an aggressive target. In some years, the third best year could be very close to the second best year. Of course, in other years it could be close to the fourth best year. Over time, these should balance each other out. In this way and in being the “middle results”, the target has a simple sense of fairness to it. It is also much more tangible than a calculated average.

In preparing the MD&A, utilities would be comparing the completed year with an actual year. This has the significant advantage of recollecting actual historic events from that target year to use as the reference point for discussing and analysing the scorecard results. For customers, the reference point would be much more tangible and related to actual experience (e.g. “Ah yes, I remember we had an easy/tough winter back in 2011. I’m glad/frustrated that my utility did better/worse than that last year.”) This would be far more “real” to customers than using either standard deviations or averages.

EnWin submits that the **scorecard’s reliability trend** will be very important for this measure. It may even be more important that the target itself. Because the weather and animal contacts are erratic, the trend towards better or worse reliability in the current year with reference to the historic reference period will be very informative. If system integrity is not keeping up with the worsening climate or other factors, the trend will bear this out.

The importance of the trend is another reason why the Board should use a rolling historic period to set the target rather than use a fixed five year period. The trend during that historic period will be inflexible and not reflective of the changing grid or changing environment. Over time, the departure of the current reality from that fixed period would lead to trend indicators not rooted in reality. Then, at the time the fixed period was reset, it could be shocking how disconnected the newly understood reality was compared to what was reported immediately prior to the reset.

- 5) Should the Board introduce a time line for the implementation of customer-specific reliability measures?

EnWin submits that the Board should **not set a time line to move to customer-specific reliability measures** at this time. PEG found the use of these measures to be “rare” and the Discussion Paper only identified three jurisdictions in the world (i.e. Florida, Sweden, British Columbia) where these measures are used. Most importantly, as the distributors on the Board’s Working Group noted, the technology and effort required to comply is extremely expensive. Board Staff has found that most distributors have yet to make those investments. Even where the initial investments have been made, it appears that the “readiness to report” is almost entirely absent. Usually those configuration activities are also very expensive.

Implementing these measures at this time would be to put Ontario on the “bleeding edge” rather than “leading edge”. The cost would not warrant the output.

If reliability was a significant problem in Ontario, or if the cost of electricity was relatively low, then the Board would be justified in moving forward at this time. However, there is no evidence of widespread reliability problems and ample evidence that the cost of electricity is not low. If anything, reliability is something we are doing well and, in the interest of cost avoidance, as a sector we should be sustaining rather than increasing investments in the regulatory monitoring of reliability.

- 6) 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 goals of this pilot project?

EnWin agrees that the Board should **undertake a pilot project so long as there are willing distributors and the costs would be negligible**. As noted above, this is not the time to be sinking additional customer funds into regulatory monitoring of reliability. However, a point will surely come when the technology will be in place for operational purposes and the regulatory reporting would present a negligible incremental cost. If that point has already arrived for certain distributors, stakeholders would benefit from learning their experiences.

Much as is the case in decentralized countries like Canada and the United States, a significant advantage of a large number of distributors is the opportunity to pilot new policies and approaches. EnWin **commends the Board for considering pilots and encourages their use more frequently** to test the real world implications of new regulatory requirements. This approach is not only beneficial to utilities but also to customers. It will likely result in the identification of minor tweaks that yield considerable improvements in achieving outcomes. It will also likely improve the efficiency and reduce the cost of achieving those outcomes.

- 7) 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?

EnWin supports the comments of the distributors in the Working Group. **Momentary interruptions, while undesirable, are often the lesser of two evils.** Customers (and apparently intervenors) with momentary interruption concerns need to be educated in that regard. EnWin, and presumably other utilities, actively discuss this and any number of other topics with customers. Hopefully this policy proceeding will assist in educating intervenors.

It is EnWin's experience that the customers that suffer material losses as a result of momentary interruptions are large customers with advanced manufacturing equipment that is extremely sensitive to power irregularities, including brief interruptions and minor voltage dips. **It is unthinkable to EnWin that any community-based distributor is not in regular dialogue with these large customers, including with respect to the issue of momentary interruptions.**

In EnWin's experience, these **customers are not interested in a distributor's MAIFI**; their exclusive concern is the interruptions that affect them. They know each of those by heart and bring them squarely in front of senior utility officials. The standard they demand is perfection and utilities work very hard to come as close to that as is possible given the limits on what the customer and other customers are prepared to spend to further enhance reliability.

In the same way, in EnWin's experience, these large **customers are not interested in having the Conditions of Service prescribe a complaint resolution processes.** Quite the contrary, these customer want personalized treatment of their company and the specific incident. They abhor bureaucratic processes. As a customer focused utility, EnWin treats each of these large customers and the issues that affect them on an individualized basis. These companies are pillars of the local economy and the community more broadly. They pay for and receive customized attention. EnWin expects that it would regularly be in non-compliance with Conditions of Service that set out a prescribed format for those interactions. The outcomes demanded by these sorts of incidents are diametrically opposite to the proposal by the intervenor. They want their concerns addressed on a "one-off basis."



As such, EnWin doubts that the intervenor speaking on this issue has the support of its constituency in respect of this matter. The large customers in EnWin's service area would be opposed to standardized performance requirements and uniform treatment of performance issues. Many of these customers have operations and peers in other service areas where EnWin expects the Board would find similar levels of resistance rather advocacy in respect of these proposals.

While distributors cannot always provide a solution to momentary interruption issues for the reasons identified by the Working Group, to the extent that there are utilities that are not dialoguing with large customers about these issues, the Board's **Consumer Protection** division should be engaged directly by those customers. EnWin expects that if it was not responsive to its large customers, the customers would also engage EnWin's **municipal shareholder** and if that were not successful, it would likely approach the **Ontario Government**. These are large, sophisticated, influential customers that cannot and will not be ignored. If there were meritorious issues, the Board would know quickly and definitively.

EnWin also does not agree with the intervenor submissions regarding the need for incremental education regarding protection from momentary interruptions. With current technology, the most cost effective investments that can be made to avoid the damages that may affect customers of any size when a momentary interruption occurs is an investment on the customer side of the meter. Since this is at no cost to the distributor, the **distributor has every reason to prevent and rectify this area of customer concern by talking to customers about equipment protection**. EnWin questions the degree of consultation that took place between intervenors and their constituents on this matter.

It may be that customers would like to see distributors pay for the customers' protective equipment. EnWin has heard that request from some of its customers – large and small. However, the current regulatory and legal framework does not support distributors absorbing the costs and liability associated with those sorts of solutions.

### **Concluding Comments**

Reliability is a top priority for EnWin and its customers. It has been for 100 years. EnWin supports appropriate reliability targets and the reporting of those targets as a means of setting expectations for all stakeholders and as the starting point for a meaningful dialogue about the local distribution system, distributor restoration operations, and the environmental conditions that affect reliability performance. EnWin supports the Board moving forward with pilots as a means of ensuring that regulation leads to desired outcomes effectively and efficiently. EnWin does not support the intervenor proposals and comments in respect of momentary outages, which are not aligned with EnWin's extensive experience in dealing with the types of customers that are most significantly affected by these types of events.

We appreciate the opportunity to provide this input to the Board and look forward to future opportunities to participate in this consultation and development of provincial policy.

Yours very truly,

**ENWI Utilities Ltd.**

A handwritten signature in blue ink that reads "Andrew J. Sasso". The signature is written in a cursive style with a large initial 'A'.

Per: Andrew J. Sasso, BComm, LLB, LLM  
Director, Regulatory Affairs & Corporate Secretary