



SOCIETY *of*
UNITED PROFESSIONALS
IFPTE 160

ONTARIO ENERGY BOARD MODERNIZATION REVIEW PANEL SUBMISSION

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1.0 EXECUTIVE SUMMARY

The Society of United Professionals welcomes the opportunity to contribute to the discussion of how best to modernize the Ontario Energy Board (OEB) so that Ontario's energy regulator can do an even better job of achieving its mandate and provide the most responsible consumer protection for Ontarians.

This submission puts forward the position that the OEB should:

- Balance innovation with customer protection
- Shift to outcome-based regulation rather than micro-management of industry participants
- Make a fundamental shift in policies and practices and change how the OEB interacts with new market participants
- Make material changes in its governance framework

2.0 OVERVIEW AND KEY ASSUMPTIONS

The focus of this submission is on following three themes which were put forward by the OEB Modernization Review Panel (the panel)¹:

- Mandate and activities
- Disruption and innovation
- Governance Framework

The Society of United Professionals recognizes that the other four themes identified by the panel (Stakeholder Relationship, Relationship to Government, Regulatory Excellence and Benchmarking, Resourcing) are interrelated with these three themes and touches upon elements of them in this submission.

The underlying assumption made by the Society of United Professionals in this submission is that due to new technologies being adapted over the front half of the next decade, the number of entities and products/services which will be regulated by the OEB must and will increase substantially. This is because the current industry participants will continue to exist and be regulated by the OEB and they will be complemented by new industry participants who will be utilizing new and innovative technologies.

¹ This is as provided in Appendix B – “Discussion Notes” as attached to the email entitled “OEB Modernization Review Panel – Invitation To Contribute”, dated 2018-03-09.

3.0 INTRODUCTION

3.1 ABOUT THE SOCIETY OF UNITED PROFESSIONALS

The Society of United Professionals is a growing union of 8,000 professionals based primarily in the energy sector.

Among the organizations the Society of United Professionals' members work for are Ontario Power Generation (OPG), Hydro One, Bruce Power, Ontario Energy Board (OEB), Independent Electricity System Operator (IESO), Inergi, Kinectrics, AMEC Nuclear Safety Solutions, Toronto Hydro, Electrical Safety Authority (ESA) and Legal Aid Ontario. The members we represent work in a wide variety of occupations, such as engineering, economics, auditing, accounting, system planning, information systems management, law as well as many other professional, administrative and associated occupations.

The Society of United Professionals is Local 160 of the International Federation of Professional and Technical Engineers (IFPTE). Based in Washington, D.C. and with 80,000 members in the U.S. and Canada, IFPTE represents a variety of professionals, including lawyers, judges, social workers, scientists and accountants.

Additionally, the Society of United Professionals is affiliated to the Canadian Labour Congress, Ontario Federation of Labour and many local labour councils.

3.2 SOCIETY OF UNITED PROFESSIONALS' RELATIONSHIP WITH THE OEB

The Society of United Professionals represents all staff at the OEB with the exception of those in human resources, legal, management, and the Board of Directors.

Society of United Professionals-represented staff hold a wide range of roles, from administrative duties to senior advisory roles. Staff conduct and oversee the OEB's work on rates, infrastructure approvals, policy decision-making, climate change, communications, auditing, licensing, consumer protection and business services.

4.0 MANDATE AND ACTIVITIES

4.1 EXPAND AND OPTIMIZE OEB MANDATE

The existing mandate of the OEB is to make decisions and provide advice to the government in order to contribute to a sustainable, reliable energy sector and to help consumers get value from their natural gas and electricity services. The OEB does this by establishing rates and prices that are reasonable for consumers and that allow utilities to invest in the system; encouraging higher performance from natural gas and electricity utilities and measuring progress; making the consumer's own usage easier to understand; looking out for consumer interests, investigating complaints and applying penalties, where appropriate; and thinking about the long-term needs of the energy sector and developing regulatory policy to meet emerging challenges.

In order to support the modernization of Ontario's energy sector the scope of the OEB's mandate and activities need to be expanded, and its existing role optimized. The focus of the OEB's mandate must be on balancing innovation in the sector with the protection of Ontario energy consumers.

Modernization and innovation within the energy sector will introduce new products, services and industry participants to a space with many well-established actors. Many of these new participants are expected to be private sector entities that exist outside of the traditional utility framework, such as US company EnerNOC which has just announced its first energy storage project in Canada². Other possible new market entrants include Tesla, who late last year brought into service a 100MW/129MWh giant Powerpack battery facility in Australia, and electric car companies as well as Transactive Energy (TE) providers who could utilize electric car battery energy to sell into the market during daily system peaks. Current industry participants will continue to exist and will continue to be regulated by the OEB. However, if the OEB mandate is not able to accommodate continuous innovation by new entities it risks bringing chaos to Ontario's energy sector as constructive modernization turns to disorderly disruption. New industry participants need to be regulated by the OEB. This vitally expanded mandate will require additional resourcing in order to be done effectively and efficiently.

Unless the OEB's mandate is expanded to include, among other things, licensing of these new entrants to the energy market, ratepayers will be at the mercy of unregulated service providers hawking new products. It will be necessary for the OEB to ensure consumer protection for these new products when healthy competitive market forces do not sufficiently perform that function.

In order to fulfill its mandate with respect to consumer protection, the OEB should be required to assess the financial health of these new entrants, as well as imposing a code of conduct upon them

² As per Clarington This Week, dated 2018-04-20, the US company EnerNOC will be installing a 1MWh lithium-ion battery storage system comprised of Tesla batteries in Clarington, Ontario's Algoma Orchards, a large independently owned apple grower and packer. This will allow Algoma Orchards to battery-store off-peak electricity and use this cheaper electricity to reduce its peak load consumption.

that ensures a consistent standard of reliability and stability across all industry participants. This would avoid consumers being gouged or left on the hook by “fly by night” operators.

4.2 REGULATION NOT MICROMANAGEMENT

While it will be important for the OEB to regulate the sector for the protection of Ontario energy consumers, the OEB should not micromanage the business or operating decisions of regulated entities. Rather, the OEB must optimize this aspect of its mandate by shifting to outcome-based regulation as conditions warrant. This will facilitate a more efficient approach to enabling the more complex future distribution networks. This, among other things, will require new system control centres, and associated technologies, to increase the flow of supply and demand within LDC grids, which will cost more money, as discussed in section 5.

To achieve the best in outcome-based regulation, the OEB’s mandate must be optimized by strengthening its research function so that its decisions are based on the best evidence available. This would improve the OEB’s assessment of benchmarking of utility performance, and assessing proposed outcome based performance metrics and targets. A strengthened OEB research and data gathering function will eliminate the need for some of the far more expensive research done by intervenors and external consultants. In addition, by fully utilizing evidence based research, this will facilitate the OEB’s independence of government influence in its decision making.

Outcome-based regulation by the OEB would comprise establishing performance outcomes or targets for whichever performance measures that are deemed as appropriate. The OEB would set an envelope of investment money including operating expenditures, and then measure performance against target. This would be done for each entity regulated by the OEB (e.g., LDCs, Hydro One Transmission, OPG, etc.). For example, for LDCs this could include setting measures and targets for percentage of peak load signed up as behind-the-meter generation, resilient electrical areas (i.e. capable of islanded operation), and cooperation of neighbouring LDCs once cooperation protocols are established. This would stand in contrast to the micro-management approach that the OEB is increasingly undertaking.

An example of the current approach is the assumed role of the OEB in reviewing LDC Distribution System Plans (DSPs). This current method places the OEB’s focus on the minutiae of low-level detailed technical assessments. Instead, the OEB should place its focus on whether LDCs are meeting OEB-specified regulatory requirements.

Additionally, the OEB’s influence in external labour contract negotiations and pension benefits should be removed entirely. This level of micromanagement forces the OEB to operate at a level of detail that it does not have the resources to support and, consequently, delays rate proceedings. By focusing on outcomes, OEB resources are freed to focus on core activities while regulated entities can make their own internal decisions as to how to achieve the required outcomes.

4.3 AN EVIDENCE-BASED AND TRANSPARENT LTEP

The Long Term Energy Plan (LTEP) needs to be developed in a transparent and evidence-based process. The best way for Ontario to properly balance ratepayer costs, system reliability and environmental sustainability when it makes supply mix decisions is to reduce political interference in the sector and put into place a framework that ensures decisions are made in a transparent, evidence-based manner with broad expert and stakeholder participation, and appropriate regulatory oversight. This is an appropriate oversight role for the OEB, and further, an outcome-based approach would be most efficient and appropriate.

An Integrated Power System Plan (IPSP) type process allows government to exercise its rightful responsibility to set goals and parameters for system planning that reflect the priorities of Ontarians with respect to reliability, environmental sustainability and cost. Through robust public consultations and regulatory hearings, the IPSP capitalizes on the knowledge of system experts, as well as industry and public stakeholders. This generates a depoliticized plan that achieves the government's stated policy goals with maximum efficiency, cost effectiveness, and public approval. The process is intended to be evidence driven, generating practical and achievable plans that prioritize long-term thinking, while still ensuring that short-term needs are met.

A full IPSP has yet to be completed. The process itself has been abandoned. Instead, the government has issued a series of directives to the IESO requiring it to undertake or abandon generation procurements, conservation and demand management activities, incentive programs, and other activities. It now appears clear that the Ministry prefers giving very specific direction to the IESO. This is problematic because these directives come without an effective and institutionally embedded process for transparent public and stakeholder consultation or any independent oversight. These directives are also not reviewed by the OEB to determine cost effectiveness or economic prudence. The electricity system, industry, investors, the public nor ratepayers are served well under this highly politicized, opaque policy and planning regime.

The Auditor General of Ontario noted: "Although the OEB has played an oversight role in the connection of renewable energy to the grid by evaluating construction, expansion, and reinforcement projects of transmission and distribution systems, its limited involvement in reviewing the procurement and pricing of renewable energy has limited the effectiveness of its normal role in protecting the interests of consumers with respect to prices and overall cost-effectiveness in the electricity sector."³

³ 2011 Annual Report, Auditor General of Ontario, Fall 2011: http://www.auditor.on.ca/en/reports_en/en11/303en11.pdf

The consequences of the lack of independence, expert input, and transparent planning and oversight processes are plainly obvious in the numerous, highly publicized problems occurring in the electricity system.

4.4 IESO RESPONSIVENESS TO THE REGULATOR

The governance problems in Ontario's electricity sector have been highlighted by the Auditor General's recent report on the IESO and the OEB⁴, and have been the focus of considerable stakeholder comment and concern within the IESO's Market Renewal Program. Simply put, the level of the OEB's oversight of the IESO is inadequate. In comparison to most other advanced and restructured electricity sectors around the world, the system operator should be more responsive to an independent regulator.

In order to remedy this lack of oversight, the OEB's authority should be strengthened, and the power, influence and impact of the OEB's Market Surveillance Panel (MSP) recommendations on the IESO will need to be strengthened through legislation. Such a change is necessary as the risks to ratepayers of inappropriate charges being levied against them will increase as the Ontario energy sector evolves and adapts new technologies. As mentioned in the previous section, the OEB must be outcome-based in its approach to this increase in oversight responsibility. Additionally, strengthening OEB oversight would necessitate additional resources to be able to effectively oversee the wholesale electricity sector.

An alternative, however, would be to re-establish the MSP as an independent agency that can bring compliance cases and market design concerns before the regulator in a manner similar to Alberta's Market Surveillance Administrator.

The OEB's market rule amendment oversight, as it currently exists, is completely inadequate to perform this task. Regulatory oversight of important market design reform processes such as the Market Renewal Program (MRP) should start at the beginning of these processes and continue through them as in the case of the Federal Energy Regulatory Commission (FERC) in the United States.

⁴ 2017 Annual Report, Auditor General of Ontario, Fall 2017
http://www.auditor.on.ca/en/content/annualreports/arreports/en17/v1_306en17.pdf

5.0 DISRUPTION AND INNOVATION

5.1 INTERACTION WITH NEW PARTICIPANTS

As mentioned in section 4.2, a fundamental shift to an outcome-based approach will be required in the OEB's policies and practices as well as how the OEB interacts with new participants in the sector. The OEB should be encouraging new technologies and new entrants, but these new participants must be brought into the OEB's regulatory framework so that the OEB can oversee the conduct of all participants, existing and new, and ensuring the confidentiality of ratepayer data. As noted earlier, this necessary expansion of the OEB's mandate will require additional resourcing in order to be done effectively and efficiently.

The OEB, however, must not assume the role of the “selector” of winners and losers among new technologies. The regulator should be responsible for overseeing the conduct of all participants in the energy sector, and, aside from asserting its due diligence with respect to consumer protection, allow the market to decide which firms will be successful. The failure of new technologies, however, must not be subsidized by ratepayers. It is shareholders who will receive the benefits of successful technologies and therefore it is those same shareholders who should absorb the negative financial impacts of failed technologies.

In order to be prepared for proper oversight of new market entrants, the OEB needs to take a more active role in enforcement, potentially by creating an enforcement branch within their organization. Currently, a number of LDCs are violating the Distribution System Code in several different ways and there are no penalties. Examples include:

- Billing outside the Metering Data Management/Repository (MDM/R) using an Operational Data Store or third party agent
- “Cleansing or altering data” before sending it to the MDM/R (or using a third party agent to alter the data)
- Different billing practices for Net Metering based on the LDC. (Some LDCs are providing credits using tiered Regulated Price Plan rates while other LDCs are paying cash based on Time of Use)

From an IESO and LDC perspective, it is essential that we have specific Market Rules and connection requirements before new and disruptive technologies come into service. This is a matter that must be considered and reviewed quickly by the OEB as there are market players that are already entering Ontario markets on a larger scale that could result in unintended consequences if left unchecked by allowing only market forces to determine outcomes.

New and disruptive technologies create interesting challenges as well as opportunities for LDCs and the IESO. As more homeowners and business install energy storage devices, it will change traditional demand patterns and make it more difficult to predict primary demand. Incorrect primary demand



predictions have a direct effect on resource scheduling that can lead to market inefficiencies and higher prices for the Ontario consumer. However, if this technology allows system peaks to be shaved at critical times it could help mitigate the need to call upon the highest priced generation or program resources to meet demand thus lowering the Market Clearing Price (MCP) and, as a result, the Hourly Ontario Energy Price (HOEP). With companies such as Tesla and their battery storage system, the Powerpack, Ontario is already beginning to see disruptions of peak hour consumption for LDCs and Class A customers and this is creating problems for load forecasting under the current model. This offers a prime example of where the OEB should be afforded the expanded mandate and the opportunity to determine if regulation is needed. The IESO and OEB should work with LDCs and Hydro One to determine the best place to deploy energy storage in the distribution and transmission system for optimal impact on the grid as well as reliability requirements.

With increasing distributed energy resources coming through the application of existing as well as new technologies, and their penetration increasing, Ontario needs a way to incorporate them into our market whether they are storage solutions, micro-grids, embedded variable generation, etc. Otherwise, it can be expected that third-party Transactive Energy (TE) providers will arise. These providers will control and operate the market for anyone that registers with them and they will create a real time interactive platform for suppliers and consumers of electricity to transact directly. Consideration should be given for the need to establish rules and mechanisms to keep third-party TE providers in check.

As the cost of electricity is expected to continue to rise more consumers are looking for ways to save money. As a result, home automation and smart appliances are increasingly becoming the norm. These allow for direct control of all of your home appliances, HVAC and other load sources right from your phone, or customers use a pre-programmed or intelligent schedule with Artificial Intelligence that predicts their needs. The penetration of these devices is increasing quickly. These devices use machine learning and vast amounts of data to adjust energy consumption of their associated devices. These kinds of devices are connected to the internet and are sharing massive amounts of data across large networks. This increases cyber-security risks. The regulator must establish and enforce standards and requirements for cybersecurity. Otherwise this may leave the Ontario grid and energy market exposed to cyber-attacks and cyber terrorism.

5.2 TODAY'S LDCS ARE TOMORROW'S TRANSMITTERS

With distributed generation substantially increasing through the application of new technologies, the future role of an LDC is expected to be the same as a transmitter. That is to say that today's LDCs are tomorrow's lower voltage transmitters.

In order to facilitate integration of new technologies such as various new forms of distributed generation, OEB regulations and policies must be modified to require LDC investments in new



system control centres and associated technologies to increase the flow of supply and demand within their grids. Further, the OEB must facilitate and ensure that LDCs gain reasonable, but not excessive, returns on these investments.

LDCs need to be able to provide the kind of load management and price mitigating products to consumers that are usually provided through Load Serving Entities in other jurisdictions. A flaw in the original market design left too many pass-throughs where only the end user – the ratepayer – was interested in lowering costs for many items. Such a change allows the LDC to make decisions on behalf of customers to control costs such as contract hedging for commodity, managing peak demand to lower transmission pricing, lowering losses, and managing Demand Response for an integrated system.

6.0 GOVERNANCE FRAMEWORK

6.1 CHANGE THE OEB'S GOVERNANCE FRAMEWORK

A fundamental shift is necessary in the OEB's governance framework in order to improve its focus and effectiveness.

Beginning at the top, the roles of Chair and CEO should be separated. This is the case in general in industry as the two roles ought to have an entirely different focus. The CEO should be accountable for managing the OEB's day-to-day operations, including resourcing and staff issues, and in particular the fulfillment of its mandate. The Chair's responsibility would be policy and strategy. The two Vice-Chairs, who report to the Chair, would have full accountability for the adjudication function of the OEB.

Regardless of any new mandates the OEB is given through this modernization review process, it is essential to optimize its understaffed core function of utility rate-setting to allow timely, transparent, considered, consistent decisions.

In order to successfully fulfill the expanded OEB mandate, new individuals to fill these current and new roles will be necessary. These new candidates should potentially be considered from other sectors that share similar mandates and not just from within the organization. Successful organizations ensure that they have diversity in their executive team and board, not just in industry background or professional expertise, but also in gender and ethnicity. It has been consistently demonstrated that diversity in views and perspectives results in success⁵. Consequently, the OEB must be required to ensure that substantial diversity targets are met in its staffing efforts at all levels of its organization.

6.2 ADOPT A JUDICIAL-STYLE PANEL APPOINTMENT PROCESS

The appointment of adjudicators (i.e., panel members) should follow the same process as the appointment of judges in order to ensure:

- Independence of selection;

⁵ Many reports and studies over the past decade substantiate this. For example, "Delivering through Diversity" by McKinsey & Company, dated January 2018.

https://www.mckinsey.com/-/media/McKinsey/Business%20Functions/Organization/Our%20Insights/Delivering%20through%20diversity/Delivering-through-diversity_full-report.ashx

The report finds that "companies in the top-quartile for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability". Further, "overall, companies in the bottom quartile for both gender and ethnic/ cultural diversity were 29% less likely to achieve above-average profitability than were all other companies in our data set". This report's research is based on a large data set of over 1,000 companies covering 12 countries.

- Elimination of selection bias (real or perceived);
- A broader range of adjudicators to provide different perspectives; and
- Selection of the best qualified individuals for these roles.

It is key for the adjudicators to be and appear to be free of government influence. Using the same process as appointment of judges will reinforce this.

6.3 INCREASE TRANSPARENCY IN OEB PROCEEDINGS

An increase in transparency in OEB proceedings and decisions is required. For example, recent proceedings involving large applicants such as Hydro One, OPG and Toronto Hydro have been long and drawn out with six to eight month gaps required for the OEB to issue its decisions; no explanations have been provided by the OEB for the historically unusual lengthy periods of time expended on these proceedings. Further, these same Hydro One proceedings have displayed an OEB bias and desire to shift Hydro One from U.S. Generally Accepted Accounting Principles (USGAAP) regulatory accounting to IFRS, with no explanation or justification provided, despite the substantial impact upon ratepayers of such a change (amounting to an increase in annual ratepayer costs in the range of several hundred million dollars per year). This is despite the OEB approving the use of USGAAP for regulatory purposes for both Hydro One Transmission and Distribution effective January 1, 2012 in the EB-2011-0268 and EB-2011-0399 proceedings respectively.

6.4 REDUCE NUMBER OF PART-TIME ADJUDICATORS

The OEB must move to reducing the number of part-time adjudicators in order to minimize the inefficiencies which result from their use. The substantial increase in the use of part-time adjudicators is likely an important factor in the long drawn out proceedings mentioned in section 6.3. Further, using more full-time adjudicators in the place of part-time adjudicators will result in an increase in the experience and familiarity with procedural processes of these full-time adjudicators thus resulting in proceeding efficiencies.

6.5 EVOLVE TO A TWO-STAFF MODEL

Consideration should be given to evolving to a “two-staff” model as the mandate of the OEB expands and its organizational structure becomes more complex.

Larger regulators with many staff serving a large population of regulated entities have shown success in employing a two-staff model. The OEB is growing and is approaching the size where two-staff



approaches are more appropriate more often. At this scale the OEB has the capacity to enable greater specialization in its functions.

Under a two-staff model, certain staff would continue to serve in their existing role while another set of staff would act as adversarial parties to the proceeding. In this way, staff acting in their existing roles would serve a purpose similar to legal clerks supporting judges, while the other staff would act as intervenors focused on a broad public interest role. The ‘intervenors’ would have a firewall between themselves and the other staff who support the panel.

Currently, the role of Applications staff is primarily to complete the record and support the decision-making adjudicators. They file interrogatories, cross-examine witnesses, introduce expert evidence, write submissions and take a position on some issues. Their primary purpose, however, is to seek to clarify the evidence so that the adjudicators can completely understand the application. The need for Applications staff to take positions on matters like employee compensation and pension benefits, as is currently the case, would be removed if the OEB were to shift from micromanagement to an outcome-based approach as is recommended in this submission.

The OEB has, in the past, employed a two-staff model effectively and certain U.S. commissions use this model. For example, for the 2006 Natural Gas Electricity Interface Review⁶ the OEB successfully employed a two-staff model with both ‘teams’ of staff walled off from each other. There have been several projects over the years that have examined a return to a two-staff model as it provides a more thorough review of applications with a stronger eye for the public interest and it is thought to reduce intervenor costs.

⁶ Ontario Energy Board, Natural Gas Electricity Interface Review (EB-2005-0551), November 7, 2006
https://www.oeb.ca/documents/cases/EB-2005-0551/Decision_Orders/dec_reasons_071106.pdf



7.0 CONCLUSION

The Society of United Professionals appreciates the opportunity to contribute to the discussion of how best to modernize the OEB.

Due to new technologies being adapted over the front half of the next decade, the number of entities and products/services which will be regulated by the OEB must and will increase substantially. This is because the current industry participants will continue to exist and be regulated by the OEB, and they will be complemented by new industry participants who will be utilizing new and innovative technologies.

It is our expert opinion that to best meet all of these challenges the OEB must:

- Balance innovation with customer protection
- Shift to outcome-based regulation rather than micro-management of industry participants
- Make a fundamental shift in policies and practices and change how the OEB interacts with new market participants
- Make material changes in its governance framework

By making these changes Ontario's energy regulator will be positioned to do an even better job of achieving its current mandate while providing the most responsible consumer protection for Ontarians. Additionally, the changes will ensure that the OEB will be well placed to meet the future challenges that face a rapidly evolving energy sector.

