IESO Stakeholder Advisory Committee – November 3, 2020

Meeting Notes

Advisory Committee Members

- Mr. Nicolas Bossé (representing Energy Related Businesses and Services)
- Mr. David Butters (representing Generators)
- Ms. Brandy Giannetta (representing Generators)
- Ms. Malini Giridhar (representing Energy Related Businesses and Services)
- Ms. Julie Girvan (representing Consumers)
- Mr. Jim Hogan (representing Distributors and Transmitters)
- Ms. Rachel Ingram (representing Energy Related Businesses and Services)
- Mr. Bruno Jesus (representing Transmitters and Distributors)
- Mr. Frank Kallonen (representing Distributors and Transmitters)
- Mr. Paul Norris (representing Generators)
- Mr. Mark Passi (representing Consumers)
- Mr. Mark Schembri (representing Consumers)
- Mr. James Scongack (representing Generators)
- Mr. Hari Suthan (representing Energy Related Businesses and Services)
- Ms. Annette Verschuren (representing Energy Related Businesses and Services)
- Mr. Terry Young (representing IESO)

Regrets

- Mr. Brian Bentz (representing Distributors and Transmitters)
- Ms. Judy Dezell (representing Ontario Communities)



Presentations

Mr. Terry Young

Mr. David McFadden

Mr. Ron Dizy

Ms. Katherine Sparkes

Mr. Chuck Farmer

Ms. Candice Trickey

Mr. Jordan Penic

Meeting materials can be accessed online at http://www.ieso.ca/sector-participants/engagement-initiatives/stakeholder-advisory-committee/meetings-and-materials.

Agenda Item 1: Welcome Remarks

Mr. James Scongack welcomed the SAC members and IESO Board of Directors. He acknowledged that participants come from across the province of Ontario and we are within the traditional territories of the Anishinabek, Huron, Wendat, and Haudenosaunee peoples, as well as the Algonquin, Cree, Ojibway, and Metis peoples.

Mr. Scongack thanked Mr. Pat Chilton for his contributions to the SAC over the years. Mr. Pat Chilton has resigned from the SAC for personal reasons. Mr. Scongack also thanked Mr. Peter Gregg for his leadership as the president and CEO of the IESO. Mr. Gregg has left the IESO to take over the leadership of Nova Scotia Power. Mr. Terry Young has assumed the role of interim president and CEO.

Mr. Scongack praised the operations division of the IESO for coming together during the pandemic under the leadership of Mr. Leonard Kula.

This was the last SAC meeting of the year, with approximately 90 members of the public in attendance.

Agenda Item 2. IESO Business Update

Mr. Terry Young announced that Tabatha Bull, president and CEO of the Canadian Council for Aboriginal Business, has joined the IESO board.

With incremental capacity needs emerging, a variety of approaches will be taken in the coming years. The Resource Adequacy initiative will help to enable a broader range of resources and is an important first step in engaging with the SAC. The implementation phase of Market Renewal is under way. At today's meeting, Ms. Katherine Sparkes will address the integration of storage and other distributed energy resources (DERs). Much stakeholder input has been received with respect to enabling resources, and the IESO will introduce the intended path in early 2021.

The IESO is seeking SAC input into the Resource Adequacy Framework, which includes the 2021 Capacity Auction. Mr. Chuck Farmer will outline next steps with respect to the engagement. He will also share insights into the next Annual Planning Outlook.

Four new categories for engagement have been created to support regional and provincial electricity planning over the next 20 years.

- Forecasting and Planning. A reliability standards review has begun and stakeholders have asked that its scope be expanded. At the August webinar, considerations about forced outages and nonfirm imports were discussed.
- Resource Acquisition. The design for energy storage participation has been closed out. The
 Technical Panel (TP) unanimously approved proposed market amendments for the interim design,
 and these will take effect next year pending board approval. Three other key engagements have
 seen some recent activity: Market Renewal, Resource Adequacy, and the Expanding Participation
 in Operating Reserve and Energy Initiative.
- 3. Operations. These engagements will ensure reliable resources. At the August webinar it was explained why the stakeholder-preferred cost recovery mechanism for demand response-related shutdown cost is not feasible to implement until the post-Market Renewal program begins. Further discussions have been adjourned to a later time. Mr. Young noted that it has been a difficult conversation for the demand response community and the IESO. Demand response resources will remain an important tool for the IESO and conversations will continue. The interim report for the Transmission Rights Market Review was released on October 6. Work is under way to review the methodology to determine the number of transmission rights to auction. The review will assess whether the demand response market is achieving its intended purpose.
- 4. Sector Evolution. The IESO conducted a survey to better understand the role and capacity of DERs in the Industrial Conservation Initiative. More than 200 stakeholders completed the survey which included 25 one-on-one discussions. Results will be reported by year's end. There were engagements on energy efficiency opportunities for grid-connected First Nation communities and support programs.

All 13 detailed design documents and one overview chapter for Market Renewal have been published for stakeholder comment. More than 600 comments on the detailed design documents were received. The final version will be published early in 2021.

The implementation phase will include the use of draft rules and manuals prior to the TP and board approval processes next year. The work will highlight areas of significant change so stakeholders can discuss the methodology used to develop reference levels for the Market Power Mitigation Framework.

With respect to insurance and liability, the IESO was unable to obtain errors and omissions insurance. It is now examining its risk under the market rules and comparing it to other North American IESOs. There will be engagement with stakeholders on this matter within the next two months.

The IESO received a government directive with respect to a new four-year framework for Conservation and Demand Management (CDM). New programs will target opportunities for commercial and industrial customers, ongoing support for income-eligible customers, residential

customers, and on-reserve Indigenous communities. Stakeholder engagement has begun and will continue through the fall. Information on available programs will be shared in the next few days, following posting of the CDM plan which shows the budget and program measures stipulated in the directive.

The year 2020 was a watershed in launching the first-ever corporate Indigenous policy in early October. Also, Indigenous energy support programs have been re-launched to help build capacity. The focus is on community energy champions as the starting point for more programs to come. An online engagement tool will be posted this month where energy champions can support each other.

An unsolicited proposals process has been introduced. Through the Resource Adequacy engagement, a framework is being considered to address acquiring resources to meet short-, medium-, and long-term electricity needs. Capacity Auctions are expected to support short-term needs, while a combination of Capacity Auctions and requests for proposals will likely support medium- and long-term needs. The unsolicited proposals process is intended to address new proposals that require near-term decisions.

The Ministry of Energy, Northern Development and Mines has asked the IESO to review the proposals, and detailed analyses will be undertaken to evaluate them based on value to ratepayers, ability to meet system needs, whether the project is able to proceed while the competitive mechanisms under the Framework are being put in place (i.e. are the projects shovel ready), whether the project is able to participate in our future competitive mechanisms.

Comments

Ms. Rachel Ingram thanked the IESO engagement team for creating a format that shows how the engagements interact. She thanked Mr. Young, Ms. Candice Trickey, and the rest of the team for great discussions to date regarding the participation of demand response resources.

Mr. Nicolas Bossé asked who is in charge of the unsolicited proposal process and asked for more detail on the intent. He asked if the IESO would provide details about megawatt participation and the number of applicants to the York Region non-wires alternative project. Submissions for proposals closed on October 28. Mr. Young reiterated that projects would be evaluated based on system value, ratepayer value, and near-term value. Details of individual proposals will not be shared due to confidentiality. Mr. Bossé asked where to send the proposals. Mr. Young said proposals could be sent to himself or Mr. Kula.

Mr. David Butters said there is a need to better understand the unsolicited proposals process because it will impact investment decisions. He questioned the confidentiality of the proposals. Mr. Young said the main mechanism for acquiring capacity would be the Resource Adequacy Framework.

Ms. Brandy Giannetta echoed the need for transparency on the unsolicited proposals. Ideally, details would be provided to the SAC in a written, formal framework, and this will boost investor confidence as well. Mr. Young acknowledged the uncertainty that exists, and said he is committed to providing clarity.

Comments by Phone

A participant asked for more detail on the requirements of the unsolicited proposals, but the question had been previously asked by others and the response given.

To summarize, Mr. Young said some unsolicited proposals have been received and are being reviewed through a competitive lens in terms of system value, ratepayer value, and readiness.

Agenda Item 3. Presentation: Energy Transformation Network of Ontario (ETNO)

Mr. David McFadden provided an update from ETNO on its structure and mandate, work related to access to data, and potential areas of future focus.

The objective of ETNO is to provide advice and guidance with respect to the transformation of Ontario's energy sector and to ensure benefit by influencing policy, the market, and regulatory enhancements.

The smart grid forum began in 2008 under the leadership of then-IESO president Paul Murphy. It was made up of utility sector representatives along with government, regulatory agencies, and academia. More than 40 executives from a diverse range of private sector companies now support the smart grid forum, and the ETNO membership reflects the diversity of the supply chain.

The focus is on tangible, near-term outcomes via six-month work sprints. ETNO is looking to develop actionable policy, regulatory, and market recommendations that enable the integration of DERs and advance effective smart grid implementation.

ETNO supports the coordination and integration of Ontario's electricity policy, regulatory, and market leaders and provides a platform for dialogue with stakeholders.

Following recommendations, three possible outcomes are possible:

- 1. A consensus report;
- 2. A consensus report with identified areas of disagreement; and,
- 3. No consensus with identified alternatives.

A decision was made by ETNO to improve access to data and improve benefits for consumers. This is the focus of its first report which will be posted to the IESO site within a few days. The value of the data depends on who has access to it and the products and services being provided. Ontario's current framework for access to data in the energy sector has gaps that, left unaddressed, could undermine customer benefit.

Mr. Ron Dizy described the main categories within the ETNO report:

Green Button access to customer data for third-party providers is something that ETNO members
do not unanimously support. Third-party providers are generally happy to pay for access to data,
but there are concerns relating to how to recover the costs of making data available to third-party
providers and how to preserve user pay. Questions have been raised about the timelines for
implementation, which are largely borne by LDCs, and whether access to third-party providers is
being viewed as a priority.

- Data protection by third parties, ensuring that customers have the ability to revoke access if their data are used incorrectly,
- Use of IESO smart meter data in the Meter Data Management/Repository (MDM/R) would decrease cost to third-party demand response, and help with measurement and verification,
- Broad, multidirectional deployment of the data would reduce costs to third parties and LDCs, increasing the value over the long run,
- The OEB should consider amendments to the distribution code to require the provision of operational data from DERs to LDCs to ensure the system is well managed.

ETNO does not make policy pronouncements on whether DERS are good or bad. It is the obligation of stewards of the system is to capture value for ratepayers.

ETNO will explore evolving the role of LDCs in a DER future. Here are some questions to explore:

- 1. Should LDCs be permitted to own and operate DERs?
- 2. What other non-distribution uses can LDCs engage in?
- 3. What potential DER structures hold the most promise with respect to efficiency and consumer benefit? Will LDCs become system operators or load-serving entities?
- 4. Utility remuneration models will have to respond to changes.

Mr. McFadden asked the SAC which of the work topics listed above are most critical to address now, and why, and if there are other topics to be considered.

Comments

Ms. Giannetta said it is important to consider how potential DERs will be structured in terms of drivers, resiliency, and cost effectiveness.

Mr. Hari Suthan said his group would like to engage in this work.

Ms. Julie Girvan asked how the IESO application for third-party data in 2021 fits with what ETNO and the OEB are doing, to ensure coordination is being done in the best interest of consumers. Mr. Dizy said ETNO has OEB representation and is trying to avoid duplication.

Ms. Ingram said she sees an overlap between OEB engagements with the IESO's white papers, Parts 1 and 2. She noted that third-party providers can do things more cheaply than LDCs, and she would like to see more reference made to competition. Mr. Dizy said competition is a core consideration.

Mr. Butters echoed Ms. Ingram's comment on competition. He asked how the ETNO work fits with the Resource Adequacy Framework. He noted that Ontario Power Generation is the only generator named on the ETNO list.

Mr. Paul Norris said ETNO published its structural options for a DER future last year, and the IESO and OEB have released their white papers. There appears to be no category in the Resource Adequacy Framework dealing with DERs, and they need to be integrated. Mr. Dizy said a list of options was published by ETNO last year and the team is looking for recommendations.

Mr. Mark Schembri asked if consumers could opt out of having their information disclosed. Consumers want choice. Ms. Malini Giridhar said it appears that it is the Green Button data, and that a consumer would need to consent to provide their information. Mr. Dizy agreed that the Green Button data is consumption data, so the question is, would that consent extend to DERs as well? Mr. Schembri replied that when participating in market mechanisms consumers would choose who they would want to be aligned with and be willing to authorize to have their information, but not to share their data with a large number of facilities. Mr. Dizy said consumer permission would have to be granted to a third party.

Comments by Phone

A participant said DERs owned by rate-based LDCs is an important topic to address soon.

A participant said the OEB is an appropriate forum because it has the required technical expertise, and asked if panelists agree. Mr. Dizy said ETNO is making recommendations to policy makers, OEB regulators, and the IESO.

Mr. Colin Anderson, AMPCO, noted a potential duplication of work between ETNO and the OEB. He echoed Mr. Schembri's concern about data privacy. Significant discussions around disclosure are needed, so why have customers been excluded in discussions? Mr. Dizy said many ETNO committee members represent customers.

Mr. Scongack said LDCs should not be in the generation business. Provincial direction and policy guardrails may be required to address this matter.

Agenda Item 4. Innovation Update

Ms. Katherine Sparkes provided an update on the integration of storage and DERs, including the IESO Innovation Whitepaper. The innovation roadmap sets out priorities to administer markets over the next 10 years. The focus is on understanding and evaluating new solutions with respect to reliability, customer choice, and cost-effectiveness. Key activities are the Energy Efficiency Pilot Auction and the York Region DER non-wire alternatives project. Alectra has been contracted to leverage the resources.

Part 2 in the Whitepaper series looks at potential solutions to enable DERs within the wholesale market and steps to take in evaluating them. Operators are required to file revised market rules by next summer. The roadmap also addresses repair costs and improved options for liability. Next year's work will focus on enabling DERs to compete in IESO markets in 2022 and to enable storage facilities, pairing them with wind and solar.

Mr. Bossé asked about the York pilot auction coming up on November 18. Mr. Young said a post-auction report will follow in November.

Comments

Ms. Giannetta said New York and California have live stakeholder engagements that look to enable the integration of hybrids into the wholesale market. This should be a near-term priority in Ontario. The integration of DERs in the wholesale market includes hybrids in large part because they enhance the ability of DERs and existing assets.

Mr. Schembri asked, with respect to market rule amendments and DERs, if the objective is to simplify the process to enable DERs. Mr. Young said the market rule amendments are specific to the interim design. Ms. Giannetta noted there was a reference to enabling DERs in the energy storage market rules.

Agenda Item 5. Annual Planning Outlook (APO) and Resource Adequacy Engagement

Mr. Chuck Farmer said the advantage of doing annual updates is that a consistent narrative is achieved. The 2020 APO will be released in mid-to-late December. Needs arising in the next few years include the capacity requirements in summer, driven by expiring contracts and the nuclear refurbishment program, and an enduring need for new capacity as Pickering retires. COVID-19 is having an impact on both timeframes. Overall demand is reflected in the work-from-home dynamic, for example. Industrial consumption is at an expected level, but the commercial sector is down considerably. A future scenario is that the economy will recover quickly and demand will return to normal in the 2022-2024 time frame.

The trends driving demand higher are the pace of immigration, how electricity is used at home, a bounce-back in the small commercial sector, and changes in how office and warehouse space is used. Southwestern Ontario has a growing agricultural sector where greenhouses will impact winter demand. There is some growth in mining as well as acceleration in the pace of electrification of transit. Therefore, demand in post 2024-2025 is expected to be a bit higher and more peaked than in previous outlooks.

On the supply side, generators are maintaining their availability. There have been efforts made to work with operators around refurbishment and facility outages and these have been effective, combined with changes to the refurbishment schedule. Higher supply and lower demand for 2023 are predicted. The Pickering extension will put higher generation into the 2024-2025 timeframe. Higher needs for capacity will emerge in 2026 and these will endure as 3,000 MW are retired at Pickering.

On the energy side, the system is in good shape. The gas fleet provides the flexibility required to meet low nuclear production throughout the refurbishment schedule.

In summary, the needs for the next few years are lower than previously forecast and these will be reflected as we move into resource adequacy discussions. The enduring needs starting in 2025-2026 are higher than previously forecast, so decisions around this will need to be made.

After the APO is released in mid-to-late December, stakeholder engagement will commence and the APO will become linked to the Resource Adequacy Engagement.

The IESO is working to establish a high-level Resource Adequacy Framework by the end of this year. In early 2021, work will begin on operationalizing the framework, and this will be done with some urgency. The proposed high-level framework considers an annual Capacity Auction with seasonal commitments of capacity. The intention is to conduct that Capacity Auction for the next couple of years, as is. The auction will evolve with expanded eligibility and competitiveness. There will be a mid-term competitive mechanism that could be a form of Capacity Auction or RFP with longer lead times of three-to-four years and longer commitment periods of three-to-four years. Longer commitment periods will be considered for new builds or facilities with substantial investment

requirements. For the long-term, Capacity Auction or RFP will likely be the best way to go. Programs are part of a suite of products for resources that don't fit, such as energy efficiency programs. Government policy will also have to be addressed.

Comments

Mr. Norris thanked Mr. Farmer and the IESO for their resource adequacy work. He said he is happy that the work is progressing quickly.

Ms. Giannetta thanked the IESO for launching the engagement on resource adequacy. She noted that the September resource adequacy meeting indicated capacity needs shifting in 2028, not 2024-2025. Enabling flexibility within resource mechanisms should be factored into the short-, mediumand long-term reference points. The APO provides a starting point, transparent details, and the scope of the Capacity Auction. She asked if the Capacity Auction will evolve, and if so, how? How will RFPs and contracts be used? How will generation facilities with existing contracts be optimized? She thanked the IESO for being very receptive to input.

Mr. Young said there is long way to go, and talks will continue in 2021. Mr. Kula clarified that the IESO previously saw a need for capacity starting in 2023. It also saw more significant growth showing up in 2025-26, tied largely to the retirement of Pickering. There is now talk about 2028-2029 when a lot of resources come off contract when there will be a need to re-acquire resources for that time period.

The Capacity Auction will evolve as a short-term mechanism. In the short run, the focus is on high-level conversations around the Resource Adequacy Framework. More engagement will come in 2021 when choices will be made about its expansion.

To Mr. Norris's point, the IESO recognizes five buckets for looking at resources: short-, medium-, and long-term, programs, and government policy.

To Ms. Annette Verschuren's question about Capacity Auctions and storage participation, hybrids and behind-the-meter facilities will provide opportunities and challenges.

Ms. Ingram said she is excited to participate in this engagement. She noted that competitive procurement mechanisms should not prescribe the resource types that are eligible for participation.

Mr. Scongack noted that external impacts may arise that could place greater demand on electricity, such as climate action plans and electrification. These factor into resource adequacy as well.

Mr. Farmer said the IESO is continually watching provincial and federal plans and incorporating them into outlooks. APOs provide up-to-date assumptions and changes are made as time goes by. "Out-there" scenarios are not considered, but it is time to look at climate change, mitigation and adaptation, and how these are incorporated into planning.

Ms. Giridhar said electrification is moving away from fossil fuels. Enbridge has a perspective on capacity needs and would like to engage in these discussions.

Mr. Schembri asked if the IESO considered Surplus Baseload Generation (SBG) for refurbishment and Pickering requirements. Mr. Farmer said it looks like a consistent story. SBG will continue for the next few years, but there will be less SBG as the nuclear fleet expires. Pickering extends to 2025.

Ms. Girvan asked about the Darlington refurbishment schedule. Mr. Farmer said it is proceeding well.

Mr. Kula noted that the OPG has to apply to the Canadian Nuclear Safety Commission to extend the license for the Pickering station beyond 2024. While the intent is to extend it into 2025, there is no current regulatory approval to do so.

Mr. Bruno Jesus asked if the plan is to take area-specific reliability requirements and planning considerations into the Capacity Auction. Also, will players outside of the province participate? Mr. Farmer said a better assessment will be provided in the APO with respect to where the needs are, by zone. It will also describe work being done to address transmission constraints. It is too early to tell if the Capacity Auction will be the vehicle to get resources into the right locations. Ontario enables system-backed imports. Enabling resource-backed imports might be enabled in an evolved Capacity Auction budget.

Comments by Phone

Mr. David Katz asked how work on transactive energy developed by GWAC and others fits into the future of the IESO. Mr. Farmer said he is not familiar with the GWAC; however, an overriding theme within the IESO is to be responsive to regulations and consumer preference. Resource adequacy must be flexible.

Agenda Item 6. Input: Stakeholder Engagement Framework Phase II

Ms. Candice Trickey outlined the next phase of enhancements to the Stakeholder Engagement Framework. The engagement update has been aligned by category to show linkages. The goal is to refocus working groups and committees and to streamline them, creating a new Stakeholder Planning and Priorities Advisory Group (SPPAG). These engagements will enable a broader dialogue.

While the SAC provides policy-level advice to our board and executive, the new stakeholder advisory group will focus on operational-level advice to management, similar to discussions within the Demand Response Working Group and others. Mr. Young added that breaking down silos is an important evolution in engagement, providing alignment between OEB and IESO processes when needed.

Comments

Ms. Giannetta said she expected to see Market Renewal within the Operations category and asked if it will be included. It will be important to get into technical working groups within the new stakeholder structure. Ms. Trickey agreed. Clear objectives will be required for the technical groups.

Mr. Butters said the IESO has made tremendous progress on stakeholder engagement over the years. There has been ample opportunity for market participants to control agendas, and have a real voice in IESO activities. There are concerns about strategic planning and the new advisory group because they run counter to the idea of ample opportunity. He said it is difficult to understand how the new SPPAG would overlap with specific engagement groups. The scope of work for SPPAG includes prioritization of scoping of engagements; however, this should be left to specific stakeholder engagements because there is potential for dilution and encroachment on specific engagements. There are no small groups for the TP and the SAC. He requested detail on how people will be chosen within the new advisory group structure. Overlap and confusion are concerns. There is also a need

for details on the Terms of Reference. He said he would not be interested in a small, elite group making decisions.

Mr. Young said it has been difficult to move things along. The IESO is trying to streamline engagements to improve decision-making and is seeking a broad range of advice. Mr. Butters acknowledged the new advisory group is a work in progress. At the very least, there should be a stakeholder co-chair. Mr. Young said stakeholders should not make decisions that they are not prepared to own.

Agenda Item 7. Other Business

There is no other business. Mr. Scongack noted positive discussion and feedback at today's meeting, but said future SAC meetings should have fewer agenda items to allow more time for discussion.

Agenda Item 8. Adjourn

Mr. Scongack thanked all for their participation.