IESO Stakeholder Advisory Committee Meeting Notes – February 14, 2019

Advisory Committee Members:

Mr. Nicolas Bossé (representing Energy Related Businesses and Services)
Mr. David Butters (representing Generators)
Ms. Brandy Giannetta (representing Generators)
Ms. Julie Girvan (representing Consumers)
Mr. Jim Hogan (representing Distributors and Transmitters)
Ms. Rachel Ingram (representing Energy Related Businesses and Services)
Mr. Frank Kallonen (representing Distributors and Transmitters) (on phone)
Mr. Ted Leonard (representing Energy Related Businesses and Services)
Mr. Paul Norris (representing Generators)
Mr. Mark Passi (representing Consumers)
Mr. Mark Schembri (representing Consumers)
Mr. James Scongack, Vice Chair (representing Generators)
Mr. Hari Suthan (representing Energy Related Businesses and Services)
Mr. Terry Young (representing Energy Related Businesses and Services)

Absent:

Mr. Brian Bentz, Chair (representing Distributors and Transmitters) Ms. Judy Dezell (representing Ontario communities)

IESO Board Members:

Ms. Cynthia Chaplin Mr. Peter Gregg Ms. Margaret Kelch Mr. Glenn Rainbird

Presentations:

Ms. Carrie Aloussis Ms. Barbara Ellard Mr. Chuck Farmer Mr. Leonard Kula Ms. Katherine Sparkes

Agenda Item No. 1: Welcome

Mr. James Scongack welcomed everyone to the first SAC meeting of 2019. He thanked outgoing SAC members Steve Baker, Darlene Bradley, and John Beaucage for their hard work and dedication to the committee and to the sector through the years. He said few organizations take stakeholder engagement as seriously as does the IESO.

Agenda Item No. 2: IESO Business Update

Mr. Terry Young introduced the IESO executive leadership team members in attendance and introduced a new member: Robin Ridell, Vice-President of Human Resources. Mr. Young provided the following updates:

Conservation

The IESO has commissioned a study to characterize the water and wastewater sector. Opportunities to improve efficiency were identified in the Municipal Energy Profile published last year.

Community Engagement

Six regional plans for community engagement are being developed. Regional forums are scheduled for March 21 in Kingston and April 10 in Thunder Bay.

Governance and Decision Making

The advisory committee on governance and decision making's recommendations were approved by the IESO Board in December and include improving transparency, inclusivity, and consistency with regard to market rules and market manuals as well as dispute resolution processes.

Market Renewal

A new Market Development Advisory Group (MDAG) is being created to help evolve the Ontario electricity market beyond the market renewal program. There is a call for nominations to join this committee; the deadline closes February 15. The first meeting will be held in March.

Demand Response Auction

The fourth annual demand response (DR) auction acquired more than 800 megawatts for the upcoming summer and winter commitment periods. Prices have come down in the past few years. Prices in the fourth auction were 43% lower than in the first DR auction.

Comments

Mr. Jim Hogan said it will be important to honour current contracts when completing the 2020 conservation framework. After 2020, conservation efforts should continue without starting and stopping.

Mr. Paul Norris asked the IESO to address the implications for contracts as a result of market renewal. Mr. Mike Lyle replied that discussions were held last year with various contracted parties. When the IESO publishes its high-level designs for the Incremental Capacity Auction (ICA) in March, it will publish a document that sets out the approach to contract amendments that are necessary to facilitate market renewal.

Mr. Nicolas Bossé thanked the IESO for its openness toward finding solutions for contract holders and said he hopes the openness will continue.

<u>Agenda Item No. 3: Market Renewal Program – Non-Emitting Resources Subcommittee</u> <u>Update</u>

Ms. Barbara Ellard said the Non-Emitting Resources Subcommittee (NERSC) was created in response to questions from suppliers about how an unbundled market can work for non-emitting resources. The work was divided into three phases: understanding barriers, modelling, and exploring commercial incentive mechanisms. The last phase has been deferred because it fits well with the work of the MDAG.

The Brattle Group was hired to undertake the modelling of five future states. The goal was to identify the most competitive resources to fill future needs and to learn whether the resulting revenue streams will be sufficient to sustain existing assets and attract new investments.

Three themes emerged from the modelling exercise:

- 1. Markets increase efficiency. Even in the high-growth scenario, lower costs were realized compared to today's costs, Ms. Ellard said.
- 2. Under all the different scenarios there is sufficient revenue available in the marketplace to sustain existing assets and attract new investments.
- 3. Unless significant subsidies come from outside the market, it is unlikely that in the near term there would be high levels of grid defection.

Comments

Mr. Mark Passi asked how the conclusion was reached that sufficient revenue is available for generators. Ms. Ellard replied that for each scenario, the model determined the average prices from the perspective of both energy and capacity. The numbers used for existing and new

resources were based on stakeholder input and public data. Anyone can test whether their generator is above or below the assumptions used.

Mr. Mark Schembri asked when costs would come down and by how much. Ms. Ellard said \$3.4 billion in net benefits is expected from market renewal during the next decade. The MDAG will likely look for future efficiencies. The IESO is developing a business case that will refine the \$3.4-billion estimate and will share its findings later this year.

Mr. Schembri asked for a definition of an unbundled market. Ms. Ellard replied that ancillary services, such as the operating reserve, are required in addition to the energy and capacity. The IESO is required to send the right price signals for the various services needed. The IESO is leveraging its 30-minute operating reserve product to gain additional flexibility. Other markets have developed products that value flexibility and will provide an additional revenue stream to give back to the market.

Mr. Schembri asked how environmental benefits such as decarbonization are recognized within the modelling exercises. Ms. Ellard said the models considered clean scenarios, such as how to maintain the drive toward decarbonization. These were based on the assumption that there would be a carbon price and/or an environmental attribute value. If a value stream was assigned, decarbonization could be driven and maintained.

Mr. Dave Butters noted that a model is just a model. Owners and developers base decisions not only on available revenue but also on how to earn profit and manage risk. It will be important to get the contracts right. Ms. Ellard agreed, adding that the entry and exit of resources is driven by many factors.

Mr. Scongack said to build credibility it will be necessary to demonstrate underlying assumptions with respect to the \$3.4 billion in anticipated savings, as well as how the savings will be tracked.

Agenda Item No. 4: Meeting Capacity Needs for 2020 and Beyond

Mr. Leonard Kula outlined that the IESO was planning its next demand response (DR) auction for the end of this year for capacity needs in 2020 and that the IESO was asked to open the DR auction to other participants. These non DR proponents had been critical of the imbalance of their being an annual auction for DR and not for other resources. As the IESO's aim is to have a level playing field and aim for technology neutrality the IESO found this to be a compelling reason to proceed in this direction. The planning outlook released in September 2018 identified a sizable capacity need for 2023 as well as capacity needs for 2020, 2021, and 2022. It was therefore decided that the DR auction in December 2019 would evolve to increase the competition for acquiring capacity in 2020–2024. The first Incremental Capacity Auction (ICA) is Page 4 targeted for 2022–2023 and the IESO is targeting the summer 2025 for the resources acquired. An initial stakeholder engagement session on the changes to the demand response auction will be conducted on March 7.

Comments

Mr. Bossé noted that resource neutrality is not listed as an operating principle of market design on slide 6 of the handout. He suggested it be included with regard to incremental capacity. He asked whether the term "incrementality" refers to all existing or new resources that are not under contract, or whether it refers only to new resources to be built in response to capacity need. Mr. Kula replied that the principles listed on slide 6 were created for the market renewal program and not specifically for incremental capacity. With respect to the term "incrementality," there are various resources in Ontario that already have commitments through regulated rates or contracts. The ICA is meant to acquire the amount of capacity between the sum of those resources and Ontario's capacity needs. Mr. Bossé asked whether resources without contracts or with expired contracts are to be included in the ICA. Mr. Kula said they would be included. Mr. Bossé asked whether imports would be allowed to participate in the ICA. Mr. Kula replied that they would be allowed as long as the right protocols are in place.

Mr. Butters said the evolved DR auction is a bold and ambitious pivot. Given the short timelines, he asked whether a new stakeholder engagement would be created that is not connected to the current ICA. Mr. Kula said a new engagement would be created.

Ms. Rachel Ingram noted that fairness is not listed as an operating principle of market design on slide 6 of the handout and suggested that ancillary markets be made available to DR resources. Mr. Kula said markets do not exist as entities unto themselves; each must have the ability to deliver reliable services.

Mr. Schembri said the DR auction process has gone well in the past, with costs going in the right direction. He asked whether the IESO would consider leaving it alone and developing instead a separate process for the ICA. Mr. Kula replied that the intention was always to transition DR auction participants into the ICA because there is value for ratepayers in providing a single framework.

Mr. Schembri asked whether DR is a separate program in other jurisdictions. Mr. Kula replied that it participates in foundational markets against other resources.

Mr. Schembri asked whether aggregated resources embedded in local distribution companies would be allowed to participate. Mr. Kula said stakeholder engagement will determine what resources will be able to participate and when.

Ms. Julie Girvan asked whether securing capacity for 2020–2024 will be accomplished at the DR auction in December 2019 or whether the auction will be conducted annually. Mr. Kula replied that the December 2019 auction would commit resources for one year. The auction has traditionally been executed in December with a forward period (meaning when the resources become active) of five months. The ICA will have a 3-year to 3.5-year forward period. The intention is to elongate the forward period for the evolved DR auction. Commitment periods may remain at one year, but the auctions may run more frequently.

Mr. Norris noted that when the 1,400-megawatt shortfall that is coming in 2023 was discussed last year, it was stated there would be a review of non-firm imports and reserve margins. He asked whether the number of megawatts would be re-evaluated. Mr. Kula said the planning committee would look at the demand forecast for the next 20 years, revisit the assumptions, and provide updates.

Comments from the Public

Mr. Jack Gibbons asked whether U.S. coal-fired generators will be allowed to bid into the capacity auction, how many megawatts will be allowed for Quebec generators, and whether the IESO will give direction to Hydro One to upgrade the transmission system, allowing Quebec generators more capacity. Mr. Kula said he did not believe that U.S. coal-fired generators will be allowed into the capacity auction. He did not have a ready answer for how many megawatts Quebec generators will be allowed. He said direction has already been given to make upgrades in the Ottawa area that will increase transfer capability from Quebec.

Mr. Jason Chee-Aloy, Power Advisory LLC, said capacity markets typically procure a certain type of product. Unforced capacity is being discussed in the ICA. He asked what type of capacity product the IESO would procure in the DR auction. Mr. Kula said the answer would come from stakeholder engagement.

A participant agreed with Mr. Butters that the evolved DR auction is a bold and ambitious pivot, with DR participants transitioning into the ICA, and not the ICA transitioning into the DR auction. There is a need to understand the role of the Demand Response Working Group (DRWG) in ensuring resource neutrality and fairness in the process. For example, the market is looking for an agreement in principle that a load displacement generator would not be prevented from participating. Also, the process should consider the ability to use load reduction in conjunction with behind-the-meter generation. Mr. Kula said he did not have a ready answer. The DRWG will address this level of granularity.

Agenda Item No. 5: Demand Forecast

Mr. Chuck Farmer said that producing a demand forecast is the first step in producing a planning outlook. The goal is to increase transparency and decision making in the process.

A technical planning outlook was released last year and will be released annually to support the transitional mechanisms used to get to the start of the ICA. The IESO encourages stakeholder input into the preliminary demand forecast. Methodology documents will be published to guide how planning will be done. Market rules and market manuals will provide governance where necessary.

The IESO wants to evolve the planning product so that when 2022 arrives, the market will be ready to support the ICA and transmission procurement processes.

The 2019 planning outlook will give as much resolution as possible. It will speak specifically to what is required in 2020 and 2021, and it will remove uncertainty about 2023. It will evolve to include zonal assessments, assessments of requirements for ancillary services, and detailed transmission assessments. A well-attended consultation on the demand forecast was held on January 31.

In the second quarter there will be a consultation on adequacy and methodology that will include what is to be done with non-firm imports, how to calculate reserve margins, and the appropriate allowance for refurbishment risk. The formal planning report will be produced in the third quarter of the year, followed by a technical planning conference.

Mr. Farmer urged the sector to pay attention to the demand forecast because it sets the context for future requirements. The forecast is subject to shocks, economic events, and economic policy, so major updates will be done every three years with adjustments made in the interim years. The last major update, in 2016, referred to key economic drivers such as household formation and growth in commercial floor space.

Comments

Mr. Ted Leonard noted that slide 8 of the handout refers to operability needs (flexibility and ramping) being addressed in 2020. In 2021, requirements for ancillary services and essential reliability services will be addressed. He asked whether this means the IESO will not look at market changes related to those needs and requirements prior to 2020 and 2021, respectively. Mr. Farmer replied that an outlook for requirement for ancillary services will be provided this year and that this outlook will improve as the products evolve.

Ms. Girvan thanked Mr. Farmer for emphasizing transparency within the planning process.

Mr. Butters asked how the work done by the Brattle Group for NERSC connects with planning. Mr. Farmer said the planners worked with the Brattle Group to share planners' assumptions about their own modelling. The Brattle Group worked independently, and the models served to provide helpful detail.

Agenda Item No. 6: 2018 Stakeholder Satisfaction Survey Results and Action Plan

Ms. Carrie Aloussis outlined that the following activities were implemented in 2018 in response to the feedback received in the previous year's survey, specifically addressing transparency and relevance.

Engagement summary reports allow stakeholders to see what happened if they were not a part of the engagement, and allow those who took part to see how their feedback was used. Summary reports are now being provided for each engagement. The next ones will be for thirdparty access and the governance and decision-making engagements.

The IESO started using templates to ensure consistency in how it reports back to stakeholders.

Post-evaluation reports were developed to inform the IESO on how to improve each engagement. The first engagements to have post-evaluations will be the third-party access and governance and decision-making advisory groups.

To increase accessibility, the IESO also made efforts to broaden its toolbox of approaches. For example, discussions were mediated within the governance and decision-making advisory group, focus group feedback was collected within the innovation roadmap engagement, community cafés were conducted at regional forums, SLIDO was used for live polling at events, and the value of online engagement was assessed.

Northstar Research conducted the stakeholder satisfaction survey between September 5 and October 5, 2018, and achieved a 35% response rate. Within the corporate performance metric (CPM), stakeholder satisfaction was an average of 67%, and this number was also achieved in 2017. Within the 67%, generators scored IESO lowest at 65%, and Indigenous communities scored IESO highest at 75%.

Areas that drive satisfaction are information quality, energy sector evolution, and inclusiveness. The 2019 action plan will focus on continuing to build relationships with generators, reviewing information quality standards, responding to the changing sector, and increasing involvement in market renewal. Of the survey respondents, 48% said they could participate in the engagement for market renewal but they are not participating. More education is needed to build awareness of what market renewal is and to increase participation.

Comments

Mr. Norris said many generators are not participating in market renewal because they are nonmarket participants with contracts who want to know how market renewal is relevant to them. They want to know what would happen to their contracts when they expire. Mr. Norris commended the IESO for holding a well-attended single-schedule market education session for generators, and everyone asked, "What does this mean for me?" Ms. Aloussis added that distributors also make up a large portion of the 48% who are not participating.

Mr. Butters said stakeholder engagement has improved over time. He would like to see tracking of specific metrics to learn how specific improvements are achieved. It is important for generators to know how the IESO makes decisions. Stakeholders become uncomfortable when the IESO has already made up its mind about things. Generators are very involved in market renewal, and the most productive meetings are those where people attend in person. He recommended not using online meetings too often. Ms. Aloussis said that the IESO is aiming to do year over year analysis and that the CPM would be re-evaluated going forward.

Mr. Schembri said it appears the IESO intends to reduce some of its engagements. Ms. Aloussis said the IESO wants to maximize participation in 2019. Grouping engagements will make participation easier in specific areas. Mr. Gregg said the goal is to get the right balance while respecting stakeholders' time. Thus, engagements will become more targeted, not diminished.

Ms. Girvan asked whether a 67% satisfaction rate is consistent with other organizations. Ms. Aloussis replied that it is relatively consistent.

Mr. Scongack said he likes the focus of quality over quantity in stakeholder engagement. He said sometimes the executive team needs to decide to do something, and it might be a good idea to let them do it without excessive stakeholdering. The SAC has opportunities for input, but not for decision making.

Agenda Item No. 7: Innovation Roadmap

Ms. Katherine Sparkes outlined that she would walk through some highlights of the draft innovation roadmap work plan. The IESO created a broad dialogue about the challenges and opportunities in the sector and their potential impacts on reliability and cost effectiveness. What the IESO set out to do was to prioritize these challenges with input from a broad range of stakeholders.

Ms. Katherine Sparkes said the IESO's role is to monitor and enable innovation of others by facilitating increased competition. The IESO will work to improve its own processes and help

drive policy and regulatory discussions as they relate to systems operations, reliability, and cost-effectiveness.

The most urgent and impactful changes are to unlock the value of new and existing resources; provide leadership in cyber security; increase transparency and visibility of resources operating on the distribution system; and collect, store, share, analyze, and use data.

The three-year draft work plan (2019–2021) is comprised of four components:

- Research and white papers will create an opportunity for transparent dialogue. One such dialogue will examine consumer choice and behaviours, and preferences around reliability, price, and generation source.
- Demonstration and evaluation projects will be done mainly by partner organizations.
- Capital projects and process improvements will improve the IESO's tools and processes to help enable fair competition.
- Partnerships and capacity building will eliminate duplication and identify pathways toward the full deployment of cost-effective solutions. This will involve coordination with the regulator and with the policy-makers and solution providers.

Priorities within the draft work plan include looking at models that test the cost-effectiveness of non-wire solutions, learning from other jurisdictions, and deciding where the policy discussions need to go in the near term.

The next step is to finalize the work plan following the input that is received. There will be ongoing review of resources, capabilities, priorities, and initiatives. The IESO will track and report on progress made.

Comments

Mr. Passi said the Association of Major Power Consumers in Ontario (AMPCO) does not agree with the premise that innovation differences exist for the electricity sector compared with other sectors. Innovation is a reference to doing things better. Within the electricity sector, innovation cannot trump affordability. He suggested that if the IESO sees innovation as deserving of a dedicated project, the project should have a capital budget and a dedicated business case; otherwise, it should not be considered. He questioned whether the IESO is the appropriate entity to be leading a discussion on innovation. Let project proponents do the evaluation, dedicate the capital resources, create the business case, and execute the project. This way proponents own the risk and the returns.

Utilities need to perform the same due diligence and can either fund innovative projects themselves or allow interveners to decide whether a project should be publicly funded. Page 10

Ms. Sparkes replied that the IESO's role is to enable fair competition because increased competition lowers costs. Its focus is to unlock the value in existing assets. The IESO also has a role to play in addressing cyber security issues. The IESO's partner organizations that are working on demonstration and evaluation projects are sharing in the risks and are required to present their business cases.

Mr. Passi said stranded assets must be evaluated as a first step in developing a business case. Ms. Sparkes replied that fixed costs should be part of a broader conversation that includes participants outside the IESO. Mr. Passi agreed. He asked what the IESO's role is in setting policy and regulation. Mr. Young said the IESO has had policy discussions that have been well informed by input from the SAC and other stakeholders. With respect to sharing risk, there has been innovation in the conservation and demand management (CDM) space. Mr. Passi agreed, noting that the Industrial Accelerator Program has a lot of oversight and runs well. However, within the innovation roadmap, it appears the IESO has preordained the outcome. Mr. Young disagreed and outlined that many changes have been made as a result of the stakeholder engagement on this file.

Mr. Norris said the initiatives within the innovation roadmap are all very different in scope. He questioned how they will individually lead to a destination. Ms. Sparkes said the initiatives map back to potential cost-effectiveness and reliability. Mr. Norris said he is able to draw a line for market renewal, but not for other initiatives.

Mr. Butters agreed in principle with Mr. Passi's comments. He asked what the process is to revisit the business case for market renewal and whether there will be an application to the Ontario Energy Board (OEB) for IESO fees. Mr. Young replied that the IESO gets approval from the minister for fees, and then submits the fee application along with a three-year business plan. Mr. Butters asked whether there is a notice of application. Mr. Young said there is none. Mr. Butters asked whether there is a regular OEB hearing where interveners could test business-case scenarios. Mr. Young said there is. Mr. Butters noted that the IESO's scope has historically been narrow for business case hearings, but the next hearings will be significantly different. Mr. Young said the IESO submitted its fee application for 2020 early this year.

Ms. Girvan asked whether the IESO is funding all the initiatives. Ms. Sparkes replied that the IESO has been successful in securing other funding. The demonstration and evaluation projects will leverage outside funding. The IESO requires leverage of 25% to 50% from those who access the conservation fund, soon to be renamed the grid innovation fund initiatives. Ms. Girvan said it would be helpful to know how much money is being contributed by IESO fees compared with other sources. She asked whether the IESO is working with the OEB on innovation plans. Ms. Sparkes said discussions about storage are ongoing and that there was a plan to regroup with OEB staff now that the OEB report on innovation has been released.

Mr. Butters asked whether there is a cost-benefit case for each individual initiative and, if so, whether they have been sent to the OEB. Ms. Sparkes replied that the demonstration and evaluation projects have business cases. Mr. Gregg said there are no detailed cost-benefit cases available for the individual initiatives. Mr. Butters asked whether the Brattle Group produced a business case for market renewal. Mr. Gregg replied that the Brattle Group identified a benefit case of \$3.4 billion to \$5.2 billion. The benefit case will be refined this year and revised into a business case. That level of detail would not be included in the current submission to the OEB; details will arrive later this year. Mr. Butters asked whether the IESO would flesh out a process to revise the business case anytime soon. Mr. Kula said Ms. Ellard would engage stakeholders to review the assumptions and inputs around the business case.

Referring to refining the \$3.4-billion benefit, Mr. Hogan asked whether the benefits of locational marginal prices would be refined. Communities and customers will want to know why they are paying a different price from other communities. Community leaders and customers will require some education about this. Ms. Ellard said the business case would look at energy stream projects and at the capacity auction around them. The zonal pricing proposal currently considers only directly connected loads. Mr. Hogan said distributors are market participants, so he expects they will receive locational prices. Variances are passed on to customers over time. Ms. Ellard said details would be forthcoming.

Comments from the Floor

Colin Anderson, AMPCO, said it is important to stay focused on affordability and not just costeffectiveness. He echoed Mr. Passi's comment that AMPCO questions the IESO's leadership role in innovation. Innovators lead innovation. He said stakeholdering has been thin. At an October 22 roundtable session Mr. Anderson attended, the priorities of the innovation efforts were locked in and participants were asked only to rank them, not to argue them. The OEB advisory committee missed the mark by not having customers represented, Mr. Anderson said. He urged the IESO to work with the OEB, open the discussion, and avoid fragmentation. Ms. Sparkes replied that with respect to priorities that the roadmap is reflective of the IESO's perspective as the system operator and market administrator to understand the change, challenge and opportunity with regards to the ability to deliver on the IESO's mandate. So we did bring forward priorities to meet those objectives and did make changes with regards to the priorities based off of stakeholder feedback. Ms. Sparkes stated that if we can surface the issues and change that is coming our way and are able to bring us to a common understanding then the IESO should play a leadership role in driving down costs and improving reliability...

Patrick Brown, Hydro Ottawa, said the utility perspective must be reflected within the coordination with the OEB. Ms. Sparkes said the IESO has worked to ensure that the OEB is included in forums and discussions. Mr. Brown noted that references to IESO engagements

with the OEB are buried in the appendices of the handout, and suggested making them more prominent within the documentation

Ms. Girvan noted that the OEB does not attend SAC meetings, but having OEB representatives present might be helpful.

Mr. Butters said better coordination is required with respect to the various innovations and their implications.

Mr. Norris said the IESO could provide the OEB with tips on stakeholdering.

Mr. Schembri asked for clarification regarding the fee application process. Ms. Sparkes said the application goes to the ministry and then to the OEB. Mr. Schembri asked whether the ministry or the OEB funds the Conservation First Framework (CFF). Ms. Sparkes replied that the IESO has the ability to fund the CFF through global adjustment. Mr. Schembri said his experience in working with LDCs has shown that it is best to manage them through a central agency.

Mr. Scongack noted that the SAC is not an advisory committee for all problems in energy policy in Ontario. The SAC members have the ability to provide feedback to the OEB, the Ministry of Energy, and elected officials, and that is part of the process too.

Agenda Item No. 8: Other Business

Mr. Bossé said the Technical Panel has received a submission from a market participant who is pushing for a market rule change. It is important that market participants are involved in those discussions. The submission will challenge the Technical Panel to move beyond rubberstamping and engage in meaningful discussion around market rule changes and commitments.

Agenda Item No. 9: Adjourn

Mr. Scongack adjourned the meeting. The next meeting will take place on April 24.