

IESO Stakeholder Advisory Committee
Meeting Notes
February 1, 2017
St. Andrew's Club & Conference Centre, Toronto

Advisory Committee Members:

Mr. Brian Bentz, Chair (representing Distributors and Transmitters)
Mr. Steve Baker (representing Related Businesses/Services)
Mr. John Beaucage (representing Ontario Communities)
Ms. Darlene Bradley (representing Distributors and Transmitters)
Mr. Jack Burkom (representing Related Businesses/Services)
Mr. David Butters (representing Generators)
Mr. Jared Donald (representing Generators) – by teleconference
Ms. Valerie Helbronner (representing Generators)
Mr. Mark Passi (representing Consumers)
Mr. Mark Schembri (representing Consumers)
Ms. Ersilia Serafini (representing Ontario Communities)
Mr. James Scongack (representing Generators)
Mr. Paul Shervill (representing Related Businesses/Services)
Mr. Todd Wilcox (representing Distributors and Transmitters)
Mr. Terry Young (representing IESO)

Regrets:

Ms. Julie Girvan (representing Consumers)
Mr. Geoff Lupton (representing Ontario Communities)

Presenters:

Mr. Alexander Wood, Executive Director, Ministry of Environment and Climate Change
Ms. Barbara Ellard, Director, Markets, IESO
Mr. Terry Young, VP, Conservation & Corporate Relations, IESO

IESO Board Members:

Mr. Timothy O'Neill – Chair
Mr. Bruce Campbell
Ms. Cynthia Chaplin
Ms. Susanna Han
Ms. Margaret Kelch
Ms. Deborah Whale

Agenda Item No. 1: Welcome

Mr. Brian Bentz

Mr. Bentz welcomed the participants present in person and on the phone, along with members of the IESO Board of Directors, to the first Stakeholder Advisory Committee (SAC) meeting of 2017.

In reviewing the agenda, Mr. Bentz remarked that SAC members have an important role in providing advice to the IESO Board and Executive particularly on matters that will shape the business direction of the IESO and the industry as a whole. Today's discussion will allow members to provide their sector priorities to the IESO for consideration in its 2018–2020 business planning cycle. The IESO will also work with the SAC during the spring and summer months to demonstrate how these priorities are being considered. The IESO will then deliver a draft business plan at the SAC meeting in August.

Agenda Item No. 2: IESO Business Update

Mr. Terry Young

Mr. Young introduced his colleagues in attendance: Leonard Kula, Kim Marshall, JoAnne Butler, Michael Lyle and Glenn McDonald. He also provided highlights on a number of key initiatives and engagement activities and noted that the posted materials provide further details.

Conservation

A memo is posted outlining the implementation of some of the directives received from the Minister of Energy on December 16, 2016 and includes details on the launch of an energy performance program which emerged out of the Conservation Fund Pilots. He added that a partnership with Infrastructure Ontario has been initiated to help facilitate the adoption of CDM solutions across government facilities. And he said the IESO has also partnered with the Ontario Science Centre in the development of an interactive presentation called "The Energy Show".

2017–2019 Business Plan

On February 1, 2017, the IESO filed a revised business plan for 2017 with the Minister of Energy to reflect the need for increased resources related to Market Renewal.

With respect to the 2016 revenue requirement submission, the IESO agreed to work with interveners to develop a regulatory scorecard and to engage an expert to assist with this work. Four standard financial reporting forms, similar to those filed by the local distribution companies (LDCs) in their rate applications, and the scorecard will be included in the revenue requirement submission to the Ontario Energy Board later this year and in future years. In developing the scorecard, the IESO held an open and competitive procurement process to obtain expert services. Elenchus Research Associates Inc. was the successful proponent.

Elenchus will introduce its approach to developing the scorecard at a public meeting later in the week of February 1, 2017.

With respect to the development of corporate performance measures for 2017, a memo is posted that provides details on what the IESO heard from the SAC last year and how that input helped to refine the measures.

Stakeholder and Community Engagement Update

A new Local Advisory Committee (LAC) in Barrie/Innisfil is being developed to support the recently released Integrated Regional Resource Plan. This will bring the total number of LACs in the province to 11. The IESO continues to explore opportunities to strengthen the LACs within the regional planning process as well as strengthen its outreach to municipalities, associations and indigenous communities.

Last week the IESO announced the creation and composition of the Mid-Term Review Advisory Group, with meetings set to begin in February. Public stakeholder engagement will begin in Q2, 2017.

The IESO continues to engage with stakeholders on proposed elements for a new cost-recovery framework for the Real-Time Generation Cost Guarantee (RT-GCG) Program. The draft rules will be considered at the February 14, 2017 meeting of the Technical Panel.

The IESO is launching a new Grid-LDC Interoperability Standing Committee. Interested operations representatives of LDCs and transmitters have been invited to become members. Observers will be welcome.

Last year the IESO was asked to review its Interim Market Document Change (IMDC) process that is used to introduce changes to market-facing documents, including market manuals. The IESO spoke to the SAC last year and held a webinar in January of this year. The results of the IMDC consultations will be presented in March, 2017.

The Technical Panel has a new Terms of Reference. To fill vacancies and align with the revised membership, the IESO is calling for nominations for membership on the Technical Panel. Details are available on the website. The deadline for submissions is February 10, 2017.

The IESO is working on a new website, which will be up and running at the end of February. Feedback will be welcome once the website has been launched.

Members who receive the weekly IESO bulletin will need to re-subscribe for 2017 due to the recent tightening of anti-spam legislation. Contact customer.relations@ieso.ca for information on how to do this.

Comments

Mr. Wilcox asked how confident the IESO is about reaching conservation targets. Mr. Young replied that the IESO is fairly confident. LDCs are one-third of the way through the framework and are making good progress. The conservation framework mid-term review will look at any issues LDCs or customers might have and the IESO will make recommendations based on that review.

Mr. Wilcox asked whether the mid-term review is viewed as a fine-tuning process. Mr. Young said a little more than fine tuning is involved. The LDCs will have questions around targets and the ability to address the unassigned target, for example, and the IESO will have to work together with LDCs on the issues that arise.

Mr. Wilcox asked whether there has been any change in the combined heat and power (CHP) programs, referring to rumours about a potential blackout on new applications. Mr. Young said he is unaware of any changes.

Mr. Bentz said it would be useful to have a discussion about the linkages between regional infrastructure plans and regional resource plans and how these fit with the Ontario Planning Outlook, the Long-Term Energy Plan (LTEP) and regional plans. There is no one-size-fits-all approach; rather, the approach must be both top-down and bottom-up. Mr. Young noted that a discussion about the linkages of the various regional plans will be slated for a future agenda.

Mr. Donald noted that the Conservation and Demand Management (CDM) Framework excludes solar electricity procurement. He asked whether there is a view to include it now that the Feed-In Tariff (FIT) Program has ended. Mr. Young said this is an opportunity worth exploring. A discussion about including solar electricity procurement in the CDM framework will be put to the Mid-Term Review Advisory Group.

Mr. Donald asked how energy storage is related to the request for proposal (RFP) for regulation services currently under way. Mr. Kula replied that the IESO is looking forward to receiving comments regarding the wording and content of the draft RFP. Ontario has existing storage facilities that provide regulation services. The IESO is interested in submissions for both old and new technologies.

A comment from the floor expressed encouragement by the creation of the IESO-LDC Coordination Committee, which might dovetail with responsibilities the IESO has in the LTEP implementation around grid modernization. With respect to the conservation update, it was added that the recent announcement of a partnership between the IESO and Infrastructure Ontario and said Conservation Fund monies will be used to support this partnership. It was asked whether this marks the beginning of a shift in the use of the Conservation Fund. LDCs want clarity on how the partnership will be executed and suggested that LDCs might be able to provide a supporting role, but if not, asked whether some of the conservation savings potential would be deducted from LDC targets. Mr. Young said there is no shift in the use of the Conservation Fund money. The IESO intends to support the implementation of CDM practices.

Another comment from the floor noted that the agreement between Hydro-Québec, the Government of Ontario and the IESO was finalized as of last year and asked whether the IESO will publicize the details of the agreement. Mr. Young said the IESO has already released information on this initiative.

Mr. Butters said there are scheduling details for the Hydro-Québec agreement that market participants will want to understand. He encouraged the IESO to release those details and noted that generators are not satisfied with the level of detail that has been provided. He said this speaks to trust and goes to the heart of market renewal. Mr. Young replied that all of the information that is publicly available has already been released.

**Agenda Item No. 3: 2018–2020 IESO Business Planning Process
Priorities from Committee Members (Round-Table Discussion)**

Mr. Bentz invited members of the SAC to provide a summary of the priorities within each of their sectors that the IESO should consider in its 2018-2020 business planning process. Mr. Young added that comments will be discussed and responded to at the SAC meeting in August, 2017.

Ms. Serafini said conservation and delivery are key priorities. The outcome and progression of the Mid-Term Review are important, especially as the review relates to the Achievable Potential Study. There is currently a public outcry across the province about misinformation around energy prices, which requires an integrated explanation of delivery and usage bills. This misinformation could hinder the delivery of conservation initiatives. The integrated delivery of demand side management (DSM) and CDM with gas and electric is the role of the IESO among other potential government agencies. There is concern and potential confusion about the mandate of the new Climate Solutions organization and its coordination with the existing conservation programs. The impact and rollout of the market renewal and LTEP processes must be understood.

Mr. Baker agreed with Ms. Serafini that the impacts of the Climate Change Action Plan and the Green Bank on DSM and CDM delivery should be explained. Specifically, who will deliver programs must be clarified. Also, how the LTEP will mesh with the market renewal strategy must be understood. A made-in-Ontario solution would be the best outcome to address Ontario's unique assets and challenges.

Centralized planning in an increasingly distributed world creates a challenge for the IESO. Mr. Wilcox said 2018–2020 will see an increasing trend toward LDC-distributed resources. Typically, behind-the-meter generation stands at 3–5% compared with 2010 when it was almost zero. Toronto Hydro expects behind-the-meter generation to reach 12% in the next five years and is now putting an energy centre together to work with customers on development and dispatch. Mr. Wilcox said customer education must be addressed. Customers are frustrated and the sector should let them express themselves. The energy sector should thank customers for

putting up with the financial pressures imposed on them. The IESO has a role to play in providing simple and consistent messaging to the public, including emphasizing all the good work going on within the energy sector.

Mr. Beaucage said the last LTEP talked about the need for electrification of the North. A Phase 1 project is under way in Pickle Lake and a Phase 2 project is planned. However, the number of customers, the cost of the line, and how it will be paid for are unknown. Winter roads to the North are open for less time every year because of climate change. Millions of litres of diesel are going north to run power plants and the amount of spillage during transport and transfer is a concern, as well as the emissions from using diesel energy, since they add up over time. Moving off diesel should be a consideration. For the Market Renewal, players involved must have a common understanding of what the real benefits are for the customer. This must be simply and clearly communicated, so a strong communications strategy must be developed within the project.

Mr. Scongack said the critical role the IESO plays in day-to-day operations is sometimes forgotten. Peripheral issues are not to be minimized, particularly cyber-security investments as well as succession planning and training in the operations area to address new expectations with operational components. The SAC should reinforce the important role of the IESO in these issues and ensure that resources are available. The next six months will be a dynamic period, especially in terms of rate mitigation, and the IESO will have to be agile in responding to market renewal. A submission to the Ontario Energy Board is being made at a time when many items are under review and uncertainty surrounds potential rate mitigation. With respect to the electrification of the North, it is clear the IESO has developed a good regional engagement framework, and it will be important to maintain this.

Mr. Scongack asked for clarification about the proposal for a modest increase in resources this year to operate the IESO; he asked whether the funds are still under the pre-amalgamated cost. Mr. Young replied that there will be increased costs associated with the market renewal project, after which the costs will go down. Even with the increase, the costs are below what the two predecessor companies (the IESO and the Ontario Power Authority) would have charged.

Mr. Passi noted that the LTEP is a process with a stated purpose. He added that it is his hope that the market renewal project will address some of the objectives and outcomes in the LTEP. Cost should be the main issue, whether it is the cost of electricity or the cost of CDM. The IESO shows a cost-benefit analysis through its business plan, but Item 5 on today's meeting agenda addresses only the benefits case for market renewal. The focus on the LTEP and the Market Renewal project needs to remain on costs for success in communicating these initiatives with the SAC and the public.

Ms. Helbronner said the themes of ongoing existing procurement, market renewal, implementation of the LTEP and future procurement must be considered together, not kept in separate silos. More overlap of these themes is required and must be articulated clearly, along with continuously updated timelines that allow people to know when and where their input

can be brought to bear. In terms of future procurements, some power will be needed in the mid-2020s, and now is the time to discuss that from a planning perspective. As well, the industry wants to know what is within the IESO's purview and where the roadblocks are for policy initiatives such as the electrification of the North.

Mr. Burkom said governance will become increasingly important as the market renewal initiative rolls out. Currently there is little to no recourse for stakeholders when changes or decisions have a negative impact on them. More transparency is needed earlier in stakeholder discussions, particularly on transmission-related initiatives. Principles need to be stakeholdered and included in the market renewal plan. There is talk of using general tax revenues to subsidize electricity rates. The only way to lower rates is to encourage less generation and more demand, yet more base-load supply continues to be encouraged, and this is not good for ratepayers. It is difficult to understand why the province continues to do the same things that led to this unfortunate situation.

Mr. Schembri said the IESO has done a good job of keeping its fees in check. It should continue to do so and be accountable for the additional resources it requests to advance capacity auctions and market renewal. Results in demand response (DR) auctions are positive. Prices are coming down, and resource availability has increased. This can be a good model for market renewal. If the IESO were to take a limited but strategic approach moving into capacity auctions, the results would be positive. LDC consolidation should bring about cost reductions. There is still a lot of noise on the Global Adjustment (GA) billing process; LDCs pick up the first estimates, which do not always correlate with final estimates, and this needs to be fixed. Reliability should remain a focus for the IESO. With aging distribution and transmission systems distributed energy is becoming a reality. IESO to be mindful of on-peak load in large urban areas, load from heating, ventilation and air conditioning is increasing. The IESO has a unique opportunity to be a bridge between the Ministry of Energy and the Ministry of the Environment and Climate Change on the electrification of the transportation sector. Load control on on-peak periods is important, and the IESO could be instrumental in furthering the positive expansion of electric vehicles. There is support for the Conservation First initiative and province-wide programs, but stability around the programs is required. Consumers make commitments with the expectation of incentives, and they have been caught in situations where utilities have cancelled incentive programs after commitments were made. Consumers support the role of LDCs in conservation and multiple channels can support this effectively.

With his focus on education, Mr. Shervill said the IESO is in a privileged position, placed between generators, demand response activities and end consumers. The IESO has done a commendable job of setting up educational sessions for market participants and now needs to expand this work. Because the market is changing, it would be worth looking at new vehicles that engage smaller consumers in the market and not just wholesale participants. Consumers are feeling empowered to have a role in the marketplace. Behind-the-meter use is on the rise, and it behooves the IESO to respond and develop educational messages for non-traditional market participants. With respect to market renewal, the IESO should keep four things in mind; price discovery, price fidelity, open access and minimizing out-of-market transactions. The

IESO has a role to play in helping the government understand that the market loses credibility when unilateral decisions are made such as the Hydro-Québec deal. The more the government operates unilaterally the less confidence there will be in the market. Experience with the DR auction has been good, and the capacity auction can benefit from that experience. Finally, small consumer education is critical because consumers are footing the bill, and they deserve to have their questions answered.

Mr. Butters said generators want to ensure the objectives and principles of the market renewal initiative and how the initiative rolls out with LTEP implementation are beneficial for both generators and the IESO initiative. The IESO should ensure that the implementation plan is clear. The stakeholder process has been good for the RT-GCG Program. Contract accommodation for cap and trade remains an important issue. Stakeholder engagement has been good, but it is a continuous improvement process with increasing openness and transparency. The Ontario-Quebec deal, and other out-of-market solutions like it, undermines investor confidence in the marketplace. Putting blocks and limits around these would be helpful.

Mr. Donald said with the FIT program gone, clarity and sustainability are needed on the solar side, particularly regarding how the transition to net metering works for virtual net metering and community solar projects. The IESO has an important role to play in participating, along with the LDCs, in discussions on how LTEP will interface with cap and trade, CDM, opportunities for offset generation to support carbon targets and the evolution of storage with renewables.

Mr. Bentz said the recent merger of PowerStream, Horizon Utilities and Enersource into a new company, Alectra Utilities, will serve a million customers in the Hamilton-Toronto area and drive down rates. It also represents a strategic repositioning. Alectra is about changing the value proposition for customers. Rather than providing passive delivery, the new company will provide comprehensive integrated (with gas) energy solutions. The IESO is in a similar position to undertake this type of culture change as customer empowerment becomes increasingly important. With the merger, the IESO now undertakes short and long-term forecast of energy and demand. There is a need to look at the increasing divergence of demand forecasting and to be very careful and prudent and use a lot of discretion with capital planning decisions that bring a large cost. An intelligent early detection system is needed to alert the market to the arrival of new technologies, a black swan event or any magical solution, and to inform how consumer behaviour is changing. Per capita consumption has decreased across all rate classes in the past 10 years. The stakeholder engagement process needs attention around managing expectations. The SAC does, and must be seen to, provide advice. Reaching out to communities will continue to be important. It is worth considering whether there is a way to optimize surplus off-peak supply instead of exporting it, thereby helping to drive economic development in Ontario. Creative solutions would be welcome. Customer engagement and education are critical. There is an opportunity for IESO to work with LDCs to coordinate customer experience, education and consistent planning. Enhanced risk assessment/management and market scenario development are needed to address rapid change in the industry.

Mr. Young thanked the members for their input and ensured that the IESO would take their priorities into consideration and demonstrate how we recognized these priorities in later discussions.

Comments

A comment from the floor said transparency around electricity pricing is a key theme in the market renewal initiative. The IESO has a unique opportunity to serve as a champion. Distributors field many questions from customers regarding what cap and trade means for their gas and hydro bills. Residential customers want to know what will be the most cost-efficient energy supply going forward. Large retailers and school boards are struggling to control their costs. Additional resources, especially within the context of cap and trade, would be welcome as the LDCs struggle to provide answers.

Agenda Item No. 4: Ontario Climate Change Action Plan

Mr. Alexander Wood, Executive Director, Ontario Climate Change Directorate, Ministry of the Environment and Climate Change

Mr. Wood provided an update on the Ministry of the Environment and Climate Change's policy framework for climate change, the climate change strategy, the cap and trade program, the Climate Change Action Plan and the cap and trade compliance period that began on January 1, 2017. [[Presentation](#)]

The province has set short-, medium-, and long-term greenhouse gas reduction targets using a 1990 baseline. The targets are 15% below 1990 by 2020, 37% below 1990 by 2030 and 80% below 1990 by 2050.

The *Climate Change Mitigation and Low-carbon Economy Act* was passed in May, 2016. It establishes the long-term framework for climate action within Ontario, sets out the legal authority framework for the cap and trade program and describes the accountability and transparency elements around cap and trade. It requires that the province release an action plan at least every five years to describe how it will achieve its targets.

Forming the backbone of the cap and trade program are the Cap and Trade Program Regulation and the Quantification, Reporting and Verification of Greenhouse Gas Emissions Regulation. The Cap and Trade Program Regulation outlines the caps themselves, auction and sales rules, provisions around strategic reserves, market rules and how allowances are created for allocations. The previous reporting regulation set a threshold of 25,000 tonnes, so anyone emitting more than 25,000 tonnes was required to report. The new regulation has pushed the threshold down to 10,000 tonnes, allowing for a voluntary opt-in for facilities emitting between 10,000 and 25,000 tonnes.

Compliance for the cap and trade program began on January 1, 2017. A practice auction was held in January, with good feedback. The first cap and trade auction will be held on March 22, 2017.

Energy consumers are affected by Ontario's cap and trade program through their use of carbon, whether they are covered directly by the program or indirectly through a carbon price on the fuels they consume. The Climate Change Action Plan complements this price signal with targeted policies and programs to support lower-carbon choices like renewable energy and electrification.

The Climate Change Action Plan was released in June, 2016, and details more than 90 actions to be implemented over the next five years to help home and business owners manage and reduce their emissions.

The Climate Change Action Plan will complement the cap and trade program by guiding the reinvestment of proceeds to achieve greenhouse gas reduction and manage cost impacts.

Ontario is establishing a low-carbon technology deployment entity (the Green Bank) to deploy and finance readily available low-carbon energy technologies.

Comments

Mr. Bentz thanked Mr. Wood for his comments and asked how the Green Bank would distinguish between innovation-type and deployment-type technologies — and which of these would assist in the greenhouse gas reduction goals. Mr. Wood said the bank will be looking to seed investments in terms of supply push, which is distinct from demand pull. The Bank may be involved in technology validation programs to help developers enter the market. Drawing a clear line of who is in and who is out will be avoided. The broad action plan is to think about new technologies while recognizing that a lot of technologies already exist that could be deployed on a larger scale.

Ms. Serafini asked how the Green Bank would focus on the financing and leveraging of private capital to support households. Mr. Wood said the Green Bank is not designed to crowd out existing players on the program side. It will align with existing programs and eventually develop new programs. It is being designed as an RFP shop. It will not be involved in the direct delivery of programs. The directive is to use the existing ecosystem and enhance it with new resources.

Ms. Serafini asked how attribution is credited within frameworks that exist beyond greenhouse gas. Mr. Wood said design details will be left to the Green Bank directors.

Mr. Scongack asked whether there is any ability to provide relief to electricity ratepayers. Mr. Wood said money raised through auctions must return to greenhouse gas-reducing activities. For the electricity sector, the test would be the relationship between investments that not only address cost pressure but also reduce emissions.

Mr. Butters asked why compliance is upstream with the fuel suppliers for gas-fired generators as opposed to at the point of emissions. He suggested exempting them and retiring the allowances. Second, he asked what role the boreal forest plays as a carbon sync. Mr. Wood said the science of carbon syncs is complex, and the government does not have robust information on what types of forests act as syncs or sources. This is being looked at. With respect to upstream compliance, the Ministry of the Environment and Climate Change takes advice from energy colleagues—advice based on market structure at a point in time. In the next compliance period, beginning in 2020, discussions will be held on whether there is a better way to do compliance in electricity. The carbon price is the stick. The carrot is the money put back into households to help them manage the costs.

Mr. Wilcox asked why cogeneration was not exempted from cap and trade, particularly in cases where it is impossible to use heat pumps or other technologies as a main heating source.

Mr. Wood said there was a directive to favour the grid in incenting further electrification. He said the debate has not gone away and is sure to be revisited.

Mr. Shervill asked what role codes and standards play. Mr. Wood said the government is consulting on the next version of the building code. Little time has been spent on consumer or wholesale delivery products and there is a clear federal role there. It is hoped that the Green Bank will not become a standard-setting entity, but that it will play a role in helping the bodies that do such work.

Mr. Baker asked how cap and trade aligns with the LTEP in terms of what will happen to the electric grid. Mr. Wood said the government has been strongly and consistently engaged with energy on the fuel and electricity sides. How that will translate into an actual plan is unknown right now. Mr. Baker replied that the basis for analysis has not been right within the LTEP. There should be a push to get control systems in place with existing resources to use the resources that make sense on peak days before jumping into new, potentially costly options. Mr. Wood said the carbon price is a signal to innovators and investors that solutions are sought throughout the economy. The provision of solutions will be rewarded.

Mr. Burkom said Ontario's power sector is close to 90% zero emissions today. If it wants to reach 92% it will need to do so within the power market itself. The non-emitting power available is well in excess of the charge being applied today. If money is reinvested into technologies that directly and further decarbonize the Ontario grid, this attacks market renewal. The IESO is trying to move away from those out-of-market actions. Mr. Wood said there are no easy solutions for reducing emissions. The price signal will solve the problem. In the short term, it is unlikely that the price will act as an incentive in the electricity system to find the final 2–5% reduction. It is likely the reductions will come from industry and transportation in the short-to-medium term. The assumption is that the stronger the signal manifests, the stronger the market renewal framework acts to further decarbonize the electricity system.

Agenda Item No. 5: Market Renewal – Benefits Case and Communication and Engagement Plan (Input Item)

Ms. Barbara Ellard and Mr. Terry Young

Ms. Ellard provided an update on Market Renewal, including the Benefits Case. She said the Market Renewal benefits case is not meant to be a detailed cost-benefit analysis or business case. Rather, it attempts to assess both the costs for the IESO as well as the overall efficiency gains and cost savings. This year's goal is to complete the benefits case and transition into discussions on how the proposed initiatives can work for Ontario.

The ultimate goal of market renewal is to establish clear and transparent mechanisms for suppliers and consumers to meet system needs cost-effectively through competition, while addressing existing inefficiencies.

Ontario's market design and tools are nearly 20 years old. There are inefficiencies in the current design and the sector is changing. Market renewal must be looked at holistically, as a package deal. Future mechanisms can build on or integrate with other mechanisms, such as carbon pricing or clean energy auctions. As market design changes, contracts are meant to continue to work with these changes.

Diverging demand outlooks indicate the need for flexibility. There is also a need to create certainty around what the market will look like when contracts expire.

Ontario has used many capacity procurement mechanisms, and experience has shown that competition leads to the best value for consumers. The IESO has completed its second DR auction to transition contracted DR assets into an auction-based approach. The auction has driven down price by approximately 20% compared with the contract price. New DR players and technologies have emerged. DR participants now have the certainty that the annual auction is a predictable, stable tool with a transparent pricing mechanism. Evolving capacity procurement will lead to improved consumption and investment decisions. Increased complexity will be managed through improved market mechanisms.

The Brattle Group was engaged to conduct the market renewal benefits case, which focused on initiatives within three work streams: energy, capacity and operability. It looked at Ontario studies and other markets that underwent changes to see how costs and benefits were affected. Initial findings suggest that there are large potential benefits to moving ahead with market renewal in Ontario, that is, a \$3.5-billion net efficiency benefit (2021–2030), including a \$3-billion net consumer benefit. The majority of benefits will come from the capacity auction. The baseline estimate for cost for all Market Renewal initiatives is \$150 million to \$200 million.

On December 19, 2016, preliminary results of the benefits case were reviewed and discussed at the market renewal stakeholder meeting. The IESO heard what is working well: real-time resource adequacy and reliability; a clean, diverse supply mix; the day-ahead commitment process; and co-optimization of energy and operating reserve.

The IESO also heard what is not working well: pricing transparency; prices not reflective of all the market costs; governance; contracts not aligned with the market; and too few resources committed day ahead.

The opportunities identified by stakeholders are to create new market mechanisms that increase transparency and flexibility, balance risks, increase competition, improve governance and pricing signals and also enable emerging technologies.

Mr. Young said the market renewal project is not a typical stakeholder engagement process, in that numerous discrete design changes are needed under an integrated work plan. This will require enduring stakeholder commitment over a number of years.

Mr. Young acknowledged that there is a lack of public awareness about the market and the complexity associated with market renewal. The Market Renewal Working Group (MRWG) has been established as the key stakeholder vehicle, alongside the SAC and the Technical Panel. The IESO will create an external round table, comprised of CEOs or senior executives, to provide advice. Market renewal will be prominent on the IESO website and social media channels.

Ms. Ellard said there was good discussion around governance and future stakeholder engagement at the January 20, 2017 meeting of the MRWG. The MRWG will continue to be the main vehicle for market renewal. Design discussions will take place with a broader range of stakeholders and technical issues will be addressed through subcommittees. Working group members would like to have a co-chair and a professional scribe service to ensure transcripts are available. Third parties should be engaged to facilitate discussion when necessary. The membership should be expanded to better represent emerging technologies. The IESO is to pay for an individual to adequately represent consumers. Ongoing education and enhanced communication between the MRWG and the Technical Panel will be encouraged.

For next steps, the IESO will focus on finalizing the benefits case by the end of Q1, 2017. Education sessions will be held through Q1, 2017 on market renewal design elements. The IESO will look for opportunities to provide further education and to address market renewal progress in industry forums. The IESO will work with the MRWG on membership and will develop revised terms of reference.

Comments

Mr. Beaucage said that in the past there were incentives to have First Nation or Indigenous groups involved in the marketplace. He asked whether broader incentives for Indigenous groups to participate in the market would be included in the market renewal case. Mr. Young said inclusiveness will be monitored throughout the project developments and suspects that community outreach will increase in time.

Mr. Wilcox asked how the Market Renewal work differs from the everyday work of the IESO. Ms. Ellard replied that market renewal is a collection of all the initiatives and takes a holistic

view that deals with inefficiencies. Mr. Wilcox asked how the IESO will know once they have achieved their objectives in this project. There will be go-live dates for the collection of the pieces of the new market design elements. For example, the DR auction, the prices are known, the number of past participants is known, and there is an ability to look back and see whether the goals have been achieved.

Mr. Butters asked that the SAC be informed when critical milestones are reached throughout the project.

Mr. Baker asked how expectations will be set with various stakeholders, particularly consumers. Ms. Ellard said there will be continued education and communication.

Mr. Burkom said he would like to see more stakeholdering around principles. It appears from today's presentation of the benefits case that the goals and principles have already been framed, and this is frustrating. Ms. Ellard said that the IESO agrees that it is a good time to revisit this discussions we begin to discuss deeper details in design.

Mr. Burkom referred to the notes where the value of non-emitting resources implies that it will be addressed over time and said the vast majority of Ontario's resources are non-emitting. Ms. Ellard stated that Market Renewal recognizes Ontario's supply mix and design decisions will need to reflect that. Mr. Burkom suggested acknowledging this in the guiding principles.

Mr. Shervill said getting people to buy into the principles would be an improvement.

A comment from the floor asked if the Brattle Group analyzed the potential benefit of moving to a capacity market and shutting down the Pickering Nuclear Generating Station in 2018 when its license expires. Second, he asked if there was an analysis of the benefits of upgrading the intertie capacity with neighbours to provide greater rate reductions. Ms. Ellard said the Brattle Group worked with the LTEP scenarios, the demand outlook and considerations around various units, but did not go into the detail of assessing specific projects.

A comment from the floor echoed Mr. Burkom's suggestion to create a robust set of goals and objectives.

A comment from the floor said on the distribution side the goal was to provide a clear narrative for all audiences about potential benefits, even distribution assets. That is an important goal. Regarding one-on-one engagement, he asked who should initiate this communication. Ms. Ellard acknowledged that many stakeholders wear the dual hat of market participant and contract counterparty. She encouraged the attendee to get in touch with the IESO regarding one-on-one engagement.

A comment from the floor, said it is important not to presume what the relationship looks like between contracted assets and market renewal. The framing is important.

Agenda Item No. 6: Other Business

There was no other business.

Agenda Item No. 7: Adjourn

Mr. Bentz thanked everyone for participating. The next meeting will be held on May 10, 2017.