

# Meeting Notes of the Stakeholder Advisory Committee

Meeting date: 17/2/2021  
Meeting time: 09:00 a.m.  
Meeting location: Video conference

Chair: Brian Bentz, Alectra Utilities  
Scribe: Smarter Shift Inc.

Meeting materials can be accessed on the [SAC](#) web page.

<b>Invitees</b>	<b>Representing</b>	<b>Attendance Status Attended, Regrets</b>
Nicolas Bossé	Energy Related Businesses and Services	Attended
David Butters	Generators	Attended
Judy Dezell	Ontario Communities	Regrets
Brandy Giannetta	Generators	Attended
Malini Giridhar	Energy Related Businesses and Services	Attended
Julie Girvan	Consumers	Attended
Jim Hogan	Distributors and Transmitters	Attended
Rachel Ingram	Energy Related Businesses and Services	Attended
Bruno Jesus	Transmitters and Distributors	Attended
Frank Kallonen	Distributors and Transmitters	Attended

<b>Invitees</b>	<b>Representing</b>	<b>Attendance Status Attended, Regrets</b>
Paul Norris	Generators	Attended
Mark Passi	Generators	Attended
Mark Schembri	Consumers	Attended
James Scongack	Generators	Attended
Hari Suthan	Energy Related Businesses and Services	Attended
Annette Verschuren	Energy Related Businesses and Services	Attended
Terry Young	IESO	Attended
Brian Bentz	Chair	Attended
<b>IESO Presenters</b>		
Leonard Kula		
Katherine Sparkes		
Candice Trickey		
Terry Young		

## Agenda Item 1. Welcome Remarks

Mr. Brian Bentz welcomed all to the first SAC meeting of 2021. He acknowledged that Ontario is made up of the traditional territories of the Anishinabek, Huron, Wendat, and Haudenosaunee peoples, as well as the Algonquin, Cree, Ojibway, and Metis peoples.

Mr. Bentz said now is a good time to reflect on progress made with respect to the pandemic, particularly the arrival of a vaccine rollout. Society is beginning to see light at the end of the tunnel. North America is presently in the midst of a deep freeze, underscoring the importance of power grids and their operators.

Mr. Bentz congratulated the IESO Board of Directors for selecting Lesley Gallinger as its new President and CEO.

## Agenda Item 2. IESO Business Update

Mr. Terry Young introduced the IESO Board and Executive team in attendance. He announced that Jessica Savage is the new program delivery executive for the Market Renewal Program. He welcomed Ms. Gallinger as the new President and CEO of the IESO.

Mr. Young provided the following business updates:

The IESO launched a new four-year Conservation and Demand Management Framework on January 4.

The December 2020 Capacity Auction was successful. It cleared 992 MW from 75 different resources. In addition to demand response, each of the newly eligible resource types (generation, storage, system-backed imports) cleared the auction. It was the first Capacity Auction following five years of successful Demand Response (DR) Auctions. The total cost of the Capacity Auction was lower than the DR Auction of the previous year.

The IESO was asked by the Ministry of Energy, Northern Development and Mines (ENDM) to review unsolicited proposals. The reviewers assess the potential for the project to address forecasted system needs, potential to provide electricity system benefits and cost savings, and timelines. Material is posted outlining the steps of the review process. The Markets Committee is engaged in reporting back to ENDM.

Many engagement activities are underway. The IESO respects the time given by stakeholders and will make ongoing changes to address their needs.

The IESO will consider actions around recommendations made in the Market Surveillance Panel Report No. 33. Ms. Barbara Anderson has posted updates to the five-year strategic measures and targets.

## Update on Cold Weather in the United States

Mr. Leonard Kula said unusually cold weather in the southern United States has disrupted the system there, specifically within the jurisdiction of the Electricity Reliability Council of Texas (ERCOT), the Tennessee Valley Authority (TVA), the Midcontinent Independent System Operator (MISO) that runs south of Michigan, and the Southwest Power Pool (SPP).

The highest NERC Energy Emergency Alert (EEA) is a Level 3. All of the aforementioned areas in Texas reached this level and have shed load. Load shedding is the last tool in the box to balance supply and demand. ERCOT remains at Level 3 while the other areas have moved to lower alert levels. Ontario is interconnected with the TVA, MISO, and SPP. Texas has limited interconnections and limited ability to get support. At the height, ERCOT lost 30,000 MW of generation and had firm load shedding in excess of 10,000 MW. A cold weather event took place in Texas in 2011 when a similar amount of generation was lost. NERC and FERC are planning a joint inquiry.

Ontario's system is designed to withstand cold weather. The province is now in the 20,000-plus-MW range for demand and no issues are anticipated for supply or transmission. Ontario has close relationships with gas pipelines and meets regularly with the operators. The Unit Readiness Program ensures that a generating unit that has not run for a period of time can be restarted.

Mr. Bentz asked if there are lessons to be learned from other jurisdictions with respect to resource adequacy, emergency operations, and supply mix. Mr. Kula replied that the resource mix is changing along with fleet characteristics, and there is growing dialogue to move away from traditional methods of ensuring adequacy.

Ontario has long experience with energy limitations. For example, some hydroelectric generators do not have stored energy behind them. Wind and solar energy have been added, but they are energy limited too. California has been aggressive in adding wind and solar. On a bad day in California, blackouts can be driven by energy adequacy gaps between 3 PM and 5 PM. This is due to solar ramping at 3 PM and the wind starting up at about 5 PM.

## **Comments**

Ms. Malini Giridhar asked to what extent gas-fired generation plays a role in adaptability. Mr. Kula said Ontario's resource mix is large, but no resource is perfect. Gas is a strong resource within the fleet. With gas, 8000 to 9000 MW is flexible. Gas is susceptible to reduced production during mid-summer, when it needs to be de-rated by approximately 15% due to high temperatures and humidity.

Mr. David Butters asked what was the nature of the supply shortfalls in ERCOT. Mr. Kula said it was his understanding that the generators froze, as many are not enclosed within buildings. The area also has capacity adequacy issues. There may have been a fuel issue as well, as people use fuel for other things.

Mr. Butters asked what is the commitment to ensure that the public understands the results of the unsolicited proposals review. Mr. Young said proposals would be assessed and considered as part of the Resource Adequacy Framework. Some proposals will end at the submission stage; others may proceed through Gates 2 and 3. Proposals that pass through Gate 3 will have ministry directives to the IESO posted.

Ms. Julie Girvan asked, with respect to unsolicited proposals, how the IESO determines if a project will reduce electricity system and ratepayer costs. Mr. Young said an analysis would be done. He offered to take the question forward as an action item and a later response.

Ms. Brandy Giannetta said further transparency would be helpful in terms of what types of projects are being evaluated, including whether a decision like recontracting Lennox is part of that, if other sole-source contracts will be announced shortly, and what falls outside of the unsolicited proposal

framework criteria in the interim. There is a posting from ENDM on the Environmental Registry of Ontario about a consultation regarding the Long-Term Energy Plan (LTEP) framework. It states the purpose of the consultation is that the government plans to refocus the LTEP framework to increase effectiveness, transparency, and accountability of energy decision-making in Ontario, thereby empowering independent agency-led planning. The unsolicited proposal framework says stakeholders have to wait for the government to make the call. There is no alignment. It appears the system is stuck with unsolicited proposals taking precedence over a LTEP framework. She asked how unsolicited proposals would aid in making progress. Mr. Young said he would not suggest that unsolicited proposals take precedence. A number of proposals were given to ENDM and the IESO was asked to evaluate them. The IESO is trying to drive transparency and competitiveness.

Mr. Mark Passi asked for elaboration on the development of a work plan to address stranded assets. Mr. Young said this would be addressed later on in the meeting.

Ms. Rachel Ingram said she assumes unsolicited proposals are designed to meet a system need, and if so, alternatives to meet the need should also be assessed. She asked if assessment of alternatives fits into the process. Mr. Young said the IESO was asked to look at specific projects. The goal is to move toward a competitive process.

Ms. Ingram noted that the Capacity Auction held in December was for the acquisition of summer capacity only. In the last two days, and one-day last week, demand response was put on standby. Since demand response may be a necessary resource, she asked if there has been any consideration to procure winter capacity in the December 2021 auction. Mr. Kula said the IESO does not anticipate running a Capacity Auction to acquire capacity for the winter of 2021-2022.

Mr. Joe Oliver said reviewers are mindful of alternatives during their reviewing of unsolicited proposals and consider it to be part of the input provided to the government.

Mr. Bentz said transparency is a critical factor in terms of understanding how decisions are made and understanding the commercial terms.

Mr. Young announced that Mr. Bentz is leaving the SAC and this will be his last meeting. He thanked Mr. Bentz for years of strong leadership and advice on behalf of the SAC and the IESO.

Mr. Bentz announced that Mr. Young is also attending his last SAC meeting today, and thanked Mr. Young for being an outstanding voice for the organization.

Mr. Mark Schembri is attending his last SAC meeting today. On behalf of the IESO, Mr. Young thanked Mr. Schembri for being a strong advocate for commercial consumers.

### Agenda Item 3. Update: 2021 Priorities

Mr. Young outlined four priorities in 2021. The first is Market Renewal. The Technical Panel will be involved in creating manuals and rules, with Jessica Savage coming on as the new program delivery executive. The second priority will be the Resource Adequacy Framework discussions as capacity needs emerge in 2026. The third priority is consideration of each of the 21 regions within the province, in terms of where needs may be emerging more quickly in some regions than others. The fourth priority is business transformation. Protecting the health and safety of employees in light of Covid-19 is ongoing.

In the next five years the IESO will prepare for the Pickering retirement and look to fully utilize existing and emerging resources. A priority will be to produce a five-to-10 year plan and share it with stakeholders.

In May or June of 2021 the IESO will produce an Annual Acquisition Report as a complement to the Annual Planning Outlook.

Incremental changes to increase competition and performance within the Capacity Auction will continue this year.

The IESO will work with stakeholders to develop a work plan to enable existing resources and better understand opportunities for the integration of emerging resources.

The implementation stage of Market Renewal begins this year.

The IESO will evolve the stakeholder engagement processes and expand the outreach. Five regional networks have been created and diversity within them is increasing.

With respect to business transformation, last year's employee survey gathered great feedback and an action plan will roll out this year.

## **Comments**

Mr. Bentz said the digital economy has accelerated due to Covid-19. He asked if the IESO has a vision with respect to systems operation function in light of generation and resources coming on line, distributed energy resources, and edge of grid. Technology will need to advance to intersect the upstream grid and solutions behind the meter. What will the system operator look like in five-to-10 years? Mr. Young said there will be learnings from pilot projects such as the one in York Region. As new resources and mechanisms are integrated, reliability will not be compromised. Both virtual and in-person meetings will be utilized in future.

Mr. Jim Hogan said in addition to Essex County being an area of growth in southwestern Ontario, Chatham-Kent is also in a growth phase. Enbridge has expanded the gas in this area.

Mr. Young announced that Ms. Ingram is leaving the SAC and this will be her last meeting. He thanked Ms. Ingram for her leadership and said she will be missed.

## **Agenda Item 4. Input: Enabling Resource Participation**

Ms. Katherine Sparkes said initiatives undertaken in recent years have included Expanding Participation in Operating Reserve and Energy, Storage Design Projects, DER White Papers, the Demand Response Working Group, and more.

Efforts to unlock potential of existing resources vary and may require capital investments, market rule updates, design work, etc. There are a finite number of resources to upgrade and a need to prioritize which ones to focus on first. The goal is to give stakeholders transparency and certainty. The IESO proposes an approach to prioritizing and sequencing activities that will look at volume of capacity, timing of availability, and capability against forecasted system needs. While full market participation may be the aim for all resources, there may be opportunities to unlock potential from resources quickly as work is done on more comprehensive design, such as pilots and programs.

Resources such as generation and storage have been installed behind-the-meter on account of the Industrial Conservation Initiative (ICI) that could provide more value to the grid. The goals are to avoid stranding assets and to leverage investment.

## Comments

In advance of the meeting, Ms. Judy Dezell asked what is the potential impact of the Energy Efficiency Auction on forecasted system needs, or whether this question was premature? Secondly, she asked what is the future role of hydrogen. Ms. Sparkes said registration for the pilot Energy Efficiency Auction closed last week. There is potential for hydrogen resources to participate in the wholesale markets. This is currently being done at a Markham facility. There is potential to pair hydrogen with variable generation.

Mr. Passi asked how a priority list of available resources could be developed when embedded resources within an LDC are unknown. Ms. Sparkes replied that approximately 4,000 MW are under contract through procurement initiatives for which the IESO has visibility as a contract holder. The ICI DER survey has also provided some visibility on behind-the-meter DERs. IESO would gain additional visibility if these resources were enabled in the market

Mr. Bentz said Alectra Utilities is seeing increased interest in behind-the-meter services, primarily generation. Much of this has to do with the post-Covid pricing response and the need to reduce costs during a reduction in demand and energy response. The Alectra response is to do engineering studies to understand the upstream impacts of feeder loading, protection, and control. Studies are being coordinated with Hydro One to understand impacts on the transmission grid. All of this must line up with interconnection agreements on a timely basis. It is more than just ICI. It is resiliency, reliability, and load displacement. There is work to be done to enable these resources to integrate with the grid. For example, the Vault protection and control is a legacy system that is not coordinated with behind-the-meter resource microprocessors.

Mr. Passi noted that market efficiency is not efficiency unto itself. It is the total cost of electricity in Ontario, and the cost needs to come down. The market 10 to 15 years ago was \$10 billion and now it is \$23 billion. Perhaps the market is more efficient, but there is a lot of work to do. He said he looks forward to participating in the Strategic Measures Initiative.

Ms. Giannetta said California ISO, Ireland, and Germany do good work with variable renewable contributions, especially hybrids. She noted there have been many starts and stops within IESO engagements. For example, the Non-Emitting Resources Subcommittee Request for Information fell short, and the Expanding Participation in Operating Reserve and Energy consultation was shelved. There is a need for clear actions and upcoming engagement timelines. She asked how pilots, programs, and procurements integrate with resource adequacy consultation. There is a need for a schedule of objectives, inputs, and outputs pertaining to that consultation. Alignment of the various consultations is needed. Work being done in New York and California provides a good reference point. With respect to capital investment tool upgrades, she asked if the IESO is collaborating with the federal government plan for grid modernization. Ms. Sparkes said the relationship between the Enabling Resources Framework and resource adequacy comes down to working in lockstep, ensuring that existing resources are able to compete in the resource adequacy framework's acquisition mechanisms. The IESO has been engaged in discussions with the federal government regarding its

policy priorities in order to ensure that the government focuses on where and when resources are needed, avoiding stranded assets.

Ms. Giridhar said with respect to the role of hydrogen in the wholesale space, it would be good to do more studies like the one in Markham. A gas-electricity interconnection study would be helpful. Hybrid heating for end use is an exciting low-carbon initiative with good potential. It focuses on using surplus power for furnaces in place of natural gas at certain times of the day or year. Significant energy reduction is possible. Ms. Sparkes said hydrogen development would be considered within the IESO planning outlook.

Mr. Nicolas Bossé asked if the IESO is closely monitoring developments and discussions among system operators in the United States regarding FERC Order 2222 to avoid the pitfalls of integrating DER into the wholesale sector. Ms. Sparkes said the IESO is following closely. There have been discussions with FERC and individual system operators. In Alberta a DER roadmap is being developed. Last year's DER White Paper in Ontario outlined a phased approach to lowering threshold for direct participation, approaches to aggregation to unlock the value of existing assets, and how other jurisdictions are facing the challenges.

Mr. Paul Norris echoed Ms. Giannetta's suggestion that a resource enablement roadmap overlaid with resource adequacy framework timelines would be very helpful for stakeholders. The sooner there is clarity, the better. Timing considerations should contemplate investor confidence.

Mr. Hari Suthan said it would be great to learn from jurisdictions around the continent. Focusing on flexibility markets and lowering cost to consumers should be a priority.

Mr. Bruno Jesus asked what is the plan for locational market pricing. Ms. Sparkes said the IESO is taking a global adequacy perspective in addition to considering regional needs. If the federal government is going to deploy support for DERs or clean energy in support of its policies, the IESO would support these initiatives where and when they are needed, rather than taking a blanket approach to funding.

Ms. Annette Verschuren asked if Ontario stakeholders speak enough with regulatory agencies about where the industry is going, in light of how quickly the sector is changing. With respect to resiliency, there will be class action lawsuits launched against the electricity system in Texas. The issue of resiliency is going to become much bigger and the decentralization of resources much more important. Battery storage makes assets more efficient. Going forward, the curve on cost will have to change. Generation is terrific, but if it is not used more efficiently, Ontario will not be the leader it is capable of being.

### **Comments from Observers**

Mr. Jack Gibbons asked how much of the 992 MW acquired in the December Capacity Auction was supplied by fossil generation. Also, will the Capacity Auction allow U.S. coal-fired generation to participate as imports? Mr. Kula estimated that fossil generation likely supplied 100 MW to the Capacity Auction. Currently, the auction allows system-backed imports from Manitoba and Quebec and this may expand to the United States. However, coal-fired generation will not be allowed in.



## Agenda Item 5. Input: 2020 Stakeholder Survey Results

Ms. Candice Trickey said the stakeholder survey is completed every year by phone and online. Of the more than 350 stakeholders who participated in 2020, 81% reported that their experience with IESO engagement either met or exceeded their expectations. There was good support for changes made to the stakeholder engagement framework as well as how the framework has adapted to the pandemic.

Engaging stakeholders earlier and increasing transparency around decisions were given as areas for further improvement.

The engagement team is looking to utilize the SAC more and to collect earlier feedback from the SAC on the scope and areas of interest and to broaden the stakeholder audience. This morning's discussion on enabling resources is an indicator things are moving in the right direction.

The IESO will produce a new report to improve insight into the Annual Planning Outlook with respect to future needs and procurement. This will provide stakeholders with a longer view.

A new online tool called IESO Connects has been launched to enhance and strengthen regional engagement.

### Comments

Mr. Norris said in previous stakeholder surveys there was audience segmentation within the survey. He asked if the SAC could have access to this. Ms. Trickey said the results are segmented and can be provided.

Ms. Verschuren asked how digitization impacts the work of the engagement team. Ms. Trickey said digitization has expanded engagement and substantially increased the numbers of people in attendance. Indigenous community participation has particularly increased. The IESO Connects tool provides a two-way conversation online. In future there will be demand for both virtual and in-person meetings. The challenge will be to offer them simultaneously.

Mr. Butters said the importance of in-person gatherings, discussions, and information sharing cannot be underestimated. It will be important to maximize both in-person and digital engagements in the future.

Ms. Girvan asked if any surprises arose from the survey. Also, was the survey done differently this time? Ms. Trickey said the engagement framework is continually evolving and using the SAC more. Evolving transparency and decision-making is always a challenge. It requires engaging people earlier and more often, and being more forthcoming with respect to how input is used. With respect to surprises, there was very good support for work done on the innovation side. Also, participation from Indigenous communities was higher than expected.

Mr. Jordan Penic said engagement days are held monthly, presenting greater opportunities to provide transparency on what is coming next, and to gain feedback. In 2019, attendance was approximately 5,000 at 100 meetings. In 2020, attendance increased by approximately 40% within the same number of meetings. It speaks to the simplicity of attending meetings online.

## Agenda Item 6. Other Business

Ms. Verschuren said Mr. Young has made a tremendous impact on the IESO by listening, being empathetic, curious, and supporting women in the industry. She thanked him on behalf of the women.

Mr. Butters said he has questions about the uninsured liability issue and will reach out to Mr. Mike Lyle with these before the next stakeholder engagement on February 22.

Mr. Julian Ellison, Brookfield Renewables, asked what resource-backed capacity would be allowed into the Capacity Auction in the future. Mr. Young said the IESO is looking at the Capacity Auction as a significant vehicle for acquiring resources. It will expand beyond demand response as it evolves. Resource-backed imports are on the horizon.

## Agenda Item 7. Adjourn

Mr. Bentz thanked all for their participation. In parting, he said it has been a pleasure to be involved in the SAC. He said the IESO stakeholder process is about perspectives, not consensus, that drive better decisions. The process is extremely healthy. The meeting was adjourned.

Agenda Item 8. In-Camera Session (SAC members only)