Feedback Received and IESO Response

Bulk Study Updates (South and Central Ontario) – September 24, 2024

The IESO hosted a public webinar on September 24, 2024, to provide an update for the South and Central Bulk Study and Northern Ontario Bulk Study and introduce the Eastern Ontario Bulk Study. Following the webinar, the IESO invited stakeholders to provide feedback on the topics discussed during the webinar.

The IESO received written feedback submissions on the South and Central Bulk Study from:

- Energy Storage Canada
- TC Energy

Each presentation and recording of the webinar, and responses to feedback are available on the following engagement pages <u>South & Central Bulk Study</u>, <u>Eastern Ontario Bulk Study</u>, and Northern Ontario Bulk Study.

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders. The tables set out below respond to the feedback received and are organized by bulk study and then topic.



A) South and Central Bulk Study

Feedback / Common Themes	IESO Response
TC Energy shared support for the approach taken to complete the South and Central Bulk Study, specifically:	Thank you for expressing support for the approach and engagement undertaken for the South and Central Bulk Study.
The inclusion of the Bruce module and for the weighting scenarios that will be studied.	
The thorough engagement completed on the studies.	
Energy Storage Canada inquired about receiving additional information, specifically:	The IESO strives to make information available to enable meaningful feedback during the process and decisions to be made. The historical generation output and demand data can be found on the IESO's <u>Data Directory webpage</u> . The IESO is still in the process of assessing needs for the South and Central Bulk Study. Further detail on the timing and magnitude of needs will be shared at the appropriate stage in the study.
Historic hourly generation output by facility,	
 Historic hourly consumption by transformer station or sub-region, and 	
Transmission thermal capacity for normal and emergency circumstances.	

Energy Storage Canada shared that non-wire options do not appear to be considered, and they play important roles in meet growing demand, specifically:

 Non-Wires Alternatives can be a long-term alternative to traditional wires solutions, and they can be a transitionary investment to ensure the power system can meet reliability and service requirements. The South and Central Bulk Study objectives were refined through the Ministry of Energy and Electrification's Powering Ontario's Growth (POG) plan. The study will review the capability of the bulk transmission system to support key future generation connection, such as new nuclear at Bruce and the Darlington Small Modular Reactor Project. As such, a large portion of the study's scope is focused on enabling the connection of new generation through identifying the transmission reinforcements needed to deliver these new resources to growing load centres. Non-wires alternatives are not viewed as being within the scope of this broader study objective. Beyond the new nuclear facilities identified in POG, the study scope includes assessing the value of transmission reinforcements under a number of future resource build-out scenarios, as discussed during the webinar, as additional resources will be required to meet system needs in both the 2035 and 2050 cases being assessed. However, the ongoing IRRPs with linkages to the South and Central Bulk Plan (the Toronto, York Region and GTA West IRRPs) will assess the opportunities for NWA and the potential impact of NWA in meeting local needs can then be accounted for where needed through updated assumptions in the Bulk Study.

TC Energy shared that the Ontario Pumped Storage Project could provide important system synergies and help meet growing demand in Northern Ontario and Southern Ontario, including in Alliston.

Thank you for providing this feedback regarding further opportunities that could be unlocked through the South and Central Bulk Study.

Energy Storage Canada recommends the IESO create a Technical Working Group or advisory committee consisting of energy storage developers and industry associations to better understand the capabilities of non-emitting resources.

The IESO acknowledges the importance of nonemitting resources to meet the growing electricity demand. The IESO welcomes the opportunity to work with Energy Storage Canada as part of the public engagement process. As the work progresses, the IESO will continue to host opportunities to share more details, including additional webinars, and opportunities for feedback.

As part of the engagement process the IESO would welcome additional information around the capabilities of non-emitting resources. Additional information can be submitted through the public facing feedback forms as part of active engagements, or confidentially to engagement@ieso.ca.

Energy Storage Canada shared that the bulk study should enable projects identified through the Long Lead Time RFP. Through the <u>Annual Planning Outlook</u> (APO) the IESO identifies system needs of the next 20 years and provides insights into what will be required to prepare for a reliable, cost-effective and sustainable electricity future in Ontario. The APO outlines a set of planned actions to address Ontario's reliability needs, including bulk and resource needs.

The South and Central Bulk Study objectives were identified through IESO planning and refined through the Ministry of Energy and Electrification's Powering Ontario's Growth (POG) plan. Given current system needs, the study will review the capability of the bulk system to connect future generation, such as new nuclear at Bruce, supply demand growth in key areas throughout the province and determine transmission requirements to enable decreased reliance on emitting resources, such as Portlands Energy Center.

When assessing options for addressing the arising needs, including their cost effectiveness, the IESO will consider a number of future resource scenarios to inform how different portfolios of transmission investments would most cost-effectively enable the connection of the new resources required in 2035 and 2050, as discussed in the webinar.