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Formalizing the Bulk System Planning Process: Engagement Design Proposal and Transition from Process Development to Execution

Steve Norrie, Senior Transmission Planning Specialist



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Agenda

- Scope of today's discussion
- Feedback from previous engagements
- The IESO's proposed bulk system planning process
- What stakeholders can expect moving forward
- Discussion



Scope of Today's Discussion (Why are we Here?)

- Review the previous stakeholder feedback received
- Describe IESO's proposed planning process, including how stakeholders will be able to participate in the process
- Describe how the IESO is enabling better access to planning data and information
- Seek feedback on the proposed process and planning data



Feedback from Previous Engagements



Previous Engagements

- The IESO has been engaging with stakeholders through various forums on formalizing the Bulk System Planning Process since 2018
- Feedback that was received following each of these engagements was used to inform the development of the process high-level design that was presented in February, 2021
- Since 2018, the IESO has been incrementally improving the bulk planning process, based on the feedback received, and, as such, many aspects of the high level design have already been implemented



Process Features Informed through Engagement

- Consistent timelines and regular reporting intervals
- Communicating the IESO's planning priorities
- Integrates reporting on transmission system issues
- Clear and regular touch-points with stakeholders
- While respecting the IESO's mandate and expert role, enhanced sharing of planning assumptions and data and how decisions are made



The Bulk System Planning Process Final High-Level Design



Levels of Electricity Planning and Their Scope

IESO's Accountabilities

Bulk System Planning

- •Electricity transfers across the Province
- •Transfers across the interties
- System resource adequacy
- •Relieving congestion, eliminating inefficiencies, enabling the market where economic
- •Incorporation of large generation

Regional Planning

- Local deliverability
- Load security and restoration
- •Customer connection facilities; load supply stations
- •Energy efficiency and local generation resources

Distribution Planning

Local Distribution Companies

- Load supply stations
- •Distribution facilities (under 50 kV)
- Distribution connected generation, demand side resources/efficiency



Highlights of Bulk System Planning Enhancements

- Enhancing overall transparency through regular engagements, communicating our planning priorities (e.g., by publishing a Schedule of Planning Activities), and making more planning data available (see the recently completed West of London Plan)
- Developing an integrated plan that incorporates IESO transmission planning assessments into the APO process, while providing clarity around how generation vs. transmission decisions are made
- Outcomes that feed into resource acquisitions by informing the Annual Acquisition Report, etc.



Bulk System Planning – Engagement Touch-points



Triaging: Generation vs. Transmission

- The APO process will seek to comprehensively identify and define future resource adequacy and transmission system security issues
- Once all these issues are identified, they will bundled together, where possible based on factors like infrastructure common elements, timing, geography, drivers, etc. – this is to aid in determining what to do about each issue (or bundle)
 - If transmission is a solution contender, and there's time to carry out further integrated planning → Independent Bulk System Study
 - If transmission is not a contender, or if urgency precludes a Bulk System Study, and if a resource option could help \rightarrow Acquisitions



Stakeholder Access to Planning Information

- As part of the IESO's commitment to enhancing transparency of system plans, we are making more planning data and information available to better inform stakeholders about system issues and planning outcomes, and to support better participation through the provision of feedback
- Through current bulk planning studies (e.g., West of London), the IESO released detailed data on the forecasted load, interface flows and resource assumptions, to enable full understanding of the need and preparation for upcoming IESO resource acquisitions
- We are interested in your feedback on the scope and detail of planning data provided, using the West of London study as an example



The APO and Schedule of Planning Activities

- The APO will continue to be the reporting vehicle that will summarize the forecasted bulk system reliability issues over the next 20 years, for example, resource capacity/energy and transmission adequacy/security
 - It will discuss how the IESO plans to address each issue, either through an Individual Bulk System Study or Resource Adequacy Framework, and inform subsequent AARs
- System issues reported in the APO that require a Bulk System Study will be referenced in the Schedule of Planning Activities which will communicate the timelines for initiating bulk system studies (timeline will also be updated annually to account for changes)



Transitioning Into the Bulk System Planning Process

- The IESO will carry out the first Issues Identification process in 2022 which will introduce the transmission assessment
- Resource Adequacy studies will be done per the process established and reported in previous APOs
- The first Schedule of Planning Activities will communicate the timeline for addressing any issues that are best resolved through an Independent Bulk Planning Study
- We will engage as per the approach detailed in this presentation (subject to any feedback received)



What You Can Expect Moving Forward



Next Steps

- The IESO will close out the engagement on the Bulk System Planning "process" development, as we continue to operationalize planning in accord with the process
- As stated, carry out the first annual Issues Identification cycle in 2022, which will integrate transmission planning assessments that will be reported in the APO
- The scope of studies for 2022 will cover the IESO's regulatory compliance obligation to carry out a Comprehensive Area Transmission Review (per NPCC rules)



Discussion



Stakeholder Feedback

- Do the proposed stakeholder interaction touch-points throughout the bulk system planning process satisfy your need to be informed, and to participate by providing advice and/or feedback to the IESO?
- Do you have advice on how our proposal could make it clearer how generation vs. transmission triaging decisions will be done?
- Are there other ways that you would like to be engaged on bulk system issues and/or plans and activities intended to address them?
- Do you have specific feedback on the planning information and data released with the West of London bulk study report?



Stakeholder Feedback - continued

 Please use the feedback form found under the October 19, 2021 entry on the <u>Formalizing the Integrated Bulk System Planning Process</u> <u>webpage</u>

• Send written feedback to engagement@ieso.ca by November 9, 2021





<u>ieso.ca</u>

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca





Appendices



Process High-level Design

Data gathering happens continuously to maintain inputs to doing planning studies

<u>Issues Identification</u> comprises the annual assessments to identify potential resource and bulk transmission system issues

A <u>Schedule of Planning Activities</u> is the roadmap of anticipated Bulk System Studies

<u>Bulk System Studies</u> assess integrated solution options, done per a Schedule of Planning Activities updated each year

The <u>APO</u> will summarize all forecasted system issues, as well as needs determined through Bulk System Studies





Data Gathering – Providing Advice to the IESO

- Advice related to the bulk system can be submitted via the engagement channels established by the IESO (e.g., engagement days, regional networks, etc.)
- The scope of advice is not limited to any particular area or topic; advice particularly relevant for bulk system planning can include information about potential new loads or other changes that could impact the bulk system, and/or market trends, policies, sector evolutions, etc.
- The IESO will keep track of the advice received, and how it has been considered in the scope of bulk system planning



Issues Identification

- The IESO will engage early in the annual cycle on scoping considerations, our planning assumptions and methodologies
- Input specific to assessments aimed at understanding potential future system issues is especially relevant here – whether from a demand, resource, or transmission planning perspective
- Near the end of the cycle, we will report on the identified system issues via the Annual Planning Outlook, as well as publish a road map of future Individual Bulk System Studies to address issues – a "Schedule of Planning Activities"



Individual Bulk System Studies

- Each Bulk System Study is unique in scope, and will be guided by its own engagement plan (to be defined at the outset)
- Generally, the IESO will engage during Bulk Studies in three phases:
 - Early in the study to clarify the issues, and seek feedback on the engagement strategy
 - While alternatives are being developed for stakeholders to advise on the scope of solutions to be assessed and evaluation factors
 - Informing on the outcomes and recommendations
- This approach does <u>not</u> preclude additional engagements

