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Transmitter Selection Framework
Focused Engagement Session #4

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Purpose

- This session will discuss opportunities to participate in the development of IESO transmission plans, including opportunities to shape the scope of plans, get informed about the needs to be addressed, and provide input regarding potential solution alternatives
- This session will also review the feedback received from previous focused engagement sessions, including for transmission planning and the competitive project eligibility considerations

Agenda

1. Summary of Focused Engagement Feedback
2. Recap: Competitive Eligibility Considerations
3. Transmission Planning Engagement Roadmap
4. Description of Technical Information to Inform Transmitter Selection Framework (TSF) Proposals
5. Next Steps and Conclusion

Summary of Focused Engagement Feedback

Feedback on Transmission Planning (FES#2)

- Stakeholders advocated for better targeted engagement to capture diverse perspectives during transmission planning and transmitter selection
- Stakeholders emphasized the importance of transparent communication on system needs, study scope changes, and alternatives evaluation
- Identify opportunities for stakeholders to provide input and alternative solution(s)
- Clarity around bulk study timelines for effective planning and coordination

Indigenous Community Feedback (1)

- Indigenous participation should be guided by agreed-upon principles to achieve meaningful involvement in TSF-eligible projects. The design should take a multi-pronged approach with clear overarching requirements established upfront, allowing for procurement-specific components to be developed
- Acknowledgment that Indigenous communities cannot firmly endorse or commit to a participation model or approach in the absence of project-specific information/details
- Conflicts or differing perspectives between First Nations and/or rights-bearing communities should be addressed by the communities themselves, rather than by non-Indigenous project proponents, the IESO or other bodies

Indigenous Community Feedback (2)

- Proponents must understand local treaties, including Indigenous rights and their history, and demonstrate their capability and experience in engaging and working with Indigenous communities
- Indigenous communities expect early and direct engagement when affected by a transmission plan or project. Their input should be obtained before finalizing a transmission plan or starting procurement
- Barriers to Indigenous communities' economic participation within projects need to be assessed and overcome
- Other participation mechanisms or approaches (i.e., in addition to equity) should also be encouraged within the TSF design

Recap: Competitive Eligibility Considerations

Feedback on TSF Project Eligibility (FES #2)

- The IESO received general support for the proposed project eligibility considerations
- Questions were raised about the rationale for excluding projects below 200 kV
- One submission indicated a preference for a higher minimum project cost threshold to account for the administrative costs of participating in a TSF
- Some transmitters requested clarity on what constitutes an urgent or reliability-driven project that would not be considered eligible

Project Eligibility Recommendations Recap

- No current in-flight projects will be subject to TSF
- In the future, transmission projects recommended through IESO plans will be expected to satisfy the eligibility considerations to be deemed suitable for a TSF; every transmission project has unique attributes that could also impact suitability for a TSF
- As experience is gained running the process, project eligibility could be expanded

TSF Proposed Eligibility	Potential Future TSF Eligibility
• New Facilities • Benefit all electricity ratepayers • Estimated cost of $100M or greater • Nominal voltage of 200 kV or greater • Sufficient lead-time (at least 6 years)	• Line expansions • Customer connection facilities • Smaller projects (combined as a portfolio) • Voltages below 200 kV

Transmission Planning Engagement Roadmap

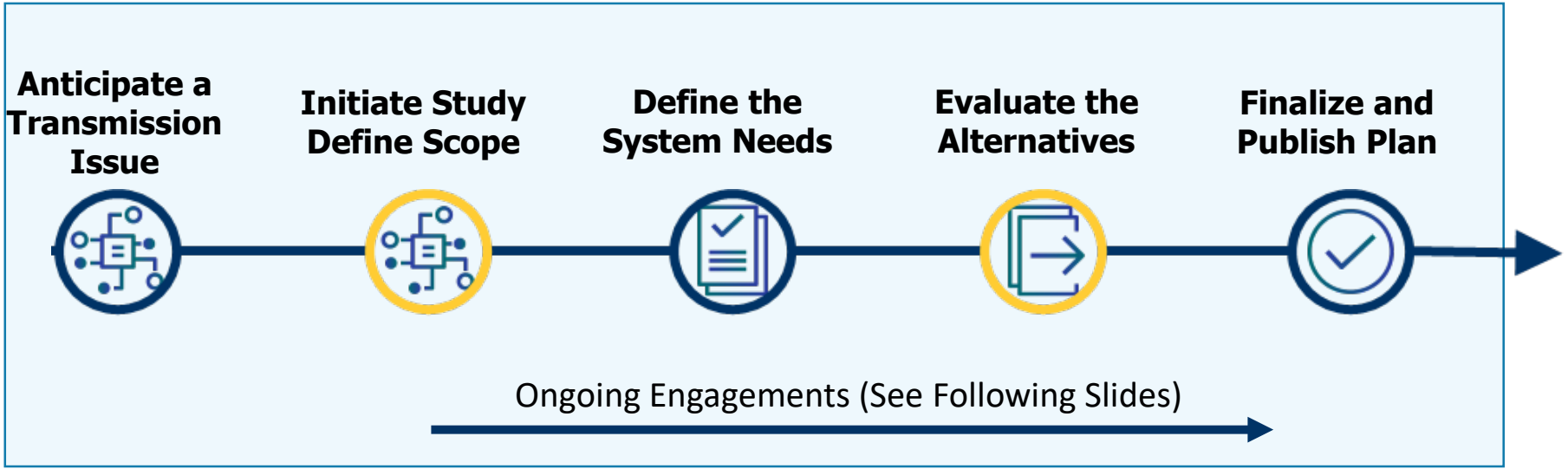
Recap: Transmission Planning

- Focused Engagement Session #2 provided a detailed walkthrough of the bulk planning study process
  - While the focus has been on bulk system plans, the IESO also conducts regional planning to address transmission supply to local areas. If TSF-eligible projects are being considered in a regional plan, the IESO will ensure this information is provided through a bulk planning forum
  - Each year, the IESO's Annual Planning Outlook (APO) summarizes transmission needs requiring system plans
  - The APO includes a Schedule of Planning Activities that provides a snapshot status and outlook for bulk planning studies and relevant regional plans

Recap: Transmission Planning Drivers

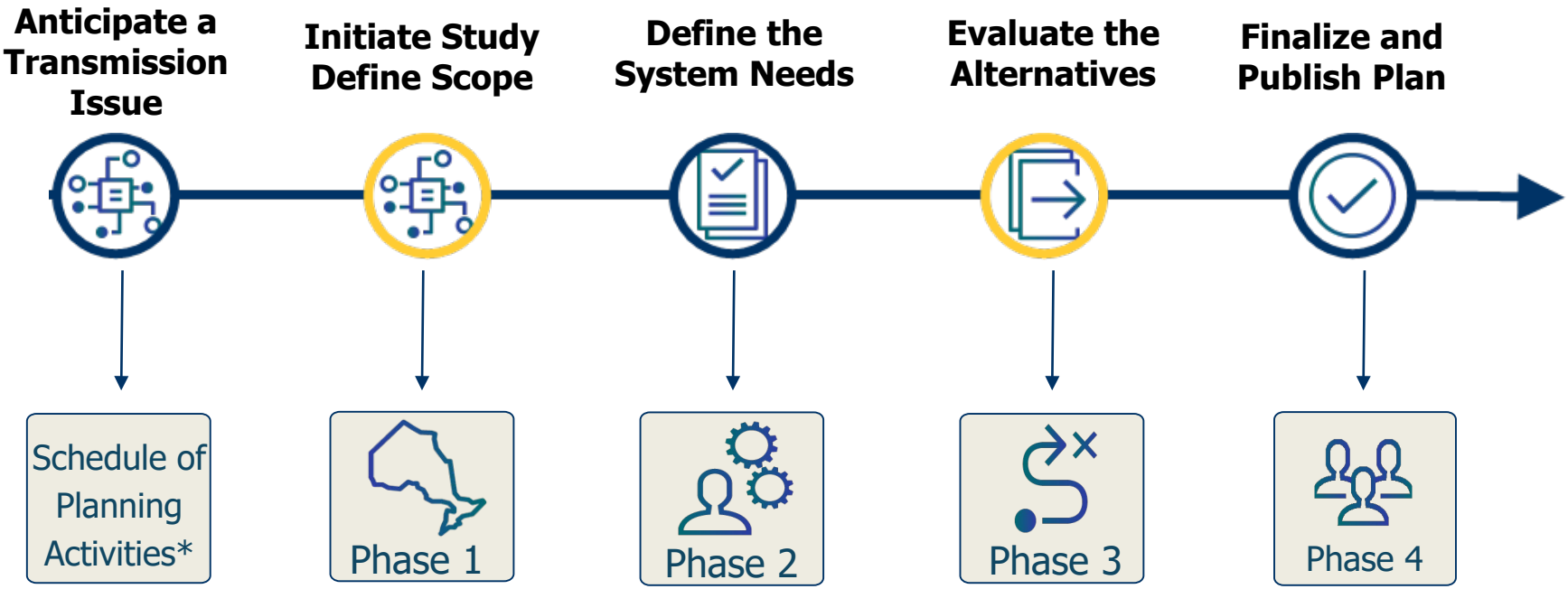
- Various drivers can necessitate system planning including:
  - Reliability needs (e.g., reliability criteria or standards violations)
  - Customer connections (e.g., industrial customers)
  - Generation interconnections (e.g., new renewable resources, nuclear)
  - Other policy-drivers (e.g., enabling grid decarbonization)
- These drivers influence the potential solutions. For example, a reliability criteria violation could be addressed by either transmission or generation sited in a specific location. In contrast, policy-driven transmission needs (such as interconnecting specific generation resources) may be limited to transmission alternatives

Bulk Study Planning Process Milestones



These milestones also apply for regional plans that address local supply issues

Bulk Planning Engagements



**published in the Annual Planning Outlook*

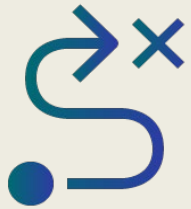
Roadmap: Engagement Throughout a Bulk Study

Phase 1: Scope

- Build awareness with communities and stakeholders that a plan is underway
- Collect input vital for the plan

Phase 2: Needs

- Inform and gather feedback on needs to be addressed by the plan
- Present preliminary solution(s)



Phase 3: Alternatives

- Inform and receive feedback on the plan alternatives
- Evaluate Alternatives
- Prepare Draft Recommend Solution

Phase 4: The Plan

- Inform and receive feedback on the evaluation results
- Publish the Plan
- Competitive-eligible projects to TSF

Engagement Roadmap Phase 1: Study Scope

Phase 1

- Build awareness with communities and stakeholders
- Collect input for the plan

- Raise awareness about the commencement of the study, including outreach to potentially impacted Indigenous communities
- Gather input on key developments, projects, initiatives, market trends, and other relevant factors
- Incorporate the provided input to inform forecasts and develop the necessary technical models for the studies
- Release the study scope along with a detailed engagement plan, including timelines

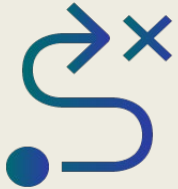
Engagement Roadmap Phase 2: Needs

Phase 2

- Inform and gather feedback on needs to be addressed by the plan
- Present preliminary solution(s)

- Provide comprehensive details about the system needs that the plan aims to address
- Present any available preliminary solution(s) options - providing early indication for projects that may be deemed suitable for a TSF
- Offer an opportunity for external parties to submit their alternative solutions
- Continue with planned engagements involving Indigenous communities, stakeholders, and transmission developers

Engagement Roadmap Phase 3: Alternatives



Phase 3

- Inform and receive feedback on the plan alternatives
- Evaluate Alternatives
- Prepare Draft Recommend Solution

- Collect input and feedback from Indigenous communities and stakeholders on the suite of alternative solutions
- Identify and highlight alternatives that may qualify for TSF competitive procurement
- Conduct a thorough analysis and evaluation of the submitted alternative solutions
- Develop and prepare the draft recommended solution based on the analysis and evaluation

Engagement Roadmap Phase 4: The Plan

Phase 4

- Inform and receive feedback on the evaluation results
- Publish the Plan
- Highlight eligible projects for TSF

- Share the outcomes of the evaluation and draft recommendations to gather feedback
- Publish the final bulk study report, detailing system needs, alternatives, solutions, technical and economic assumptions, and demand forecast data
- Highlight projects eligible for TSF competitive procurement
- Use the highlighted TSF-eligible transmission projects to inform and guide subsequent engagements focused on TSF opportunities

Engagement Roadmap – Transition to TSF Procurement

Post Bulk Study

- Hand-off to TSF Procurement
- Initiate TSF Procurement Engagements
- RFP public design and development sessions

- Projects eligible for competitive procurement, as recommended in IESO system plans, will transition to a TSF procurement process
- Create procurement plans and strategies for projects eligible for competitive procurement
- TSF Procurement Engagement roadmap:
  - Announce the timeline and key milestones to Indigenous communities and stakeholders
  - Conduct a public design and engagement process allowing Indigenous communities and stakeholders to provide input and feedback, similar to the current process for IESO's supply procurements
  - Hold focused engagement sessions with Indigenous communities, qualified transmitters, and stakeholders

Additional Channels for TSF Procurement Opportunities

- The APO will publish a list and status of transmission facilities recommended by the IESO, highlighting projects that may be eligible for competitive procurement
- Quarterly planning updates will offer a snapshot of current and future studies for both bulk and regional planning
- The IESO is considering providing bi-annual TSF updates during the quarterly updates. These updates will include TSF-specific information, such as details on potential facilities in advanced stages of plan evaluation, projects recommended for development, and the status of projects already under development

Description of Technical Information to Inform Transmitter Selection Framework Proposals

Planning Details for Transmission Solutions

- IESO transmission recommendations are documented in planning reports and products that are publicly available
- Project details published in a plan may be tailored to a wider public audience, and plans do not contain security sensitive information or data
- To align with a future TSF, the IESO will consider the requisite levels of technical, functional, and/or performance related detail pertaining to transmission recommendations sufficient for qualified developers to develop competitive bid packages

Sample Technical Detail for a Transmission Facility

Attributes	
Description of facilities	• Proposed form and function of the facilities to be the subject of the TSF
Location	• Interconnection points on the existing grid, corridor and/or route considerations or constraints (if known)
Length	• If known, an estimate of the linear distance between interconnection points
Voltage Class (kV)	• Nominal operating voltage and design voltage (if different)
Line ratings (A or MVA)	• Continuous and limited-time ratings
Design features or constraints	• E.g. Single or double circuit, tower type, etc.

Additional Technical Attributes

- A competitive procurement may identify additional attributes in a project proposal, including:
  - Functional or performance-related parameters: outage rates, losses
  - Community considerations: facility design, right-of-way/land use
  - Resilience considerations: ability to withstand extreme weather shocks, etc.
- The IESO is seeking stakeholder feedback around any additional technical attributes that should be considered within a project proposal

Technical Evaluation Consideration

Degrees of specification varies depending on the need, contract type, requirements, etc. The details below present an illustrative sample

Evaluation Attribute	Examples
Engineering Design	• Description of facilities, design considerations • Functional and/or technical specifications • Interconnection points, route development, land rights (right-of-way), and access plan (e.g., routing approach, alternatives, and siting) • Description of innovative or unique approach

The IESO is seeking developer input on other technical evaluation considerations used in other jurisdictions that should be considered within project evaluation for TSF

Next Steps and Conclusion

Questions

Your feedback is important. The IESO is hoping to understand:

1. Your feedback on the IESO's transmission planning engagement roadmap, for example, the opportunities to be informed or to participate in the development of transmission plans
2. How the IESO can better enable developers/transmitters to interact with the IESO to propose solution ideas for consideration in the development of transmission plans
3. From the developer perspective, the right level of specification for transmission design, function, or performance that worked well in other jurisdictions
4. The amount of lead-time that transmission developers and Indigenous communities will require to mobilize resources to prepare for a transmitter selection; are the proposed bi-annual TSF updates (coupled with the quarterly planning updates) sufficient?
5. If the Indigenous Energy Support Program can be a useful mechanism for helping address capacity barriers to Indigenous community participation in IESO transmission plans; are additional supports needed?

Next Steps

- A Feedback Form will be made available on the **TSF Engagement Page**. IESO is requesting feedback by **July 5, 2024**
- All written feedback should be submitted to **engagement@ieso.ca**
- Bulk Planning Studies Engagement Session (South and Central & Northern Ontario) - **June 19, 2024 - 1PM**
- Focused Engagement Session #5 – Close-out engagement session centered around initial TSF Design Considerations that will be addressed in IESO's report back to MOE. The session will focus on Commercial Considerations, Indigenous Participation and provide an engagement feedback summary – **planned for Mid-July**
- We will remain flexible on receiving input throughout TSF engagement process – contact us if you are interested in setting up a 1:1 meetings directly with the IESO to discuss any of the topics explored today, or other topics relevant to the TSF

Thank You

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