

## OEB Regional Planning Process Review Consultation

Regional Planning Process Advisory Group (RPPAG) – Meeting #2

EB-2020-0176

March 19, 2021



## Agenda

- Welcome and Meeting Overview
- Agenda Review
- Clarify Scope of the RPPAG
- Clarify Difference in Scope between IRRP and RIP products and Optimize timelines
- Better Address End-of-Life (EOL) Asset Replacement
- Next Steps and Action Items



## Scope of the RPPAG

- Previous RPPAG also requested clarity on scope as it was then limited to the RIP process and they wanted to also address IRRP issues (non-wires solution development, stakeholder engagement)
- OEB agreed RPPAG scope should be broadened to include aspects of IRRP but not to extent requested, as RPPAG recommendations need to be limited to where the OEB has legislative authority to make changes
- OEB indicated provisions in IESO licence involving the IRRP serve as a useful guide as the OEB can amend a licence
  - Does not include 'how' IESO should carry out IRRP



## Scope of the RPPAG (cont'd)

- RRPAG's mandate was broadened to include the ability to review efficacy of IRRP reports:
  - IESO licence defines what IRRP reports must include and they have a direct impact on the efficacy of the RIP process
  - Assess whether appropriate level of detail is provided in relation to both 'non-wires' and 'wires' options
- OEB response also encouraged IESO to bring out-ofscope IRRP related matters to the RPPAG to get informal feedback given knowledge of the RPPAG and broad set of stakeholders as members



# Clarify difference in Scope between IRRP and RIP products & Optimize Timelines

- An IRRP is conducted by the IESO to determine the appropriate mix of solutions (CDM, DERs, wires) to address regional needs
- A RIP is then developed by the Transmitter to further assess the 'wires' options to support applications to the OEB
- The OEB currently allows 18 months for an IRRP and 6 months for a RIP (i.e., 24 months in total)
- IESO noted there is currently duplication of work on 'wires' options by IESO in IRRP and Transmitter in RIP
- IESO recommended 'wires' related work in the IRRP (including load forecast) should not be revisited during the RIP process (unless a significant change occurs)



## **IESO Final Report**

- "Each stage and its deliverable in the regional planning process should offer incremental value" and RIP should focus on advancing wires recommendations of IRRP without replicating work; i.e., wires recommendations made in IRRP should be developed in further detail – not reassessed
- "[PPWG Report] should be updated to clarify process steps including better defining hand-off points, establishing mechanisms for formal agreement from Technical Working Group members, and further describing extent of wires planning in IRRP vs. RIP"
- "In IRRPs, wires options must be evaluated to permit adequate comparison between all potential options"

\*PPWG - Process Planning Working Group



## Existing PPWG Report

- PPWG Report that sets out the current regional planning process identifies three scenarios to implement a RIP process
  - 1. Directly from Scoping Assessment (if no potential for 'non-wire' solutions in region)
  - 2. Before the IRRP process is fully completed but sufficient analysis to determine where a 'wires' option is the most appropriate approach
  - 3. Upon completion of the IRRP process (i.e., issuance of final report)
- In practice, since the PPWG Report was issued, all Scoping Assessments have resulted in an IRRP process where regional planning is required (i.e., never directly to a RIP)



## Differences – IRRP vs. RIP

- IRRPs address both the near- to medium-term (10 years) and long term (20 years)
- RIPs focus more on the near- to medium-term (10 years) in more detail
- RIPs make adjustments to assumptions in IRRP (e.g., load forecasts) where changes are significant
  - According to Hydro One, load forecast changes have been relatively rare
- RIPs address <u>all</u> wires needs in a region including those in Local Plans (while IRRPs do not)
- RIPs are required to support all Transmitter / LDC applications submitted to the OEB (while IRRPs are not)

## Existing PPWG Report – RIP

- "Once it has been determined that a wires approach is needed, the transmitter, in collaboration with distributors and the [IESO], may conduct further planning and analysis to confirm the needs and to identify the potential regional transmission and distribution options that will satisfy each of the needs in the region or its sub-regions."
- The transmitter may request from the participants:
  - Further detailed information related to load forecasts, generation changes (new & retirements), and CDM program changes that may impact the reliability needs in the region.
  - Other information such as equipment ratings and municipal planning information that may be germane to the analysis.
- "If some or all of this information was made available in the IRRP process, the transmitter will work with the [IESO] for the exchange of this data."



## Questions for RPPAG

- 1. Does the RPPAG agree "establishing mechanisms for formal agreement from Technical Working Group members" to increase accountability makes sense and the issue to focus on is to avoid duplication that IESO suggests is now occurring by "further describing the extent of wires planning in the IRRP versus the RIP"?
- 2. Are wires options being evaluated in the IRRP process to the extent that permits an adequate comparison between all potential options (as the PPWG envisioned) or is the evaluation currently going beyond that?
- 3. Can evidence be provided that demonstrates unnecessary duplication of work is occurring in the RIP process?
- 4. With the RIP process (including completing a RIP Report) limited to 6 months, how much efficiency can be gained within the RIP process?
- 5. Is it necessary to always await the issuance of the Final IRRP Report before the RIP process is implemented (as per the status quo)?
  - Or is it possible for the PPWG's second scenario to become the default (or leveraged more) with the RIP process initiated before the final IRRP Report is formally issued to increase process efficiency?



# Better address end-of-life (EOL) asset replacement in regional planning process

- Incorporate a process where transmission asset owners or TAOs (Transmitters & specific LDCs) develop a *long list* of the expected service life (ESL) of major high voltage (HV) assets (for *long term* planning)
  - Provided annually to IESO
  - Transformers, circuit breakers, transmission lines, etc.
- Include a short list of end-of-life (EOL) transmission assets as an input to the regional planning process to address near term needs
- Purpose of the new ESL information process is to provide a longer lead time to study opportunities for non like-for-like replacements in the regional planning process
  - Non like-for-like could be a wires and/or non-wire alternative

# Better address EOL asset replacement in regional planning process (cont'd)

### IESO diagram setting out process

#### Long List

Transmission Asset Owner Information



#### Filtering Process:

- Conducted by transmission asset owners
- Considers factors, such as equipment condition, failure history, operating stress, magnitude (i.e., km of line) and obsolescence

#### Short List

- Formal endof-life need
- 10-year outlook



## Summary of Discussion – First Meeting

- Members did not raise any concerns with the IESO's recommendation to formalize the TAOs providing the short list related to EOL assets based on a 10-year outlook to the IESO
- Further discussion is needed related to the long list
  - Whether requiring the TAOs to provide ESL information over a 20-year timeframe is needed or is the 10-year outlook sufficient to plan for alternative solutions such as non-wire options
  - Would the benefits related to providing ESL information over 20 years be worth the costs it would impose on TAOs (and ultimately ratepayers)?
  - If 20-year ESL information is collected, should the scope of HV assets include circuit breakers?
  - A pilot project was suggested to test it. How would a pilot project work to determine if beneficial within the context of a 20-year outlook?

## Next Steps and Action Items

- Continue discussion related to better addressing EOL asset replacements (if necessary)
- Discuss next issues on RPPAG prioritized list
  - Better consideration of Cost Responsibility in the regional planning process
  - Streamline & Standardize Load Forecast development
- Schedule next RPPAG meeting for week of April 19



### Appendix: End of Life & Expected Service Life

- End of Life (EOL): Represents the state of having a high likelihood of failure, or loss of an asset's ability to provide the intended functionality, where the failure or loss of functionality would cause unacceptable consequences. EOL is determined by the TAO's risk-based assessments, taking into account factors such as reliability, loss of load, environmental considerations, and safety.
- Expected Service Life (ESL): A general guideline to inform TAO investment decisions. Defined as the average duration in years that an asset can be expected to operate under normal system conditions and is determined by considering factors such as manufacturer guidelines, and historical asset performance, failure and retirement data.



### Questions / Comments?



