

On August 7, 2013 stakeholders were asked to provide feedback on the Interim Process Redesign Proposal (including suggestions for pre-approval criteria), the modified compensation mechanisms for the Final Process Redesign Proposal, and suggestions for software capabilities in a new software solution. Feedback was received from the following stakeholders:

- Ontario Power Generation
- Pattern Energy
- Portlands Energy Centre

The tables on the following pages summarize the member feedback received including IESO responses and actions that will be taken. The feedback is grouped into the four themes that members were asked to provide feedback on:

- Interim Process Redesign;
- Criteria for Pre-Approval;
- Final Process Redesign; and
- Suggested Software Capabilities

The tables summarizing feedback on Criteria for Pre-Approval and Suggested Software Capabilities also include member feedback since SE-109 consultations began in April 2013. To date feedback on these two topics has been received from the following stakeholders:

- | | |
|-------------------------------------|----------------------------|
| • Brookfield Renewable Energy | • Hydro One |
| • Bruce Power | • Ontario Power Generation |
| • Enbridge Renewable Energy | • Pattern Energy |
| • Gerdau | • Portlands Energy Centre |
| • Goreway Station Partnership | • Powerstream |
| • Great Lakes Power Transmission LP | • TransCanada |

TABLE 1 - INTERIM PROCESS REDESIGN

Stakeholder Feedback	IESO Response	IESO Action
<p>Manual tracking of outages that require a request for final approval (those with 3-day advance approval) against those that do not (those with pre-approval) may create confusion and lead to compliance issues.</p>	<p>The IESO acknowledges this concern and agrees that in the absence of automated controls, the process may be confusing and result in a breach of compliance. There is also a risk that in the absence of a request for final approval, the IESO allows an outage with pre-approval to proceed when it shouldn't have (i.e. an unforeseen outage or system event suddenly creates a conflict with the pre-approval).</p>	<p>The IESO proposes removing the feature for pre-approved outages not requesting final approval for the time being. This feature will be re-evaluated within the Final Process Redesign once the capabilities of a new software solution are fully understood. However the IESO may establish mutually agreeable trials with some market participants during the Interim Process to identify potential risks and opportunities of not requesting final approval.</p>
<p>Manual validation of criteria for outages eligible for pre-approval may not provide participants with sufficient outage certainty under the proposed submission and approval deadline times (23:59 EST for both) for pre-approved outages. It is recommended that the existing submission deadline time of 10:00 EST and approval deadline of time 14:00 EST be retained for pre-approvals until a software solution capable of auto-validation is made available.</p>	<p>The IESO agrees that under a manual validation process the advance approval deadline time of 23:59 EST for pre-approvals may not provide participants with the sufficient certainty, and that a rejection made after normal business hours would not give participants enough time to mitigate the impact of a rejection. The IESO has no concerns with retaining the submission deadline time of 23:59 EST on the second business day prior to the outage start date. However in the interests of simplifying obligations, a consistent time is desirable for all submission and approval deadlines.</p>	<p>The IESO proposes changing all advance approval & deadline times within the interim process to better reflect the end of normal business hours, from 23:59 EST to 16:00 EST.</p>
<p>The submission deadlines for 3-day advance approval may not provide the scheduling flexibility required for the testing of commissioning facilities. Conversely, commissioning tests may not be able to meet the criteria for pre-approvals if they cannot be deemed low impact or require minimal IESO assessment effort. Unless commissioning tests can be included in the criteria for</p>	<p>The IESO does not support an exception process for commissioning tests. Testing of commissioning generators can have a significant impact on reliability and requires a more thorough assessment.</p>	<p>The IESO will include certain types of generator commissioning tests in its proposed criteria for pre-approvals provided that the commissioning facility has an approved new-facility-notification. All other types of commissioning tests will be subject to the submission deadline of 5 business days prior to the start date of the test.</p>

Stakeholder Feedback	IESO Response	IESO Action
pre-approval, it is recommended the IESO allow an exception to the 3-day advance approval submission deadline for commissioning tests in order to provide adequate scheduling flexibility.		

TABLE 2 - CRITERIA FOR PRE-APPROVALS

Note – IESO responses and actions are based on the proposal to remove the ability of not requesting final approval for pre-approved outages (see IESO Action in the first item of Table 1 – Interim Process Redesign for details). Removal of this feature allows for greater flexibility in the criteria for pre-approvals.

Stakeholder Feedback	IESO Response	IESO Action
Renewable generation (wind & solar) de-ratings between forecasted output and rated capacity, regardless of recall time.	The IESO agrees that any planned de-rate to a level greater than that of the forecast could be eligible for pre-approval, provided that the resource’s energy cannot be shifted from one hour to another (i.e. wind, solar and run-of-the-river hydro).	The IESO will include these de-ratings in its proposed criteria for pre-approvals, provided that the de-rating is limited in duration as forecast accuracy diminishes with time.
Generator outages, de-rates or tests affecting mega-watt (MW) or mega-var (MVAR) capacity with a recall time ≤ 30 minutes.	The IESO agrees that MW & MVAR capacity related outages with a short recall time are suitable candidates for pre-approval.	The IESO will include these requests in its proposed criteria for pre-approvals provided that the recall time is ≤ 15 minutes.
Power system auxiliary outages that only result in a loss of redundancy (LOR), regardless of recall time.	The IESO agrees that most auxiliary LOR outages are typically low impact and require minimal assessment effort if the loss of the redundant auxiliary poses no additional risk to the system. For example, if a redundant line or generator protection fails while the companion protection is out-of-service, the facility must be promptly removed from service. From a system re-preparation perspective, this is no different than the line or generator being relayed from service due to a fault. However if a redundant DC	The IESO will include two categories of auxiliary LOR outages in its proposed criteria for pre-approval: <ol style="list-style-type: none"> 1. Any auxiliary LOR with a recall time ≤ 15 minutes 2. Any auxiliary LOR with a recall of > 15 minutes provided that the loss of the companion auxiliary would only result in a single element failure.

Stakeholder Feedback	IESO Response	IESO Action
	system fails while its companion system is out-of-service, impact to the system is much greater as this may result in a loss of protection and control of multiple facilities, making re-preparation of the system very complex and beyond scope of coverage.	
Load distribution, wholesale customer and dispatchable load transformers	The IESO agrees that most of this equipment would be eligible for pre-approval, however exceptions may be required as some of these facilities have an adverse impact on system reliability.	The IESO will include these outages in its proposed criteria for pre-approval along with any exceptions in future SE-109 discussions.
Reportable ¹ load distribution & wholesale customer equipment operated below 50 kV (breakers, switches, capacitors) ¹ outlined in Appendix B of Market Manual 7.3	The IESO agrees that most of this equipment would be eligible for pre-approval criteria, with the exception of low voltage capacitors. Many security operating limits, auto-switching schemes and voltage sensitive areas are dependent on low voltage capacitors and require thorough assessment. There may also be exceptions to other low voltage equipment as some of these facilities have an adverse impact on system reliability.	The IESO will include these outages in its proposed criteria for pre-approval along with any exceptions in future SE-109 discussions. Future inclusion of low voltage capacitors will be re-evaluated under a Final Process Redesign supported by a new software solution.
115 kV radial transmission lines. Single transmission system breakers in non-NPCC impactful areas.	At this time, the IESO cannot support inclusion of any transmission system elements operated at 115 kV or above (other than load-serving transformers) as the criteria are too broad (some radial line and most single breaker outages change system conditions such that a detailed assessment is required). Narrowing the criteria to specific facilities is not feasible under the Interim Process due to the level of manual tracking that would be required.	The IESO will not include these outages in its proposed criteria for pre-approval under the Interim Process; however will re-evaluate the suggestions under the Final Process Redesign that will be supported by a new software solution.

TABLE 3 - FINAL PROCESS REDESIGN

Stakeholder Feedback	IESO Response	IESO Action
At Risk declarations received after the mid-term assessment period may be confused with the existing At Risk declarations used by the 18 Month Outlook process.	The IESO agrees that this may cause confusion.	The IESO will consider changes to how At Risk declarations are used between the mid-term and 18 Month Outlook processes. This will be discussed at a future SE-109 meeting.

TABLE 4 - SUGGESTED SOFTWARE CAPABILITIES

Stakeholder Feedback	IESO Response	IESO Action
Make outage purpose and outage IDs for publicly disclosed outages visible to all participants.	The IESO thanks members for their feedback and supports inclusion of capabilities that contribute to the objectives of this process redesign initiative, namely: Minimizing reliability risks to the power system; and Improving process efficiencies between the IESO and market participants.	The IESO will assess all of the feedback received on this topic against the objectives of this redesign initiative and report on which capabilities that will be considered for the software solution design.
Automated Assessment Notifications (At Risk, Advance Approval, Rejection etc.).		
Critical element identification (if applicable to the participant).		
Automated validation of submission deadlines with accompanying error messages.		
Automated differentiation between regular and pre-approved outages.		
Advance Approval identification for multiple timeframes (mid-term vs. near-term).		
Compensation eligibility flags.		
Configurable outage submission templates.		
Easier access to online outage submission forms.		

Stakeholder Feedback	IESO Response	IESO Action
Outage notification capabilities between market participants and internal stakeholders.		
Configurable login durations (to avoid timeouts following inactivity).		
Import/export capabilities of outage request information to/from common technologies (i.e. Microsoft Word/Excel).		
Expansion of reporting to include generator outages by area in addition to fuel type.		
Configurable summary displays.		
Configurable filtering and searching capabilities.		
Flexible audit capabilities.		
Login driven contact information.		
Flexibility in modifying planned start and end times for multiple pieces of equipment in an outage request (individually or by group).		
Standardized equipment IDs among multiple databases.		
Retain existing Application Programming Interface (API) functionality for market participants using their own software to communicate outages to the IESO.		