

Stakeholders were asked to provide feedback on the following materials presented at the April 23, 2014 meeting:

- The proposed methodology for the capacity assessment in the quarterly process.
- The proposed capabilities available for use in the new outage management software.
- The proposed outage request state control framework in the new outage management software.
- Operation under the Interim Process to date, including recommendations for change with respect to the 3-Day and 1-Day advance approval processes.

Further consultation is required on a number of items as noted throughout this response (and summarized at the end of this document). An update on these items will be provided at the next stakeholder meeting.

Feedback was received from the following stakeholders:

- Ontario Power Generation
- Portlands Energy Centre

The following pages provide stakeholder feedback in verbatim. The feedback is grouped by the questions that stakeholders were asked to provide feedback on and IESO responses and actions that will be taken are provided in italics beneath each piece of feedback.

### **1. Feedback on the proposed Quarterly Advance Approval Process Capacity Assessment Methodology (slides 16 to 20) with respect to:**

- a) Removing 'At Risk' notifications from the 18 Month Outlook process (currently issued for outages starting between 2 and 9 months in advance) since the new Quarterly Advance Approval process will provide this service for outages starting 3 to 9 months in advance.**

#### **Ontario Power Generation**

OPG has no concerns with removing the "At Risk" notifications from the 18 month process provided appropriate reserve margin forecasts are available to support outage planning. In the IESO's material presented on April 23 the following statement was included on slide 3:

"Security & Adequacy Report issued at the start of the report period – used to make scheduling decisions for the upcoming Weekly AA Process or the next Quarterly AA Process"

Is the IESO's intent to publish a Weekly SAA to cover the entire quarterly approval coverage period i.e. 6 months? If so issuing the report at the start of the report period i.e. one month prior to the coverage period is insufficient to support outage planning. In OPG's opinion this report would need to be published a minimum of one quarter prior to the start of the assessment period to facilitate participant outage planning.

*The IESO intends to publish one report on a quarterly basis by the end of each quarterly assessment period that covers the corresponding 6 month coverage period (i.e. the results of the assessment period). Any reports published ahead of the conclusion of the quarterly assessment period would not capture the outcomes of the assessment period itself (e.g. conflict management and repositioning of outages) and therefore provide information already available in previous 18 month outlook reports. The IESO's expectation is that previous 18 Month Outlook reports would continue to be used to support outage planning beyond what the quarterly process offers. **The IESO will however consult with OPG ahead of the next SE-109 meeting to further understand the need and discuss those findings at the next SE-109 meeting.***

### **Portlands Energy Centre**

Okay.

- b) Using the 18 Month Outlook methodology (assuming 0 MW for future installations, i.e. neither a firm nor planned scenario) to assess surplus/shortfall capacity under normal weather conditions and provide Advance Approval in the Quarterly process.**

### **Ontario Power Generation**

The IESO has proposed using a methodology to determine "available resources" that is not consistent with the 18 Month methodology ("assuming 0 MW for future installations, i.e. neither a firm nor planned scenario") for use in the quarterly approval process. OPG's opinion is that this is likely to result in a reserve margin that is more restrictive than that used in the current approval process. Planning outages based on the 18 month outlook solely may give participants a false sense of certainty with respect to their outage positioning.

*Although a more restrictive reserve margin is being proposed for the quarterly approval process, by not including future installations as available capacity in the quarterly process, this proposal will provide participants and the IESO with greater certainty that outage requests, if advance approved, will maintain their approval.*

The IESO's publication "Methodology to Perform Long Term Assessments" documents how transmission adequacy and transmission outage plan assessments are performed for the 18 Month outlook. Can the IESO provide detail on the transmission assessment methodology to be used in the proposed quarterly approval process?

*The IESO intends to propose a transmission assessment methodology at a future SE-109 meeting.*

Facility retirements are currently captured through the 18 month data submission process. Does the IESO anticipate any additional requirements as a result of the quarterly approval process?

*The IESO does not anticipate any additional requirements as a result of the quarterly approval process.*

## Portlands Energy Centre

We would like clarification on the methodology. The table pasted below is from the IESO 18 Month Outlook released Feb. 28, 2014, and shows the Planned and Firm scenarios. The proposed methodology assumes 0 MW for future installations and, as stated above, is neither the firm nor planned scenario. Could you provide clarity on the differences between the proposed methodology and the Planned and Firm scenarios?

**Table 4.3: Summary of Scenario Assumptions for Resources**

		Planned Scenario	Firm Scenario
Over the 18-Month Period	Total Existing Installed Resource Capacity (MW)	32,961	
	New Generation and Capacity Changes (MW)	All Projects	Generator shutdowns or retirements, Commissioning Generators and Generators starting in the first 3 months
		3,306	262

The Firm and Planned Scenarios also differ in their assumptions regarding the amount of demand measures.

*The main difference between the IESO's proposed quarterly process assessment methodology and those used in the 18 Month Outlook process (i.e. firmed and planned scenarios) is that the quarterly process will not consider any future generation installations as available capacity during the quarterly coverage period. Referring to the table above, the quarterly process would assume that "New Generation and Capacity Changes (MW)" would be less than or equal to zero (less than zero if shutdowns or retirements were planned). Not including new generation installations is consistent with the existing near-term (days 1 to 33) assessment and advance approval methodology.*

- 2. Feedback on the Software Capabilities the IESO proposes to use (slides 7 to 9). If you currently are and/or plan on using the API to communicate with the IESO's new outage management software, please provide an impact assessment each capability would have on your existing software assuming all the capabilities were implemented as mandatory.**

## Ontario Power Generation

OPG understands that there will likely be a requirement to re-write our API in order to interface with the IESO's new API but maintains the position that changes that would result in extensive changes to OPG's ROMS application and/or database must be minimized.

This requirement is critical in meeting the IESO proposed implementation schedule. OPG will continue to carry out preliminary assessments of IESO requirements but no implementation plan or schedule will be finalized until completed API specifications and market rules are available.

Minimizing the number of new mandatory attributes will reduce the potential risk of extensive application revisions. High level comments on the specific CROW capabilities are listed below:

- **Configurable Outage Request Attributes**
  - **Complex Profiles (Continuous, Daily, Weekly, Custom):** Maintain the existing explicit flags for daily, continuous and planned weekend (available or unavailable). Any additional flags should be optional for participants.
  - **Multiple Recall Times (Daytime/Night time):** Maintain existing recall time and recall measurement properties. Use of multiple recall times i.e. daytime/night time should be optional for participants.
  - **Priority Codes (Planned/Opportunity/Urgent/Forced):** OPG feels that it should be able to reflect the new priority codes. The current API refers to "event types".
  - **Reason Codes (Maintenance/Replacement/Commissioning/Testing etc.):** The current API handles "purpose" as a free-form text field. Changing this attribute to a "pick list" may be an issue but OPG has not had sufficient time to assess. OPG's preference would be to retain the current format.
  - **Status (In-service, Out-of-Service, Derated):** Impact cannot be assessed until API specification is provided. Current API manages this attribute at the equipment level as a "condition status".
  - **Flags (Loss of Redundancy, Process Inclusion etc.):** Based on currently available information OPG should be able to accommodate new binary flags provided these do not drive business rules and application modifications.
  - **State Transition (Proposed/Submitted/Study/Negotiate/ Approved etc.):** OPG is not likely to utilize the "proposed" state. Can the IESO identify what visibility the IESO will have on outage in this state?
  - **Comment Fields (Public/Confidential based on permission model):** OPG would expect that existing critical comments fields would remain available. It is unclear if the proposed attribute is referring to IESO public/confidential permissions which should remain the same or is the proposal providing participants with the capability to determine visibility. For example could a generator make its comments available to the transmitter or vice versa.

- **File Attachments Supported (both Web Client/ API):** OPG supports the inclusion of this functionality.
- **Event Handling & Notification:** OPG would expect that all notifications, approvals/rejections and others, would be available via the API.
- **Validation Controls:** All error messages with respect to mandatory fields, equipment conflict and business rule violations should be available at the API. Effort should be made to ensure that error messages are in plain English.
- **Configurable rules engine:** This capability may be a benefit to the IESO but participants may not have the same flexibility within their proprietary software. Any process changes need to be assessed for participant impact prior to implementation.
- **Intuitive Versioning Features:** OPG's outage software already tracks revisions.

*The IESO will consider the feedback provided and discuss at the next SE-109 Meeting. The IESO understands that working closely with existing API users is a key component to the timely development and implementation of the software solution. The IESO has already requested that the preferred vendor ensure the API specification is one of the first deliverables during the proposed software development phase.*

## **Portlands Energy Centre**

The software capabilities look to be an improvement over the current capabilities. In particular being able to retrieve previous revisions of an outage is a good improvement to current capabilities.

It would be beneficial if the “Multiple Recall Times” capability allowed different recall times at different times during the outage. For example if an outage is scheduled to last 7 days, the recall time may be 3 hours for the first day, and then 12 hours from day 2 to day 6 and finally 8 hours on day 7. Having the capability to enter these different times would be very useful.

*The ability to provide multiple recall times rather than only being required to provide the most restrictive recall time may result in overly complex outage request assessments considering the impact that recall time has on the assessment effort of an outage request, especially if the profile of the outage request is also more complex (i.e. daily vs. continuous). However, the IESO will investigate whether or not this capability exists and provide feedback at the next SE-109 meeting.*

There is a known problem with ONLORF that after a period of time has passed completed outages are no longer available on the system. Will the new software correct these problems?

*The proposed software does have the ability to determine how long historical outage requests should be retained. A reasonable timeframe will be proposed at the next SE-109 meeting.*

### 3. Feedback on the proposed State Control Framework (slides 11 to 14) for Planned, Urgent and Forced outages.

#### Ontario Power Generation

Planned Outages: Overall OPG has no concerns with the proposed states. Current API and IESO software has never permitted participants to submit actual start and end times to the IESO so this functionality is not available. OPG has not yet assessed the impact of having to provide these values.

Forced & Urgent Outages: As stated above the provision of actual start and end times may be challenging but still requires further assessment.

*The IESO will further consult with OPG to understand how the IESO can support OPG in assessing the impact of implementing the proposed requirement and will report at the next stakeholder meeting..*

#### Portlands Energy Centre

We would like clarification on the "Study State". From the documentation it appears that the Market Participant cannot make changes to an outage while it is in the "Study" State and that this state lasts at least a month under the Quarterly Advanced Approval Process. Is this interpretation correct? If a Market Participant want to make changes to an outage that is in this state what steps do they need to follow?

*The only way to make a change to an outage request in the Study State and still maintain priority date (i.e. timestamp) would be through the Negotiate State, which must be manually invoked by the IESO. Upon verbal agreement of the change request, the IESO would place the outage request in the Negotiate State, which would allow the market participant to make a one-time change to the outage request. Once the change is committed by the market participant, the outage request would transition back into the Study State. There is no limit to the amount of times an outage request can be placed into the Negotiate state.*

*Another way to make a change is to cancel the outage request; however the market participant should be aware that the Cancel State is an end state. A new outage request would have to be submitted to reflect the desired change, which would also result in a new priority date (i.e. timestamp) and the outage request would no longer be included in the quarterly advanced approval process.*

There was discussion at the meeting on how an outage moves through the various advanced approval (AA) processes namely the: Quarterly AA Process, Weekly AA Process, 3 day AA process and 1 day AA process. It would be useful if an example of how an outage that is not approved in the Quarterly AA process can receive advanced approval in the subsequent approval processes if the Market Participant chooses not to change the outage start and end dates or times. Specifically does the outage lose its time stamp at any point and does the outage need to be resubmitted?

*The IESO will develop and present a sample scenario at the next SE-109 meeting.*

Our understanding is that an outage (either forced or planned) that is extended beyond its original end time needs to be resubmitted as a new outage. Often an outage slip, with an end time, is submitted shortly after a forced outage occurs. The original end time entered on the slip is only an estimate of when the unit will return to service and could be refined a number of times as the cause of the outage is investigated. Our understanding is that if the outage end time is advanced then a new slip is not required but if it is delayed then a new slip is required. Is this understanding correct?

*Forced and Urgent outage requests can have their end times extended without having to create a new outage request for the extension. Situations that will require a new outage request to be submitted in order to reflect an extension are forced or planned extensions to planned/opportunity outage requests that are already In-Progress.*

#### **4. Feedback on the Interim Process to date, including recommendations for change with respect to the 3-Day and 1-Day advance approval processes.**

##### **Ontario Power Generation**

The interim process has provided generators with some flexibility through the 1 day approval process. Frequently during generator outages maintenance activities require supporting condition guarantees from Hydro One to complete the task. The interim process which allows 1 day approval for the generator outage requires 3 day approval for the supporting transmission equipment. Although every effort is made to meet the 5 day transmitter submission requirements changes in schedule, such as weather, can result in delays. If the maintenance is on the critical path the literal application the 5 day timeline can result in generators being unable to meet the committed return to service date. The IESO needs to give consideration to outages of this nature to avoid unnecessary delay in the return to service of equipment.

##### **Portlands Energy Centre**

The process has worked well so far. We understand the reasons why short-notice outages are no longer accepted but would still like some flexibility to be built into the process to allow for changes in ramp profiles/testing due to changes in outage end dates/times or emerging work.

*The interim process currently provides an avenue for scheduling flexibility for “late” planned outage request submissions that support the earlier return to service of existing ‘in-progress’ outage requests. Similar to the example above regarding supporting condition guarantees, there have been several scenarios reported since the implementation of the interim process where market participants believe it would have been beneficial for both themselves and the IESO to consider a “late” planned outage request submission that would support the earlier return to service of an existing ‘advanced approved’ but not ‘in-progress’ outage request.*

*The IESO intends to provide scheduling flexibility for ‘late’ planned outage requests through the use of Opportunity outage requests. The IESO will consider the feedback received and at the next SE-109 meeting propose criteria for what constitutes an Opportunity outage request along with what obligations are associated with it.*

## 5. Other Comments

### Ontario Power Generation

OPG would like to offer the following comments and feedback on the topics identified in the April 25, 2014 stakeholder email and on the material presented at the April 23, 2014 stakeholder session.

#### Quarterly Advance Approval Process

The IESO has identified that participants cannot make changes, other than cancellation, to outages submitted prior to and included in the Assessment period without IESO consent. Please confirm that participants are not precluded from submitting additional outages in the coverage period. OPG's expectation is that these outages would not be eligible for a Quarterly approval but would be considered in the Weekly and/or Daily Approval process.

*Participants will not be precluded from submitting additional outages in the coverage period. These outages would be eligible for advance approval in the Weekly or Daily processes.*

OPG requests that the IESO explain how "timestamp" priority will be managed and tracked. Will there be a timestamp for each approval process?

*The IESO intends to manage "timestamp" priority in accordance with the Final Process design that was proposed and approved during the stakeholder sessions conducted between April and August 2013. The priority of an outage request depends on several factors and can be described as follows:*

1. *Priority Code sets the first level of priority (i.e. Forced → Urgent → Planned → Opportunity)*
2. *All Forced outages are considered equal priority (i.e. they have already occurred)*
3. *Planned Start date determines priority level between competing "Urgent" priority codes (i.e. the earlier it is scheduled to start, the sooner it must be assessed, the higher the priority it has)*
4. *Advance Approval status determines priority level between competing "Planned" priority codes (i.e. Quarterly AA → Weekly AA → Daily AA)*
5. *Priority Date (i.e. submission date) determines priority level between competing Priority Codes and/or Advance Approval statuses (i.e. the earlier the priority date, the higher the priority).*

*There will be a "timestamp" for each Advance Approval, but it is only used to identify under which process the outage request received Advance Approval (i.e. Quarterly, Weekly or Daily). This replaces the need to have separate Advance Approval states in the software solution.*

#### Weekly Advance Approval Process

As stated above please confirm that participants are not precluded from submitting additional outages in the coverage period.



*Additional Non-Critical Planned outages would not be precluded from being submitted in the coverage period as long as they were not already included in the weekly assessment period (i.e. requested for advance approval in the weekly process). This proposal assumes an inclusion flag for participants to opt their non-critical outages in or out of the weekly process is available.*

*Any Opportunity outage would not be precluded from being submitted in the weekly coverage period and would be eligible for advance approval if the IESO agrees to study it.*

"At Risk" outages or new submissions that cannot be approved in the Weekly process should not be rejected but should remain eligible for the 3 day and 1 day approval processes at the participants discretion. This scenario would also be applicable to outages that have Quarterly approvals "revoked". Please see additional detail below under Final Process Design Considerations.

*The IESO will further consider this feedback in conjunction with the feedback provided under OPG's Final Process Design Considerations and discuss a proposal at the next SE-109 meeting.*

### **1 & 3 Day Approval Process**

Until a definition of Opportunity outages is finalized it is difficult to comment on the appropriate timeframe for submission.

*The IESO will propose criteria for what constitutes an Opportunity outage request along with what obligations are associated with it at the next SE-109 meeting.*

### **Final Process Design Considerations: Voluntary submission of "non-critical" outages into the Weekly Process**

As the IESO identified on April 23rd the IESO is proposing to opt in or out of the weekly approval process based solely on time of submission. It was also identified that "at risk" outages if rejected during the Weekly approval process would not be eligible for the 1 or 3 day approval process without re-submission. Although outages can be re-submitted after rejection and time stamp retained participants would bear the risk of not meeting resubmission timelines. For outages that may have been in the outage process for months or even years ahead of the outage date this risk even if small is unacceptable. The business based decision whether to participate in Weekly process should be the participants.

If there is significant savings to the IESO not to provide an "inclusion flag" then provision must be made for outages to flow seamlessly from the weekly process to the daily process similar to the transition between quarterly and weekly processes.

*The IESO will further discuss incorporating an inclusion flag for the weekly process and discuss at the next SE-109 meeting.*

Summary of items which require further investigation/consultation from the IESO to be updated at the next stakeholder meeting.

1. OPG's comments under question 1a) – see page 2.
2. Portland's comments under question 2 – see page 5
3. OPG's comments under question 3 – see page 6
4. Portland's comments under question 4 – see page 8
5. OPG comments under question 5 – see pages 9, 10