

SE-109: Outage Management Process Redesign Interim Process & Online Outage Form Training

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January 15, 2014



1. Interim Process Review:

– Market Rule & Market Manual Changes:

- 3-day Advance Approval & Pre-Approval
- Mechanisms for Scheduling Flexibility
- Quick Take 26: Interim Outage Management Process Redesign

2. Online Outage Form (ONLORF) Changes:

– Table Top Exercise

3. IOMS and ONLORF Sandbox Testing

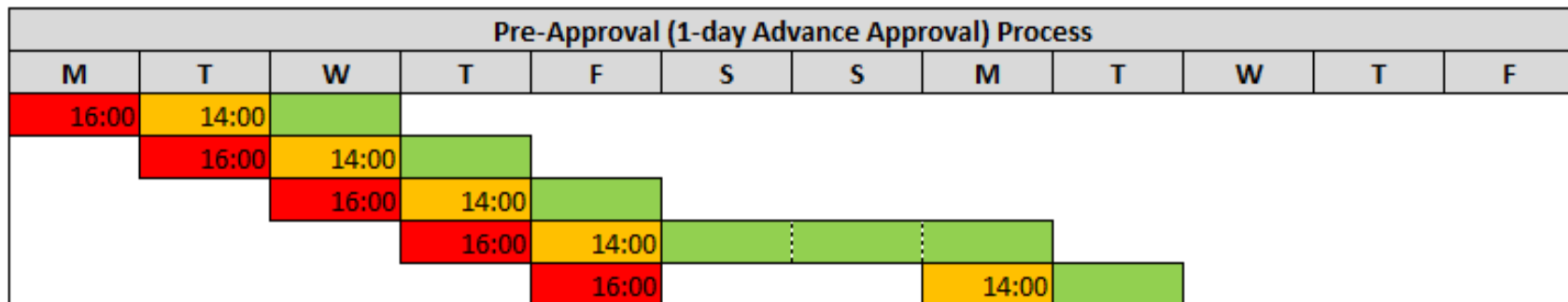
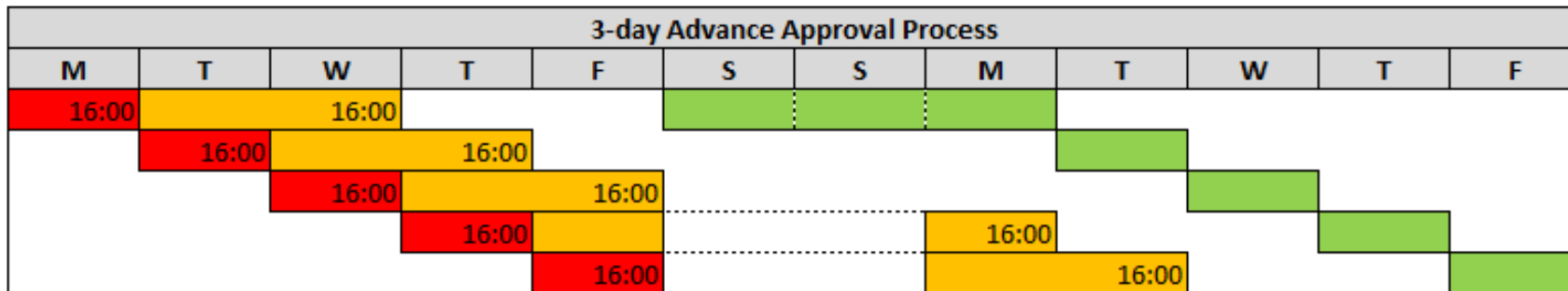
4. Next Steps

- **Request for 2 day advance approval becomes a request for 3 day advance approval**
 - Submission deadline of 16:00 EST, 5 business days out
 - IESO Advance approval by 16:00 EST, 3 business days out
- **“Short Notice” replaced with “Request for Pre-Approval”**
 - 1-day advance approval for lower impact outages:
 - Submission criteria applies (more on this later)
 - Submission deadline of 16:00 EST 2 business days in advance
 - IESO advance approval by 14:00 EST 1 business day in advance
- Late requests for 3 day advance approval or pre-approval (1-day advance approval) will not be assessed (rejected by the IESO) unless certain allowances for scheduling flexibility apply (more on this later)

- **Outage “confirmation” not required for 3-day advance approval**
 - Still required for requesting pre-approval (1-day advance approval) and tells the IESO:
 - The outage is not a late request for 3-day advance approval
 - The market participant has verified the outage meets the criteria for pre-approval before submitting to the IESO

Approval being Requested	Submission Deadline	Confirmation Required?	Method of Confirmation	
			Participants using ONLORF	Participants using own Software
3-day advance approval	16:00 EST, 5 business days in advance	No	Not applicable	Not applicable
Pre-approval (1-day advance approval)	16:00 EST, 2 business days in advance	Yes	Electronically using the “Request for Pre-approval” button/flag	Electronically using the “Outage Confirmed” flag

Interim Process Review: Submission & Assessment Timelines



Submission Deadline

IESO Assessment Period

Outage Start Dates

- IESO obligation to assess low impact planned outages on shorter notice
- Outages must meet the following eligibility principles:
 - Low impact to reliability
 - Low IESO assessment effort
 - No impact to 3rd party market participants
- Criteria developed to meet these principles (incorporated into rewrite of Market Manual 7.3, Appendix B)
 - [Link](#) to draft version on SE-109 webpage
- Some equipment outages meet the criteria but violate the principles
 - Very few equipment meet this condition
 - Participants will be separately notified

- **IESO will/may assess outage requests received after the submission deadlines under the following situations:**
 1. Forced (urgent) outages with time-limited flexibility
 2. Segregated Mode of Operation (SMO)
 3. Extensions due to a delayed outage start
 4. Returning equipment to service
 5. Generator ramps to support start-up/shut-down
 6. Generator Testing/Commissioning
- Items 2 through 6 are on a best effort basis only
- SMO will not be discussed in detail as it only pertains to OPG

- IESO will assess these types of urgent requests up to and including real-time and ahead of all planned outages
- Participants must declare and submit these requests as 'Forced Outages' in order to set outage priority and drive the proper IESO response
- **Example Scenarios:**
 - Hydro One reports a 500 kV breaker at Milton with low SF6 must be topped up within 4 days but have staff on site now
 - Portlands reports G1 has a tube leak that must be repaired within 3 days and can have staff on site as early as tomorrow
 - OPG reports Darlington G4 must be removed from service within 48 hours to repair a fueling machine

- IESO may re-assess an outage extension before revoking advance approval, up to and including real-time, if the outage starts and ends in the same day and can still be completed by the end of the day
- **Eligible Example Scenarios:**
 - Brookfield reports Wells G1 outage from 08:00 to 16:00 cannot start until 10:00 but can be completed by 19:00
 - IESO delays a one day Dofasco T2 outage by 2 hours but Dofasco reports they can still complete the work by day's end
- **Ineligible Example Scenario:**
 - OPG reports multi-day Kipling G1 outage will be delayed by one day and cannot complete the work by the original end date/time

- The IESO may assess any new outage request, up to an including real-time, that would allow an existing in-progress outage request to be completed early
- **Eligible Example Scenarios:**
 - Hydro One requests a 2 hour outage to a Trafalgar bus in order to complete an outage to circuit R19TH 3 days earlier
 - Greenfield reports additional testing is required to return G3 back to service early from a forced outage
 - Hydro One requests a 1 hour outage to circuit H24C in order to expedite the completion of Gerdau's outage to T1 & T2
- **Ineligible Example Scenario:**
 - Late requests for new outages that will expedite outages that have not yet started

- The IESO may assess any new or modifications to a generator ramp profile request in order to manage dispatches for shutdowns and start-ups
- Also aligns with assessment of requests to expedite the completion of in-progress generator outages
- **Eligible Example Scenarios:**
 - Bruce Power requests modification of a ramp request for G1 in order to drive proper dispatch of the unit for a planned or forced shutdown later in the day
 - Thorold G1 start up for a DACP commitment is delayed by 2.5 hours which also requires a supporting ramp-up request to be delayed

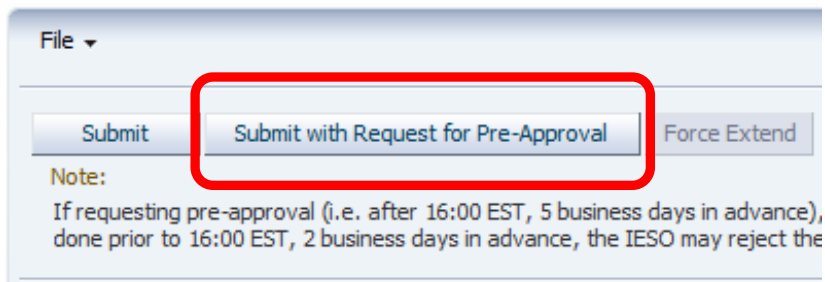
- The IESO may assess any new or modified outage requests that support in-progress generator testing or commissioning requests provided that the scope or potential scope change was identified in the original outage request that was advance approved by the IESO
- Also aligns with assessment of requests to expedite the completion of in-progress outage requests (commissioning units are considered unavailable)
- **Eligible Scenarios:**
 - Bruce Power requests a 50 MW de-rate on G8 to support an in-progress valve testing outage request that has been advanced approved by the IESO and which makes reference to a 50 MW derate being required when ideal conditions are present

- IOMS currently looks at submission and confirmation time to distinguish planned outages (PO) from short notice planned outages (SNPO)
 - PO: submission & confirmation before 10:00 EST, 3 days ahead
 - SNPO: submission or confirmation after 10:00 EST, 3 days ahead

ID#	S	MF	Start Date/Time	End Date/Time	Code	Equipment
11727720	S1	H1	Sat. Dec. 07, 2013 16:00	Thu. Dec. 12, 2013 23:00	PO	Adelaide JCT.77S2N-40, Strathroy
11794487	S3	H1	Sat. Dec. 07, 2013 16:00	Sat. Dec. 07, 2013 17:00	PO	Merivale TS.M32S_Terminal
11728562	S1	H1	Sat. Dec. 07, 2013 16:00	Sun. Dec. 08, 2013 16:00	PO	Wanstead TS.T1, Wanstead TS.
11676939	S3	H1	Wed. Dec. 04, 2013 05:00	Wed. Dec. 04, 2013 11:00	SNPO	H11L (Hearn x Lumsden), Main T
11791030	S1	H1	Wed. Dec. 04, 2013 07:00	Wed. Dec. 18, 2013 16:00	SNPO	Hanover T3A, BY
11753665	S1	H1	Wed. Dec. 04, 2013 17:00	Wed. Dec. 04, 2013 18:00	SNPO	W44LC (Including All Terminals)

- IOMS will continue to distinguish between PO and SNPO, however only based on submission by the new deadline of 16:00 EST, 5 days ahead (confirmation ignored).
- SNPO nomenclature retained due to limited IOMS coding flexibility

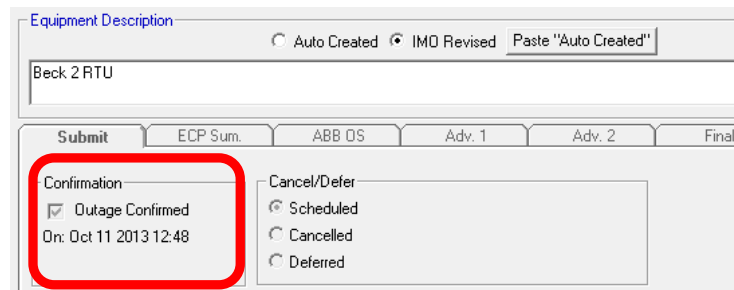
- PO: outages submitted on time for 3-day advance approval
- Any outage flagged as SNPO is either:
 - Late request for 3-day advance approval;
 - Eligible for pre-approval (1-day advance approval); or
 - Had its scope changed after the 16:00, 5 business days ahead
 - Scope changes may be acceptable (IESO discretion)
- SNPO outages eligible for pre-approval (1-day advance approval) must be submitted using the *Submit with Request for Pre-Approval* button in ONLORF. This button will check off the corresponding flag in the IESO outage software (the former *Confirmation* flag):



File ▾

Submit **Submit with Request for Pre-Approval** Force Extend

Note:
If requesting pre-approval (i.e. after 16:00 EST, 5 business days in advance), done prior to 16:00 EST, 2 business days in advance, the IESO may reject the



Equipment Description

Auto Created IMO Revised Paste "Auto Created"

Beck 2 RTU

Submit ECP Sum. ABB OS Adv. 1 Adv. 2 Final

Confirmation

Outage Confirmed
On: Oct 11 2013 12:48

Cancel/Defer

Scheduled
 Cancelled
 Deferred

- ONLORF users will still see *Short Notice* nomenclature despite the changed requirements (it was not technically possible to make this software change for the Interim Process).
- Participants can use the following methodology to understand the IESO's treatment of planned outage requests:
 - All outages **without** a *Short Notice* status are considered requests for 3-day

Outage ID: 5264287	Status: Submitted	Timestamp: 03-Jan-2014 15:46	Last Saved: 03-Jan-2014 15:47
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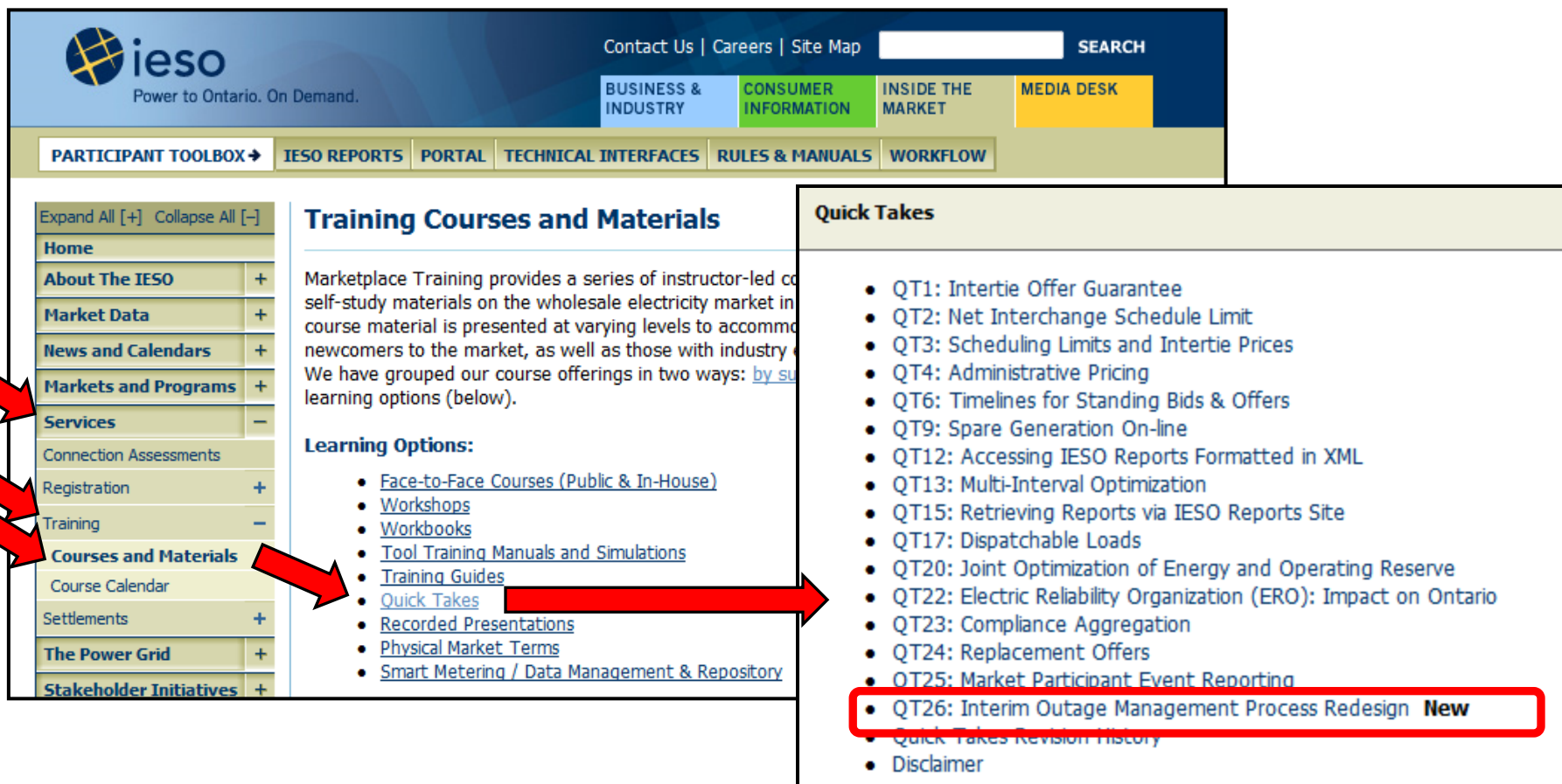
- All outages **with** a *Short Notice* and *Request For Pre-Approval* status are considered valid requests for pre-approval (1-day advance approval) if received and

Outage ID: 5264046	Status: Requested Pre-Approval Short Notice	Timestamp: 19-Dec-2013 10:56	Last Saved: 19-Dec-2013 10:56
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- All outages **with** a *Short Notice* status but **without** a *Request for Pre-approval* status

Outage ID: 5264287	Status: Submitted Short Notice	Timestamp: 03-Jan-2014 15:46	Last Saved: 03-Jan-2014 15:47
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- http://www.ieso.ca/imoweb/marketplaceTraining/training_overview.asp#6



The screenshot displays the IESO website's navigation and content. At the top, there is a search bar and navigation links for 'Contact Us', 'Careers', and 'Site Map'. Below this are tabs for 'BUSINESS & INDUSTRY', 'CONSUMER INFORMATION', 'INSIDE THE MARKET', and 'MEDIA DESK'. A secondary navigation bar includes 'PARTICIPANT TOOLBOX', 'IESO REPORTS', 'PORTAL', 'TECHNICAL INTERFACES', 'RULES & MANUALS', and 'WORKFLOW'. The main content area is titled 'Training Courses and Materials' and includes a description of the training program and a list of 'Learning Options'. The 'Quick Takes' section lists various training modules, with 'QT26: Interim Outage Management Process Redesign' highlighted as 'New'.

Navigation Menu:

- Expand All [+]
- Collapse All [-]
- Home
- About The IESO +
- Market Data +
- News and Calendars +
- Markets and Programs +
- Services -
- Connection Assessments
- Registration +
- Training -
- Courses and Materials**
- Course Calendar
- Settlements +
- The Power Grid +
- Stakeholder Initiatives +

Learning Options:

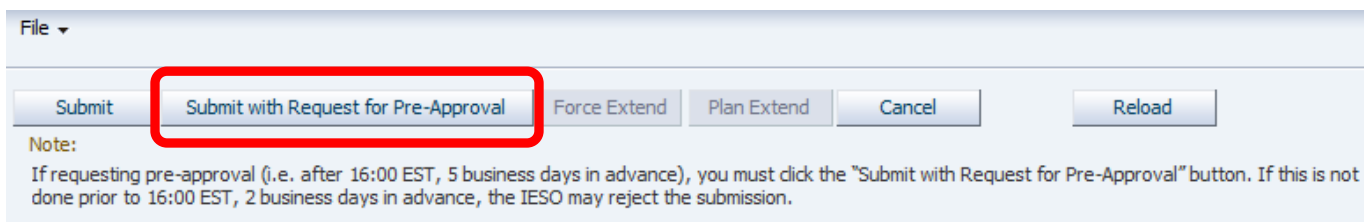
- [Face-to-Face Courses \(Public & In-House\)](#)
- [Workshops](#)
- [Workbooks](#)
- [Tool Training Manuals and Simulations](#)
- [Training Guides](#)
- [Quick Takes](#)
- [Recorded Presentations](#)
- [Physical Market Terms](#)
- [Smart Metering / Data Management & Repository](#)

Quick Takes:

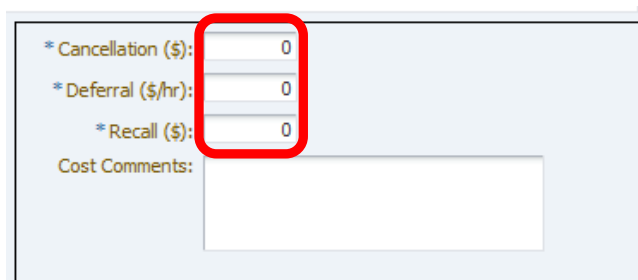
- QT1: Intertie Offer Guarantee
- QT2: Net Interchange Schedule Limit
- QT3: Scheduling Limits and Intertie Prices
- QT4: Administrative Pricing
- QT6: Timelines for Standing Bids & Offers
- QT9: Spare Generation On-line
- QT12: Accessing IESO Reports Formatted in XML
- QT13: Multi-Interval Optimization
- QT15: Retrieving Reports via IESO Reports Site
- QT17: Dispatchable Loads
- QT20: Joint Optimization of Energy and Operating Reserve
- QT22: Electric Reliability Organization (ERO): Impact on Ontario
- QT23: Compliance Aggregation
- QT24: Replacement Offers
- QT25: Market Participant Event Reporting
- **QT26: Interim Outage Management Process Redesign **New****
- Quick Takes Revision History
- Disclaimer

- Intro to Changes
- Table Top Exercise

- **New “Submit with Request for Pre-Approval” button**
 - Used to submit a *request for pre-approval* (1 day advance approval) after 16:00 EST, 5 business days in advance, but no later than 16:00 EST, 2 business days in advance
 - Replaces the former *Confirm* button



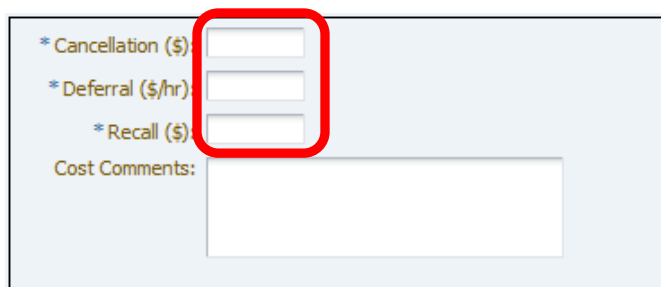
- **Cancellation/Deferral/Recall costs no longer required upon submission for the purposes of compensation eligibility, however software still requires a value**
- Zero values are acceptable



* Cancellation (\$): 0
* Deferral (\$/hr): 0
* Recall (\$): 0
Cost Comments:

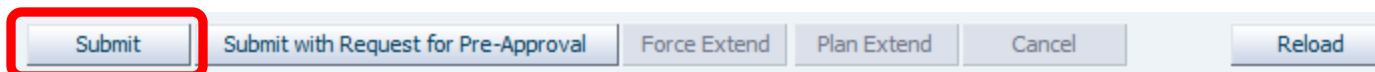
Deadline of 16:00 EST, 5 business days in advance applies (available to all outage requests)

1. Fill out the outage request form as you normally would
 - Remember: cancellation, deferral and recall values are still required by the software in order for your request to be successfully submitted
 - Zero values are acceptable and consequence free



* Cancellation (\$)
* Deferral (\$/hr)
* Recall (\$)
Cost Comments:

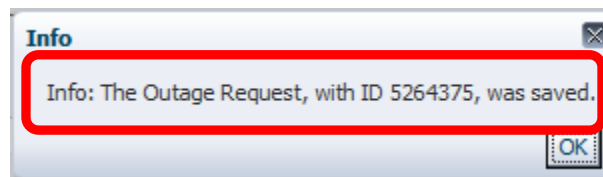
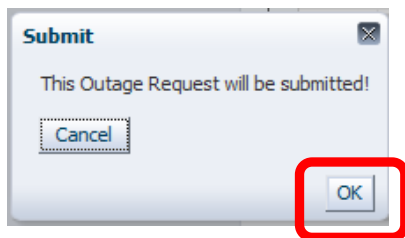
2. When satisfied with your entries, click the *Submit* button



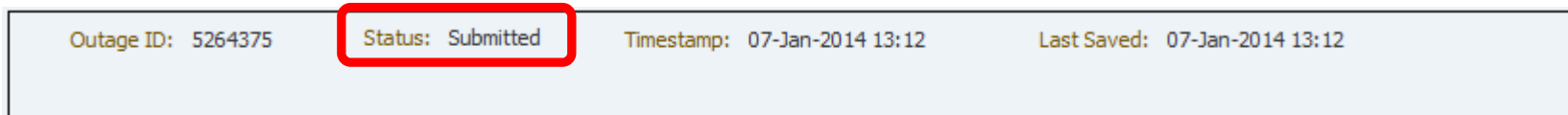
Note:

If requesting pre-approval (i.e. after 16:00 EST, 5 business days in advance), you must click the "Submit with Request for Pre-Approval" button. If this is not done prior to 16:00 EST, 2 business days in advance, the IESO may reject the submission.

3. Identical to the current process, once you click *Submit*, you'll be prompted to acknowledge your submit request in order to receive an ID number and save your outage request



4. You're outage request form will be updated with an ID number and a timestamp. If your timestamp is ahead of 16:00 EST, 5 business days in advance, your outage request status will change to *Submitted*.



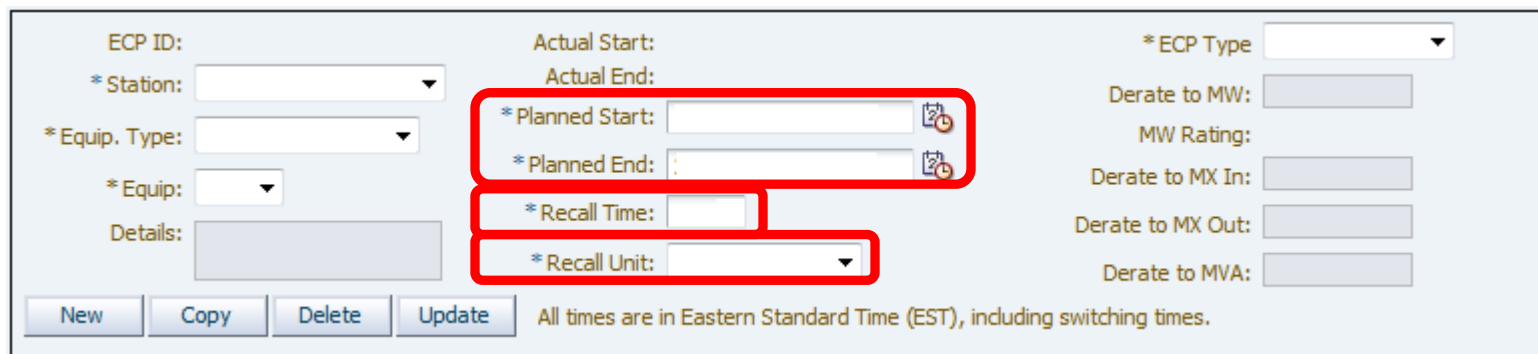
5. If your timestamp is after 16:00 EST, 5 business days in advance, your outage request status will change to *Submitted* and *Short Notice*

Outage ID: 5264316	Status: Submitted Short Notice	Timestamp: 06-Jan-2014 10:08	Last Saved: 06-Jan-2014 10:08
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- A planned outage request with this status combination (*Submitted* + *Short Notice*) is considered a late request for 3-day advance approval and will be rejected by the IESO

Deadline of 16:00 EST, 2 business days in advance applies (only available to eligible outage requests that meet prescribed criteria in Appendix B of Market Manual 7.3)

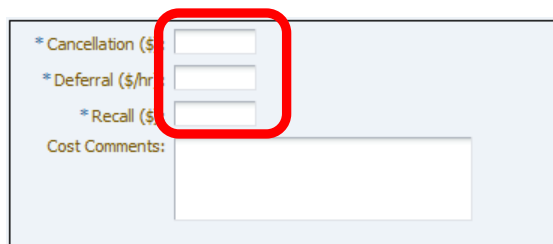
1. Fill out the outage request form, ensuring that certain request fields meet the prescribed criteria for the facility being applied for:
 - Examples:
 - Generators will need to ensure the outage *Starts* and *Ends* in the same day if the *Recall Time* is > 15 minutes



ECP ID: _____ Actual Start: _____ *ECP Type: _____
* Station: _____ Actual End: _____
* Equip. Type: _____ * Planned Start: _____
* Equip: _____ * Planned End: _____
Details: _____ * Recall Time: _____
* Recall Unit: _____
Derate to MW: _____
MW Rating: _____
Derate to MX In: _____
Derate to MX Out: _____
Derate to MVA: _____
New Copy Delete Update All times are in Eastern Standard Time (EST), including switching times.

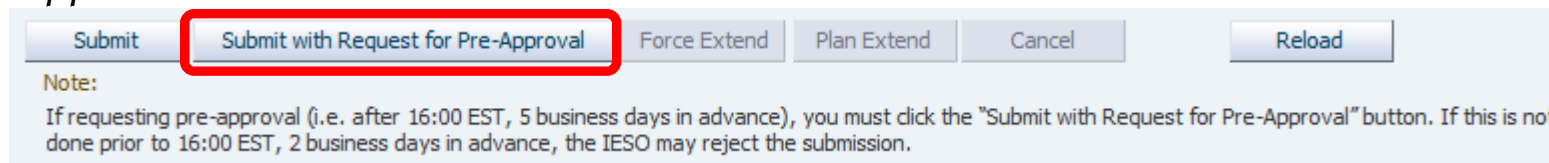
- Load facilities do not need to worry about meeting the criteria because any scope of outage request is eligible for pre-approval

2. Fill out the rest of the outage request form as you normally would
 - Remember: cancellation, deferral and recall values are still required by the software in order for your request to be successfully submitted
 - Zero values are acceptable and consequence free



* Cancellation (\$)
* Deferral (\$/hr)
* Recall (\$)
Cost Comments:

3. When satisfied with your entries, click the *Submit with Request for Pre-Approval* button

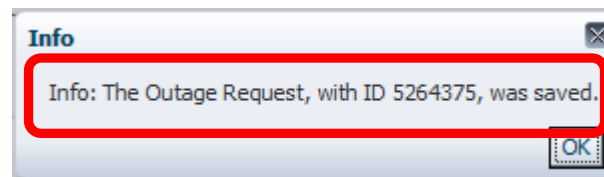
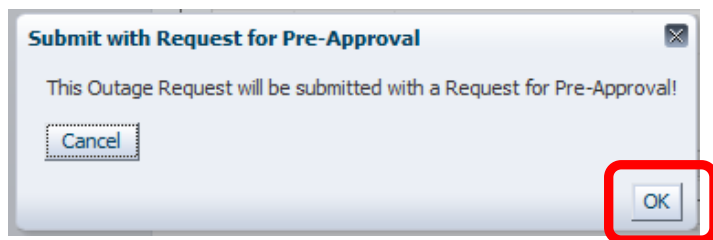


Submit **Submit with Request for Pre-Approval** Force Extend Plan Extend Cancel Reload

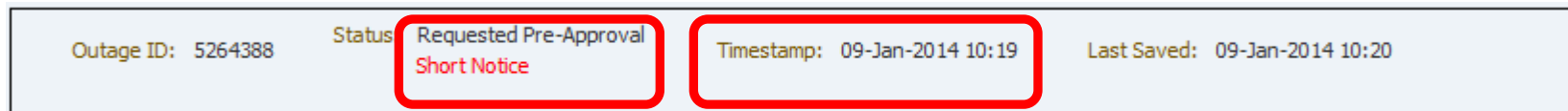
Note:
If requesting pre-approval (i.e. after 16:00 EST, 5 business days in advance), you must click the "Submit with Request for Pre-Approval" button. If this is not done prior to 16:00 EST, 2 business days in advance, the IESO may reject the submission.

- A note has been provided to remind you that only a *Request for Pre-Approval* will be considered after the submission deadline for 3-day Advance Approval (i.e. after 16:00 EST, 5 business days in advance)

4. Once you click *Submit with Request for Pre-Approval*, you'll be prompted to acknowledge your submit request in order to receive an ID and save your outage request



5. You're outage request form will be updated with an ID number and a timestamp— Regardless of whether your *Timestamp* is ahead of, or after 16:00 EST, 2 business days in advance, your outage request status will change to *Requested Pre-Approval + Short Notice*



- However, if your timestamp is after 16:00 EST, 2 business days in advance, your outage request will be considered a late request for pre-approval and will be rejected

- On-time requests for pre-approval will manually validated against the pre-approval criteria and further assessed as required on the business day prior to the outage start date before receiving advance approval or rejection
- In the event of a rejection, a reason will be provided in the IESO comments field:



The image shows a screenshot of a form with two text input fields. The left field is labeled '* MP Comments:' and is empty. The right field is labeled 'IESO Comments:' and is also empty, but it is highlighted with a thick red border. The form has a light blue background.

- One of the following reasons will be provided:
 - Rejected as late
 - Rejected as pre-approval criteria not met
 - Rejected for reliability

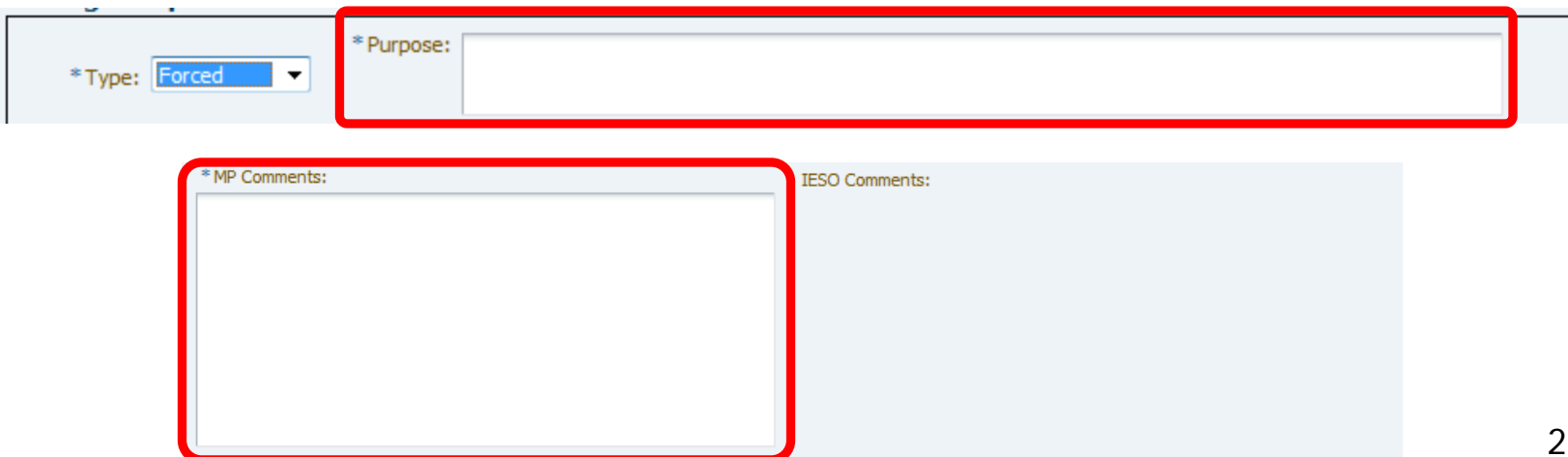
Submitting Planned Outages: Allowances for Scheduling Flexibility

- Forced outages with time limited flexibility should be submitted as forced outages:



* Type: * Purpose:

- All other late planned outage requests for 3-day advance approval or pre-approval should have reasoning provided in the *Purpose* or *MP Comments* field to justify an allowance for scheduling flexibility:



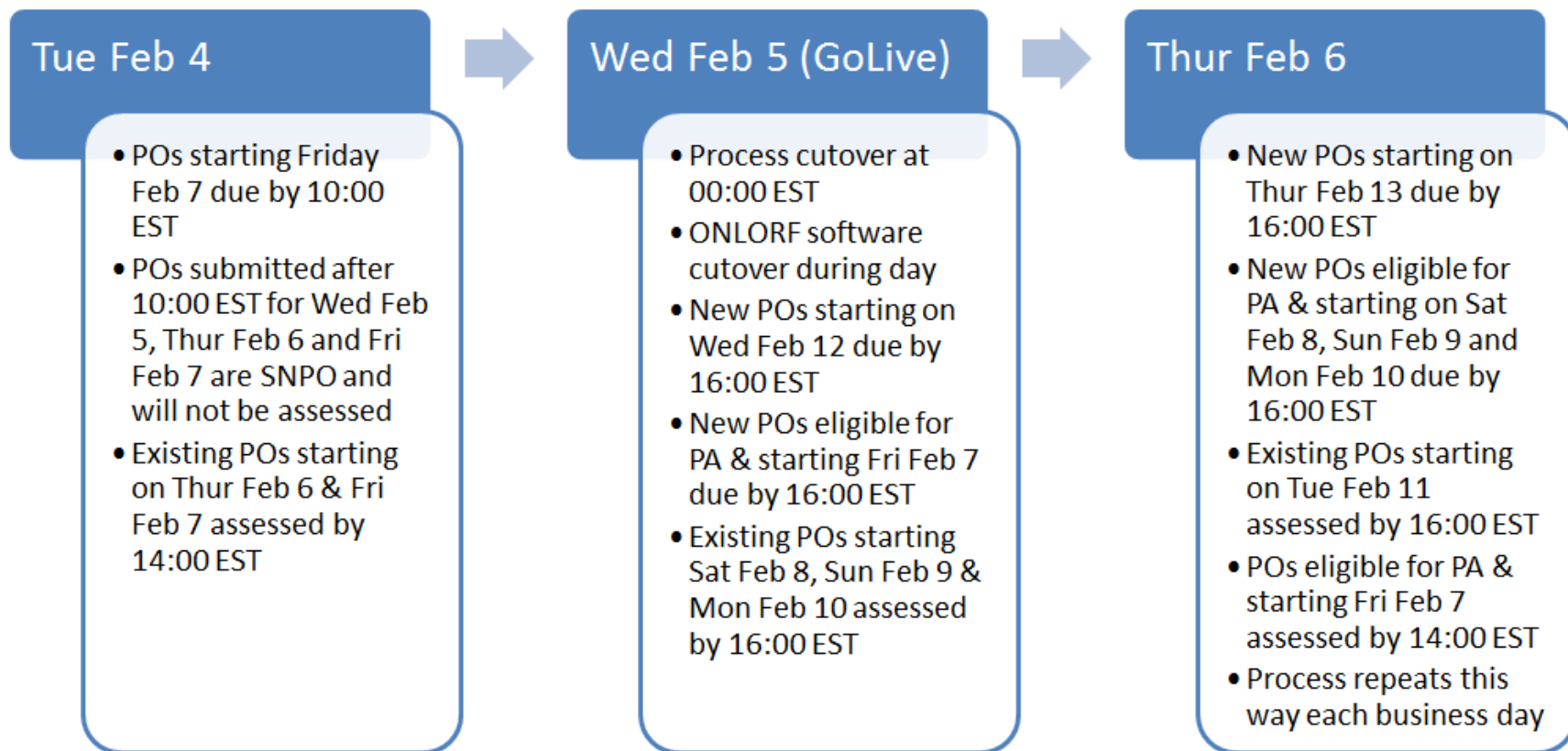
* Type: * Purpose:

* MP Comments: IESO Comments:

- **Examples of comments that would be acceptable for supporting an allowance for scheduling flexibility:**
 - To return Portlands G1 (outage ID# 9999999) back to service 3 days earlier
 - Delayed 2 hours by IESO but work can still be completed by the end of the day
 - De-rating required to support valve testing as per information included on the Bruce G5 in-progress outage ID# 9999999
 - Allanburg D1 bus required out of service to return circuit Q30M (outage ID# 9999999) back to service a day early

- Sandbox Testing takes place from January 16, 2014 to January 30, 2014
 - A testing plan will be introduced at the January 15, 2014 meeting
- Please contact Customer Relations if you experience any issues or have any questions
 - customer.relations@ieso.ca

- “Go Live” date of February 5, 2014 with a transition plan as follows:



Legend: PO = Planned Outage

SNPO = Short Notice Planned Outage

PA = Pre-Approval

- Several reminders for the “Go Live” date will be issued as Wed Feb 5 approaches:
 - Outage reporting letters already sent out
 - IESO Weekly Bulletin reminders
 - Email notification several days prior
 - SSR and SAA notes several days prior, up to and including Tues Feb 4

- Market Manual 7.3 Outage Management
 - Draft version currently found on [SE-109 webpage](#)
 - Final version will be found on the [Rules, Manuals and Forms webpage](#) once available
- Quick Take 26: Interim Outage Management Process Redesign
 - Found [here](#) under the Quick Takes heading
- On-line Outage Request Tool: A Step-by-Step Guide
 - Found [here](#) under the Tool Training Manuals and Simulations heading
- Training webinars (Dec 11, 2013 and Jan 15, 2014)
 - Found on the [SE-109 webpage](#) once available

Questions/Comments?