

OUTAGE MANAGEMENT PROCESS REDESIGN

July 27, 2016

Agenda

- Progress Update
- Overview of Market Trials
- Go Live Training
- Go Live Implementation
- Next Steps

Progress Update

- Preliminary Web Service/API testing completed
 - Defects to be addressed ahead of Market Trials
- Market Manuals posted for final review
 - Available on the IESO website:
<http://www.ieso.ca/Pages/Participate/Change-Management/Change-Notification-Listing.aspx>
 - Feedback due **Friday Aug 5**
 - Send feedback to pending.changes@ieso.ca
- Process and tool training materials completed

Market Trials: Test Scenarios and Cases

Test Scenarios	Test Cases
Online IESO Access Roles and Permissions	<ul style="list-style-type: none">• Grant Outage Viewer/Submitter• View Equipment Criticality and Outage Reporting Requirements• Grant Third-Party Viewership• Associate Facility Contact with Control Centre• Update Late Notification Lists
Advance Approval Processes <ul style="list-style-type: none">• Weekly• 3-Day• 1-Day	<ul style="list-style-type: none">• Various Outage Submissions:<ul style="list-style-type: none">• Non Critical, Non-Critical and Low Impact Outages• Outage Conflicts• Outages eligible for Auto-Advance Approval and Final Approval in Advance<ul style="list-style-type: none">• Urgent Outages and Opportunity Outages• Outage Coordination/Negotiation• Advance Approvals/Rejections

Market Trials: Test Scenarios and Cases

Test Scenarios	Test Cases
Real-Time Process	<ul style="list-style-type: none">• Manage Outages with Final Approval in Advance• Revoke Outages with Advance Approval• Outage Final Approval• Outage Implementation• Outage Recall• Late to Start Notifications• Outage Completion• Forced, Urgent and Opportunity Outage Submissions
Miscellaneous	<ul style="list-style-type: none">• Additional Auto Advance Approval submissions• Various constraint code conflict submissions• Outage Resubmission• Outage Cancellation• Other cases identified ad-hoc

Market Trials: Test Scenarios and Cases

Test Scenarios	Test Cases
Public and Private Reports	<ul style="list-style-type: none"><li data-bbox="614 334 1721 439">• Verify Publication, Timing and Content of Public Transmission Outage Reports<ul style="list-style-type: none"><li data-bbox="710 448 896 496">• Day 0<li data-bbox="710 505 981 554">• Days 1-30<li data-bbox="710 562 1006 611">• Days 31-90<li data-bbox="710 619 1025 668">• Days 91-180<li data-bbox="710 676 1051 725">• Days 181-780<li data-bbox="614 733 1734 839">• Verify Publication, Timing and Content of Private Outage Planning Guideline Reports

Market Trials: August 2016 Test Schedule

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
7	8	9	10	11	12	13
	Access Roles and Permissions			Confirm Web Service Connectivity / Web Client Access	Weekly AA Process (Submission)	
14	15	16	17	18	19	20
	<ul style="list-style-type: none"> 3 Day and 1 Day AA Process (Submission, Coordination and Assessment) <ul style="list-style-type: none"> Public and Private Reports 					
21	22	23	24	25	26	27
	<ul style="list-style-type: none"> Real-Time Process (Implementation and Completion of 3 Day and 1 Day AA Outages) <ul style="list-style-type: none"> Miscellaneous Public and Private Reports 					
28	29	30	31			
	<ul style="list-style-type: none"> Real-Time Process (Implementation and Completion of Weekly AA Outages) <ul style="list-style-type: none"> Miscellaneous 					

Market Trials: Registered Participants

- TransAlta
- Ontario Power Generation
- Hydro One
- Brighton Beach Power
- Great Lakes Power
- Northland Power

Note: those interested in participating in Market Trials **must** register in order for your test environment to be configured.

Go Live Training Schedule

Dates	Materials
May 2016	Summary document posted on the stakeholder engagement page
August 2 - 5	Web Client User Guide and 'Quick Clips' posted on stakeholder engagement page
August 9	Webinar – Process and Tool Training
August 16	Repeat Webinar – Process and Tool Training (recorded and posted on stakeholder engagement page until Go Live)
Go Live	Sept 14

Go Live Implementation

- Third Party Viewership
- Station and Equipment Name Changes
- Outage Request Migration
- Outage Management Process Transition

Third Party Viewership

- Participants will be able to grant others viewership of their equipment outages:
 1. Locate your equipment in Online IESO
 2. Select market participants
- Functionality will be available in the production environment after Market Trials
- Viewership can be granted or revoked at any time

Station and Equipment Name Changes

- The new outage management system will source equipment information from the IESO's registration system (i.e. Online IESO).
- Some of the station and equipment names in the current outage management system differ from those in the registration system.
- Station and equipment names in the new outage management system will be changed to reflect their registered operational names.

Station and Equipment Name Changes

- All station and equipment names will be capitalized in the new outage management system
- Examples of typical name changes (station and equipment concatenated):
 - Facility A GS G4 → FACILITY A GS G4
 - Facility B GS G2 → FACILITY GS B G2
 - Facility MTS #1 T2 → FACILITY MTS 1 T2
 - Facility TS 56T13 → FACILITY TS T13

Outage Request Migration

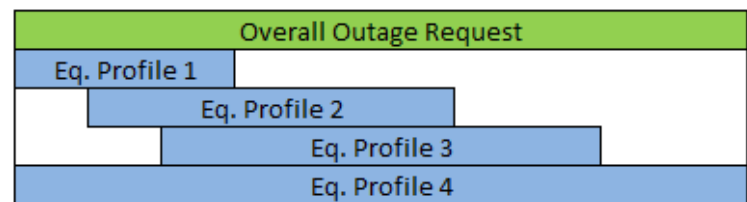
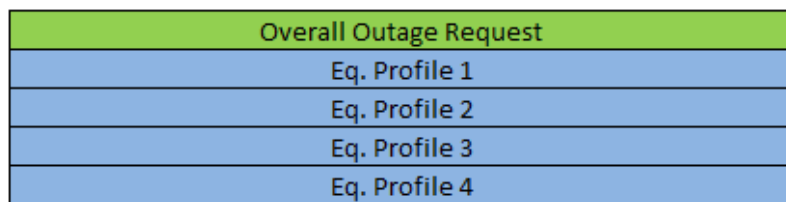
- Majority of outages will be auto-migrated from the current outage management system to the new system
 - Migration tests will be performed ahead of Market Trials
 - IESO will review failures to determine whether participants can resubmit their outages in the current system such that they pass auto-migration for Go Live

Outage Request Migration

- Go Live migration will occur on Go Live (Wed Sept 14)
 - Participants will have to resubmit failed outages into the new outage management system
 - IESO will manually retain timestamps for resubmitted outages
 - A resubmission deadline of Sept 28 will apply for the purposes of timestamp retention

Outage Request Migration

- The following outage requests will not be migrated:
 - Cancelled Outages
 - Informational Outages
 - Outages with overlapping equipment profile start and end times that differ from the overall outage start/end time



Outage Request Migration

- The following outage requests will not be migrated:
 - Outages with different equipment profile codes on the same piece of equipment

Overall Outage Request		
Equip A - Derated To		
	Equip A - Derated To	
		Equip A - Derated To



Overall Outage Request		
Equip A - Out of Service		
	Equip A - Derated To	
		Equip A - In Service



Outage Request Migration

- The following outage requests will not be migrated:
 - One day outages with incorrect Daily and Weekend flags:

Planned Start	Planned End	Daily flag	Weekend flag	
Monday 9:00	Monday 5:00	Continuous	Available	✓
		Daily	Unavailable	✗
		Daily	Available	✗
		Continuous	Unavailable	✗

- One day outages must be 'Continuous' + 'Available' weekends

Outage Request Migration

- The following outage requests will not be migrated:
 - Weekday outages with incorrect Daily and Weekend flags:

Planned Start	Planned End	Daily flag	Weekend flag
Monday	Friday	Daily	Unavailable
		Continuous	Unavailable

X
X

- Weekday outages must be 'Available' weekends

Outage Management Process Transition

- ‘Hybrid’ process will be in place for 2 weeks post Go Live to manage timeline differences between the current and new processes.
- Planned outages will not be permitted to start Sept 13 through Sept 15 or to end on Go Live.
- Planned outages should not be submitted into the current system after 16:00 Mon Sept 12.

Outage Management Process Transition

- All planned outages submitted before 16:00 Mon Sept 12 and scheduled to start between Sat Sept 17 and Mon Sept 19 will be assessed by 16:00 Tues Sept 13/16.

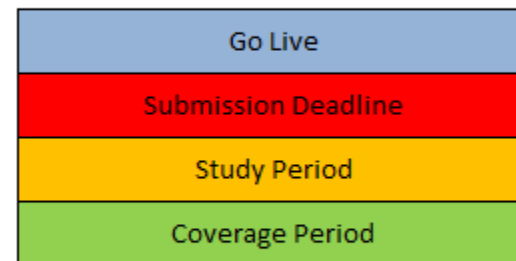
Sep-16						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2						

Go Live
Last Submission Day (Current Process)
Last Study Period (Current Process)
Last Coverag Period (Current Process)

1 Day Advance Approval Process Transition

- The first submission deadline for the new 1 Day process is 16:00 on Thurs Sept 15 for low impact outages scheduled to start Sept 17 – 19.
- All planned outages (regardless of criticality) starting Sept 20 & 21 and submitted prior to Go Live will be assessed by subsequent 1 Day processes.

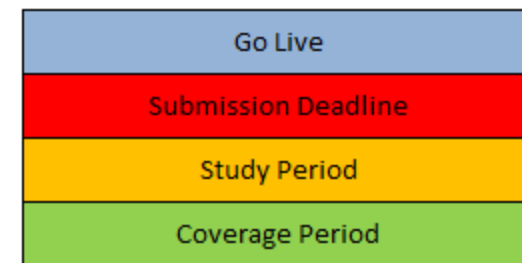
Sep-16						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2						



3 Day Advance Approval Process Transition

- The first submission deadline is 16:00 on Thurs Sept 15 for non-critical outages scheduled to start Thurs Sept 22.
- All planned outages (regardless of criticality) submitted prior to Go Live and starting Sept 22 – Oct 2 will be processed by the 3 Day process since the first Weekly coverage period is not until Oct 3.

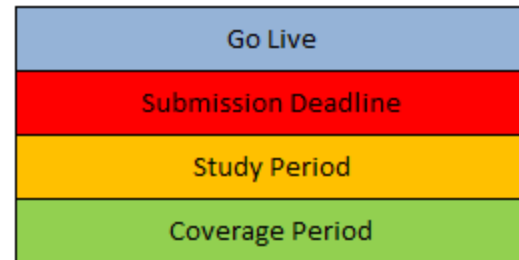
Sep-16						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2						



Weekly Advance Approval Process Transition

- The first submission deadline is 16:00 on Fri Sept 16 for newly submitted outages starting Oct 3 through Oct 9.
- Critical outages submitted before Go Live and starting the week of Oct 3 will be also be processed.

Sep-16						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9						



Quarterly Advance Approval Process Transition

- This process is not impacted by Go Live as the first Quarterly process will not commence until October 1, 2016.
- Outage requests starting between Jan 1/17 and Jun 30/17 will be assessed between Oct 1/16 and Nov 30/16 if they are submitted prior to Oct 1/16 (i.e. start of the quarterly study period).
- Participants are encouraged to review and firm up their outage plans for Jan – June 2017 prior to the Oct 1/16 submission deadline.

Next Steps

- Register for Market Trials by Aug 3
- Feedback on Market Manuals due Aug 5
- Prepare for Market Trials
 - Review Test Plan, User Guides and Quick Clips
- Register for Training Webinars