



Outage Management System (OMS) Enhancements

December 2022

Customer Readiness

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Agenda

In this training, you will learn about the new enhancements:



- ✓ Max and Min Energy tabs display solution
- ✓ Load Min Values display correction
- ✓ New automated email functionality for Transmission Induced Generation Outages
- ✓ Solution for conflicting positions for overlapping timeframes

Deployment timeline

This functionality will be available in the Production environment on **December 14, 2022.**



OMS ENHANCEMENTS

Max and Min Energy tabs

Issue: WebOMS users are not able to enter the **Max** and **Min Energy** data when the CEN data is present for the resource.

Availability	Notes	A/S Availability	PHIN Re-Rate	Ramp Re-Rate	Max Energy	Min Energy
MAX Energy Date/Time		MAX Energy MWh				
11/21/2022 00:00		35.00				
11/23/2022 00:00						

Cannot enter data

This resource has CEN data

CEN data is the State of Charge (SOC) for a battery resource.

Generation Resource Data Detail

10/26/2020 00:00 - 12/25/2020 00:00 | 12/25/2020 00:00 - 09/01/2021 00:00 | 09/01/2021 00:00 - 01/01/2022 00:00 | 01/01/2022 00:00 - 01/01/2031 00:00

Resource mRID: [redacted] Resource Name: [redacted]

Resource Attributes:

Type:	GEN	Dispatchable:	No	Resource Type:	NGRL	Aggregate Resource:	No
Market Type:		MSG Resource:	No	Outage Split (Hard BP):	Yes	PGA:	Yes
RMR Type:	N	Hourly Predispatch:	No	Fuel Type:	LESR	NGR:	Yes
Unit Type:	OTHR	REM:	No	RAAIM Exempt:	No	Unit Code:	
Time Zone:		Substation:		Jointly Owned Unit:			

Operating MW:

Start Date	End Date	PMax	PMin
01/01/2022 00:00	01/01/2031 00:00	10.00	0.00

Resource Ramp Rate:

Type	Start Date	End Date	Y1 Value	Y2 Value
OP	01/01/2022 00:00	01/01/2031 00:00	-10.00	20.00
OP_RES	01/01/2022 00:00	01/01/2031 00:00	0.00	20.00
REG	01/01/2022 00:00	01/01/2031 00:00	0.00	17.41
OP	01/01/2022 00:00	01/01/2031 00:00	10.00	20.00

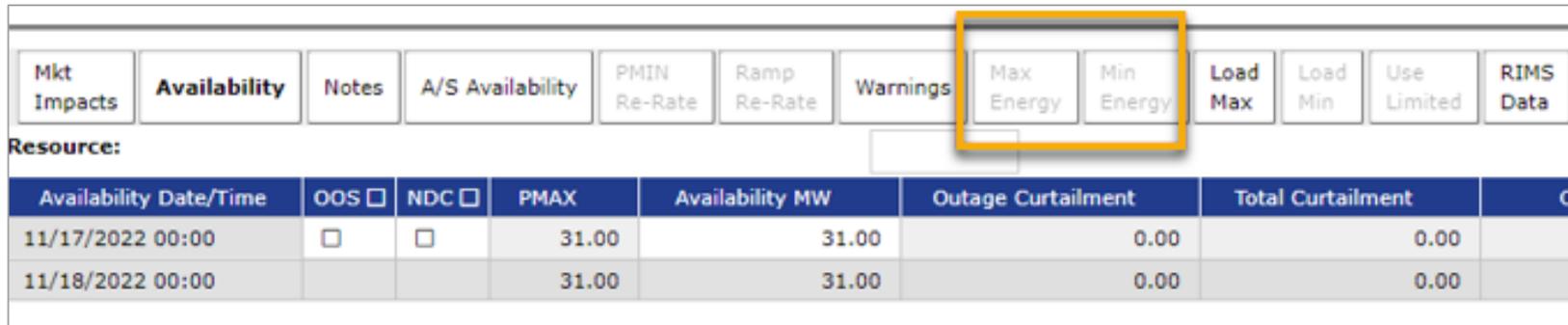
CEN Data

Resource Capacity:

Capacity Type	Default Capacity	Maximum Capacity	Minimum Capacity	Start Date	End Date
CEN	0.00	40.00	0.00	01/01/2022 00:00	01/01/2031 00:00
LOAD	0.00	10.00	0.00	01/01/2022 00:00	01/01/2031 00:00

Max and Min Energy tabs – Display Solution

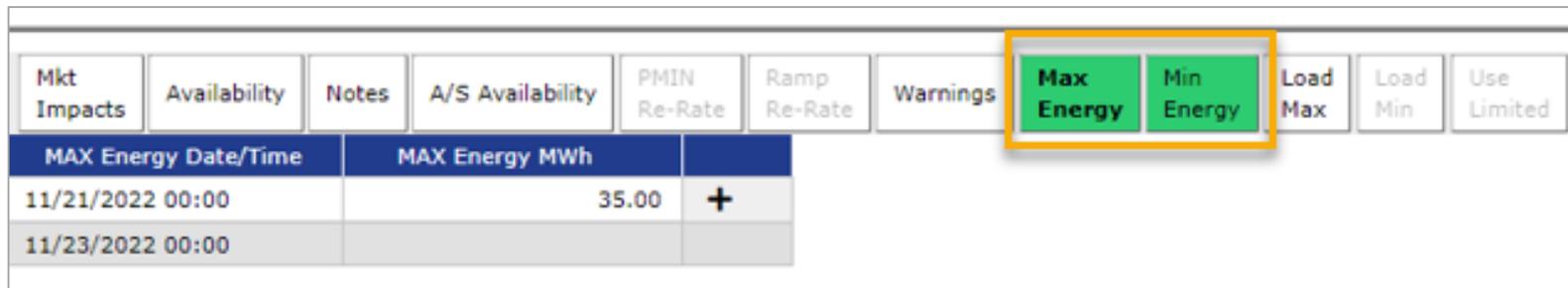
Max and **Min Energy** tabs will be disabled and are greyed out if **no** CEN data is present for the resource.



The screenshot shows a navigation bar with several tabs: Mkt Impacts, Availability, Notes, A/S Availability, PMIN Re-Rate, Ramp Re-Rate, Warnings, Max Energy, Min Energy, Load Max, Load Min, Use Limited, and RIMS Data. The Max Energy and Min Energy tabs are greyed out and highlighted with a yellow box. Below the navigation bar is a 'Resource:' section with a table showing availability data.

Availability Date/Time	OOS <input type="checkbox"/>	NDC <input type="checkbox"/>	PMAX	Availability MW	Outage Curtailment	Total Curtailment	C
11/17/2022 00:00	<input type="checkbox"/>	<input type="checkbox"/>	31.00	31.00	0.00	0.00	
11/18/2022 00:00			31.00	31.00	0.00	0.00	

Max and **Min Energy** tabs are enabled and turns green if CEN data is present for the resource.



The screenshot shows the same navigation bar as the previous image, but the Max Energy and Min Energy tabs are now green and highlighted with a yellow box. Below the navigation bar is a table showing MAX Energy data.

MAX Energy Date/Time	MAX Energy MWh	
11/21/2022 00:00	35.00	+
11/23/2022 00:00		

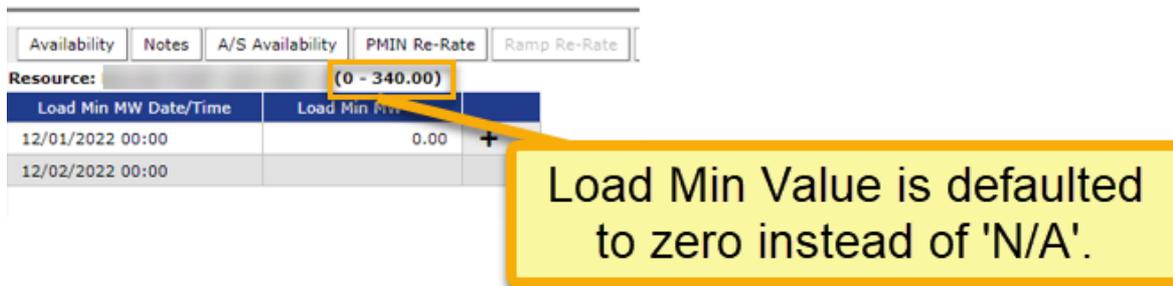
Load Min Values Display

Issue: WebOMS does not receive Load Min values from master file; therefore, the values could not be entered for any resource since the default value was displayed as 'N/A'.



The screenshot shows a web application interface with a navigation bar at the top containing tabs: Availability, Notes, AS Availability, PMIN re-rate, Ramp Re-Rate, Max Energy, Min Energy, Load Max, Load Min, Use Limited, and RIMS Data. Below the navigation bar, there is a 'Resource:' field with a dropdown menu showing '(N/A - 340.00)'. A table below this field has columns for 'Load Min MW Date/Time' and 'Load Min MW'. The table contains two rows: one for '04/22/2022 00:00' and another for '04/23/2022 00:00'. The 'Load Min MW' column for both rows is empty. A yellow callout box with a black border points to the 'Load Min MW' column header and contains the text: 'Load Min Value is displayed as 'N/A''.

Solution: WebOMS will default the Load Min values to zero for Generation Resource Data when the Load Max values exist.

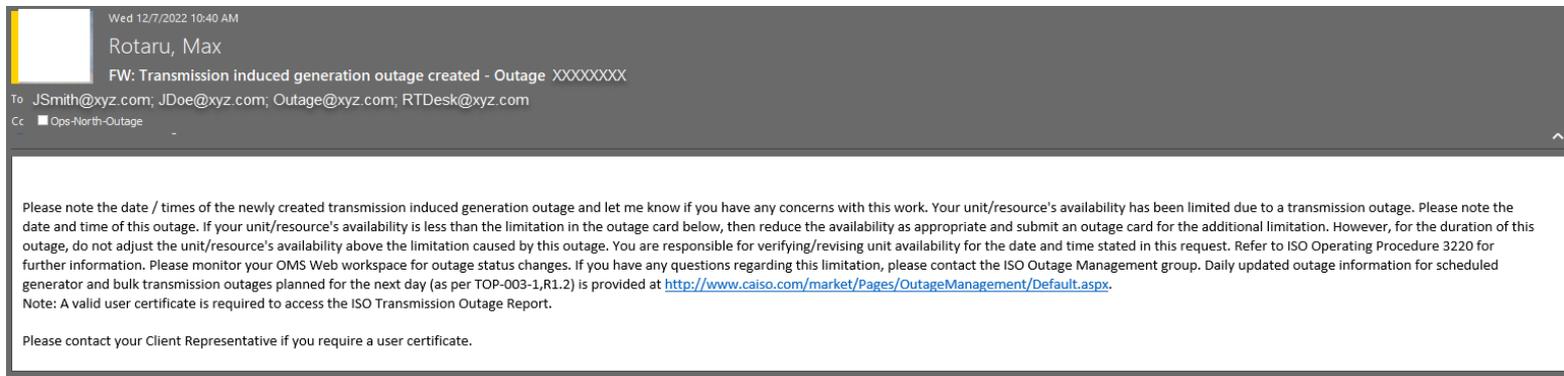


The screenshot shows a web application interface similar to the one above. The navigation bar includes tabs: Availability, Notes, A/S Availability, PMIN Re-Rate, and Ramp Re-Rate. Below the navigation bar, there is a 'Resource:' field with a dropdown menu showing '(0 - 340.00)'. A table below this field has columns for 'Load Min MW Date/Time' and 'Load Min MW'. The table contains two rows: one for '12/01/2022 00:00' and another for '12/02/2022 00:00'. The 'Load Min MW' column for both rows contains the value '0.00'. A yellow callout box with a black border points to the 'Load Min MW' column header and contains the text: 'Load Min Value is defaulted to zero instead of 'N/A''.

Email functionality for TIGO for SCs

Issue: The **Transmission Induced Generation Outage (TIGO)** notifications are manually sent to Scheduling Coordinators' (SCs') outage contacts.

Screenshot of existing outage notification to SC outage contacts

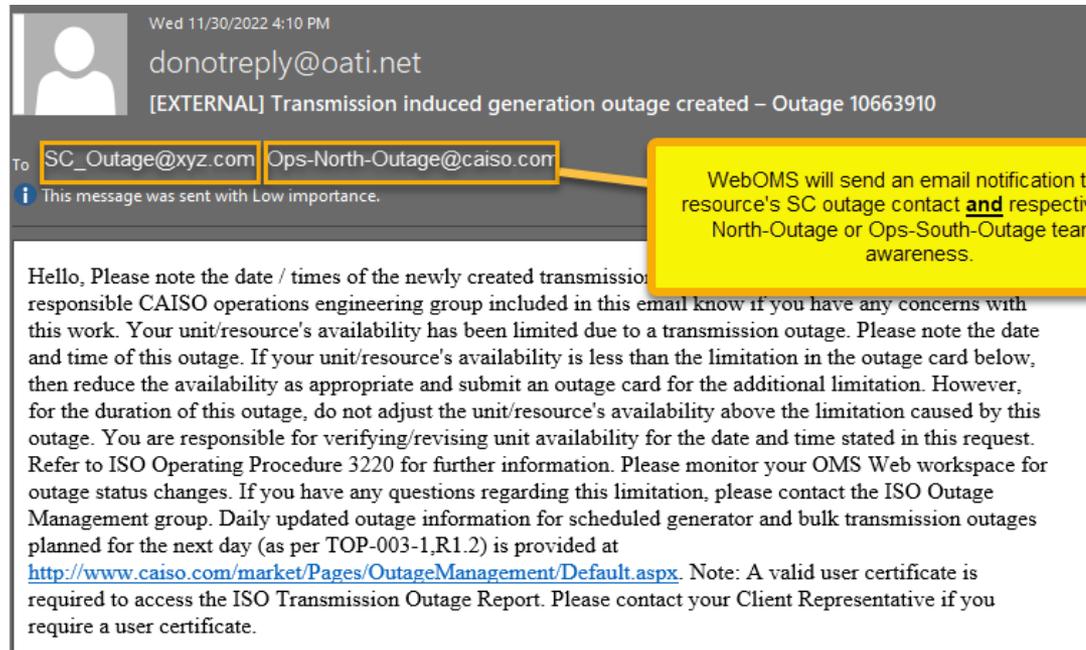


Email functionality for TIGO Resources for SCs

New email functionality:

The *Transmission Induced Generation Outage (TIGO)* email notifications for a generation resource will be automated from the WebOMS application.

Screenshot of new email notification format



Conflicting positions for overlapping timeframes

Issue: Conflicting switch positions should not be allowed for overlapping timeframes.

Solution: The system will display the proper error message when a switch has conflicting position for the same duration

NEW TRANSMISSION OUTAGE

Participant Name: [redacted]
Outage Class: Transmission
Equipment: [redacted]

Start Date/Time: 11/17/2022 00:00
End Date/Time: 11/18/2022 14:00
Outage Duration: 1 day(s) 14 hour(s) 0 minute(s)
Recurring Outage:

Outage can not be entered since it has conflicts with Pending Request for Outage ID [redacted] from (11/17/2022 01:00 (PPT)) to 11/20/2022 01:00 (PPT)), (132) from (11/17/2022 01:00 (PPT) to 11/20/2022 01:00 (PPT)) and is outside of the trumping threshold.

Station	Name	Voltage	Type	Switch Modeling Concepts	Use Facility Model	ID
[redacted]	[redacted]	13.80	BREAKER	<input type="checkbox"/>	<input type="checkbox"/>	Switch_68166
[redacted]	[redacted]	66.00	BREAKER	<input type="checkbox"/>	<input type="checkbox"/>	Switch_68161

Station	Name	Voltage	Type	Status	Start Date/Time	End Date/Time
[redacted]	[redacted]	66.00	BREAKER	Open	11/17/2022 00:00	11/18/2022 14:00
[redacted]	[redacted]	13.80	BREAKER	Open	11/17/2022 00:00	11/18/2022 14:00

Proper error message will be displayed

Outage can not be entered since it has conflicts with Pending Request for Outage ID [redacted] from (11/17/2022 01:00 (PPT)) to 11/20/2022 01:00 (PPT)), (132) from (11/17/2022 01:00 (PPT) to 11/20/2022 01:00 (PPT)) and is outside of the trumping threshold.

Ok



Thank you for your participation!

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