



# MSRS Report Updates – Secondary Reserve adjustment MW

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November 20, 2023

- 3 existing reports updated:
  - Operating Reserve Lost Opportunity Cost Credits
    - Add additional column Secondary Reserve adjustment MW to assist with MW Reduction calculation
  - CT Lost Opportunity Cost Forfeiture
    - Add additional column Secondary Reserve adjustment MW to assist with MW Reduction calculation
  - Reactive Services Credits
    - Add additional column Secondary Reserve adjustment MW to assist with MW Reduction calculation



# Operating Reserve Lost Opportunity Cost Credits

- Add additional column Sec Reserve MW Adj

Online and CSV Column Name	XML Column Name	Column Number	Data Type
Sec Reserve MW Adj	SECRES MW ADJ	3000.90	NUMBER(22,3)

- Updated calculation for MW Reduced :

If the unit is a CT or Diesel unit and is scheduled for PJM Day-ahead and not called on in Real-time, then:

$$\text{MW Reduced (3000.96)} = 0$$

If the unit is a Wind Farm unit, then:

$$\text{MW Reduced} = \text{MIN}(\text{RT LMP Desired MW, Wind Forecast MW}) - \text{RT Generation} - \text{Reg MW Adj} - \text{Synch Reserve MW Adj} - \text{Sec Reserve MW Adj} - \text{Reg High} < \text{LMP Desired}$$

$$(3000.96) = \text{MIN}( (3000.34), (3001.41)) - (3000.33) - (3000.94) - (3000.95) - (3000.90) - \text{Reg High} < (3000.99)$$

Else:

$$\text{MW Reduced} = \text{RT LMP Desired MW} - \text{RT Generation} - \text{Reg MW Adj} - \text{Synch Reserve MW Adj} - \text{Sec Reserve MW Adj} - \text{Reg High} < \text{LMP Desired}$$

$$(3000.96) = (3000.34) - (3000.33) - (3000.94) - (3000.95) - (3000.90) - \text{Reg High} < (3000.99)$$



# CT Lost Opportunity Cost Forfeiture

- Add additional column Sec Reserve MW Adj

Online and CSV Column Name	XML Column Name	Column Number	Data Type
Sec Reserve MW Adj	SECRES MW ADJ	3000.90	NUMBER(22,3)

- Updated calculation for MW Reduced :

If the unit is a CT or Diesel unit and is scheduled for PJM Day-ahead and not called on in Real-time, then:

$$\text{MW Reduced (3000.96)} = 0$$

If the unit is a Wind Farm unit, then:

$$\begin{aligned} \text{MW Reduced} = & \text{MIN}(\text{RT LMP Desired MW, Wind Forecast MW}) - \text{RT Generation} \\ & - \text{Reg MW Adj} - \text{Synch Reserve MW Adj} - \text{Sec Reserve MW Adj} - \text{Offset for} \\ & \text{Reg High} < \text{LMP Desired} \end{aligned}$$

$$3000.96 = \text{MIN}(3000.34, 3001.41 - 3000.33 - 3000.94 - 3000.95 - 3000.90 - 3000.99)$$

Else:

$$\begin{aligned} \text{MW Reduced} = & \text{RT LMP Desired MW} - \text{RT Generation} - \text{Reg MW Adj} - \text{Synch} \\ & \text{Reserve MW Adj} - \text{Sec Reserve MW Adj} - \text{Offset for Reg High} < \text{LMP Desired} \end{aligned}$$

$$3000.96 = 3000.34 - 3000.33 - 3000.94 - 3000.95 - 3000.97 - 3000.99$$

- Add additional column Sec Reserve MW Adj

Online and CSV Column Name	XML Column Name	Column Number	Data Type
Sec Reserve MW Adj	SECRES MW ADJ	3000.90	NUMBER(22,3)

- Updated calculation for MW Reduced :

If the unit is a CT or Diesel unit and is scheduled for PJM Day-ahead and not called on in Real-time, then:

MW Reduced (3000.96) = 0

Else:

MW Reduced = RT LMP Desired MW - RT Generation - Reg MW Adj - Synch Reserve  
 MW Adj - **Sec Reserve MW Adj** - Offset for Reg High < LMP Desired

(3000.96) = (3000.34) - (3000.33) - (3000.94) - (3000.95) - (3000.90) - Offset for Reg High  
 < (3000.99)

- Report updates are scheduled for Tuesday, November 28, 2023 and will be effective retroactively to trade dates starting 10/1/2022 and forward.
- Send any questions to [mrkt\\_settlement\\_ops@pjm.com](mailto:mrkt_settlement_ops@pjm.com)

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## **MSRS Report Updates - Secondary Reserve adjustment MW**



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