

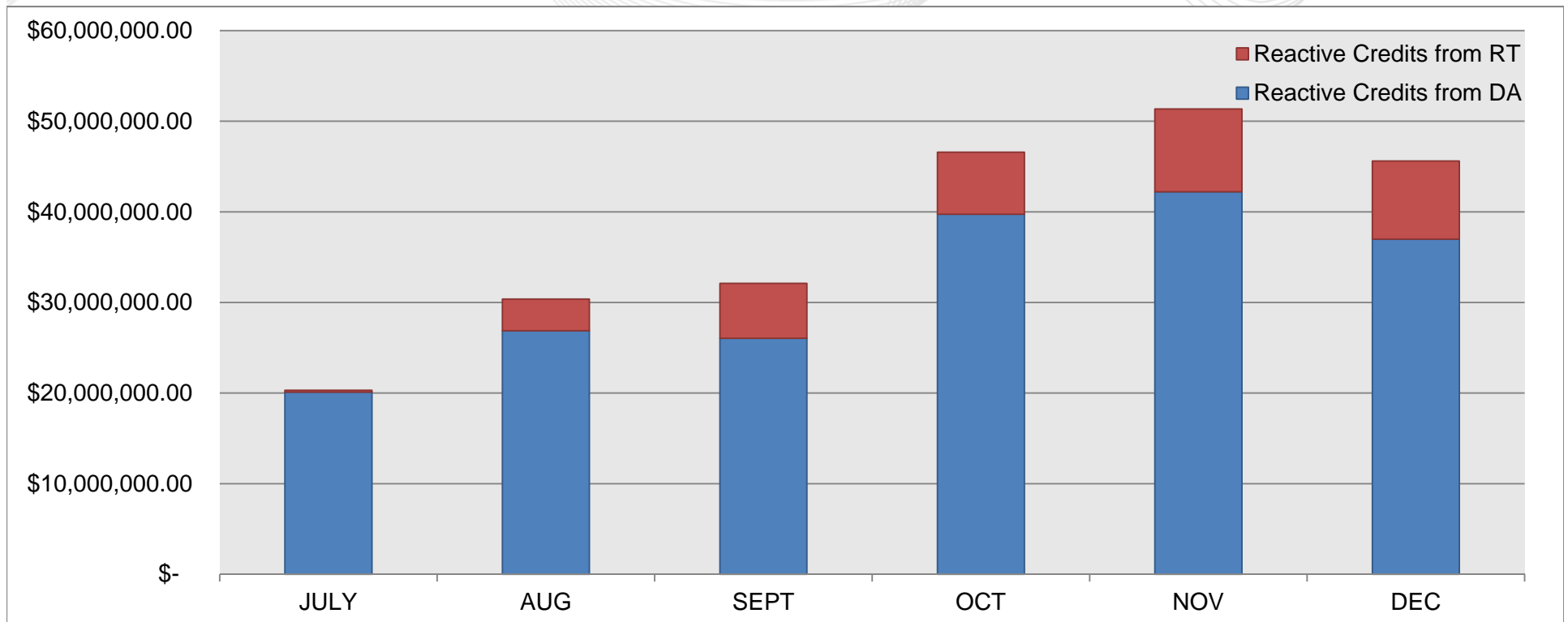


Reactive Charges Update

January 2014 Committees
Adam Keech



2013 Reactive Charges: July - December





What actually changed Dec 1, 2012?

- Prior to 12/1/12
 - Cost to make a generator whole running for Blackstart or Reactive was done through DA OR/BOR and allocated through the BORCA flow chart
 - Only credits specifically for Blackstart or Reactive were allocated through those provisions
- Post 12/1/12
 - Cost to make a generator whole running for Blackstart or Reactive now allocated through these specific Tariff provisions, not through DA OR/BOR
 - Additional credits specifically for Blackstart or Reactive still allocated through those provisions

- Prior to 12/1/12
 - GEN A for local REACTIVE in DPL Zone (< 500 kV)
 - DA OR payment = \$50,000
 - Reactive Credits = \$1,500
 - \$50,000 allocated to all DA load + DECs + exports
 - \$1,500 allocated to DPL zonal load
- Starting 12/1/12
 - GEN A for local REACTIVE in DPL Zone (< 500 kV)
 - DA OR payment = \$50,000
 - Reactive Credits = \$1,500
 - **\$50,000 + \$1,500** allocated to DPL zonal load

In some cases more reactive charges are being allocated across a smaller denominator even though the total dollar amount is not changing.



What changed on August 1, 2013?

- Change in internal PJM logging processes
 - Intent was for additional awareness for PJM operators
- Large increase in real-time reactive charges
 - Resources committed in the DA Market for reactive support in real-time also being made whole in real-time for reactive services
 - Not a direct double payment
 - **This is an error that will be resettled.**

- Resources assumed to be following dispatch and made whole hourly
 - If LMP Desired $>$ Actual MW, LOC payment
 - If LMP Desired $<$ Actual MW, additional make whole
- These credits are separate and distinct from original reactive credits accrued from scheduling the units in the DA Market

- This issue resulted in roughly \$25M-\$30M in reactive charges/credits
 - Roughly from August through late December 2013
- PJM will be resettling for this period as quickly as possible
- Adjustments should begin to appear in bills issued in January

- PJM reviewed its internal processes for scheduling
 - Have been scheduling less units for reactive for APSOUTH/BED-BLA since late December
 - Local reactive issues still require running generation
 - DPL high voltages
 - Seneca area of PN
 - Cleveland Interface
- Began creation of small closed-loop interfaces to address local reactive issues
 - These have not been implemented in pricing
 - PJM looking to roll these out in Q1 2014



Timeline

- **July 30, 2013**
 - Logging change made by PJM leading to incorrect real-time reactive charges
- **December 23, 2013**
 - PJM finds issue and corrects starting December 20, 2013
- **December 24, 2013**
 - PJM begins implementing new scheduling procedures for reactive support for transfer interfaces (APSOUTH/BED-BLA)
- **January 2014**
 - Begin rebilling RT reactive credits

