Reactive Charges Update

January 2014 Committees
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2013 Reactive Charges: July - December

Reactive Credits from RT
Reactive Credits from DA

JULY  AUG  SEPT  OCT  NOV  DEC

$-  $10,000,000.00  $20,000,000.00  $30,000,000.00  $40,000,000.00  $50,000,000.00  $60,000,000.00
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
**Simplified Example**

- **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 + DEC s + 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.**
Issue: Real-Time Reactive Settlement

- 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
• **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