

Why the proposed Settlements change concerns me

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Old System

Today

- Settlements calculation with mileage ratio (MR)
- $\text{Credit} = \text{CCP} * \text{MW} * \text{PS} + \text{PCP} * \text{MR} * \text{MW} * \text{PS}$
- CCP = Capability Clearing Price
- PCP = Performance Clearing Price

- In the current system, Reg D is always paid slightly more than Reg A, regardless of the effective MW Provided by the respective resource types
- I understood the goal of settlement changes being to ensure that resources were compensated equally per effective MW

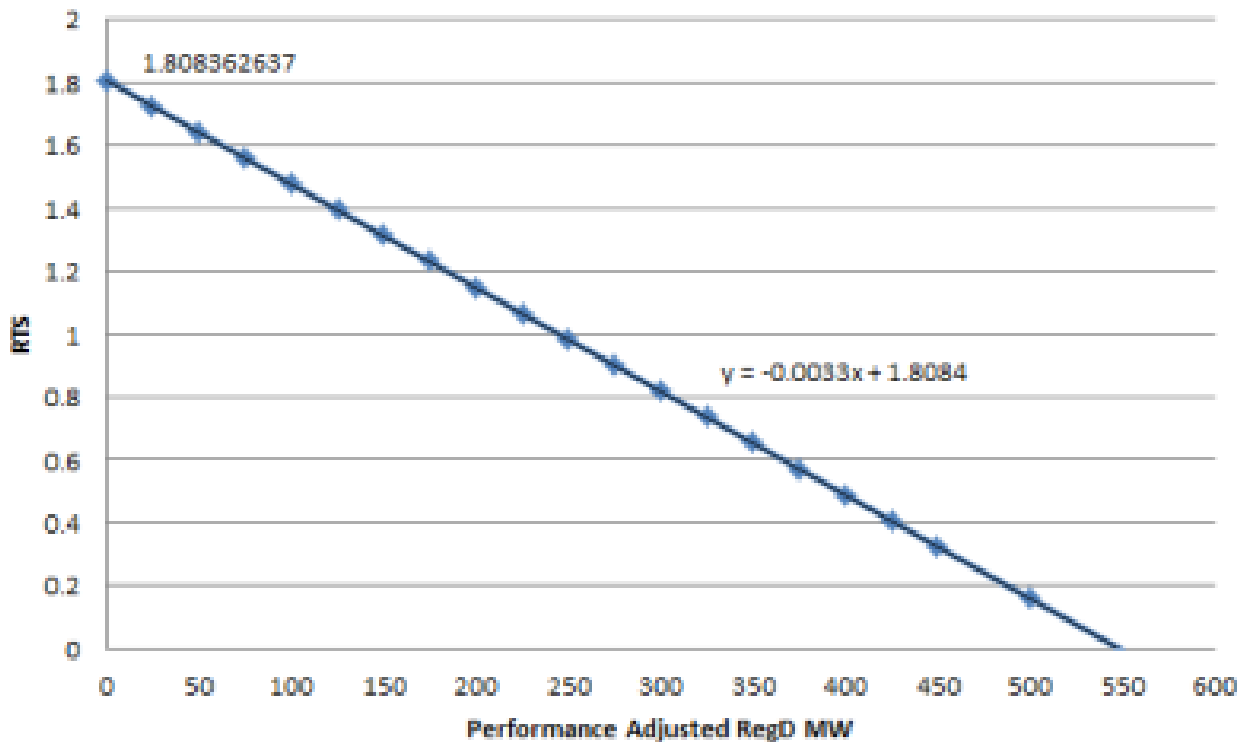
New System

- In the proposed new system, Reg D will always be paid less per effective MW than RegA
- Because the MRTS is the marginal substitution rate, all non marginal Reg D resources cleared at a higher RTS, hence they were counted in clearing as more
- (Also, having separate capability and performance prices no longer makes any sense)

Phase 1 Go-live - ongoing

- Settlements calculation with marginal rate of technical substitution (MRTS)
- $\text{Credit} = \text{CCP} * \text{MRTS} * \text{MW} * \text{PS} + \text{PCP} * \text{MRTS} * \text{MW} * \text{PS}$
- CCP = Capability Clearing Price
- PCP = Performance Clearing Price

Requirement: 800 Effective MW



- 30 minute energy storage modeled
- MRTS = 1
 - 35% Perf. Adj. MW of RegD make up total Regulation Requirement
 - 245 Perf. Adj. MW of RegD
- MRTS = 0
 - 64% Perf. Adj. MW of RegD make up total Regulation Requirement
 - 548 Perf. Adj. MW of RegD

Looking at the examples

- 30 minute energy storage modeled
 - MRTS = 1
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 - 245 Perf. Adj. MW of RegD
 - MRTS = 0
 - 64% Perf. Adj. MW of RegD make up total Regulation Requirement
 - 548 Perf. Adj. MW of RegD
- For MRTS = 1
 - 35% of 800MW is 280MW effective provided by Reg D.
 - They would be paid the same as 245 MW RegA under the proposed method (30.625%)
 - For MRTS = 0
 - 64% of 800MW is 512MW effective provided by Reg D
 - They would be paid nothing under the proposed method

My suggestion

- 30 minute energy storage modeled
- MRTS = 1
 - 35% Perf. Adj. MW of RegD make up total Regulation Requirement
 - 245 Perf. Adj. MW of RegD
- MRTS = 0
 - 64% Perf. Adj. MW of RegD make up total Regulation Requirement
 - 548 Perf. Adj. MW of RegD
- All reg gets paid per effective MW.
- For the MRTS = 1 example, 1MW of Reg D is $280/245 = 1.143$ MW effective and should be paid as such.
- For MRTS = 0, 1 MW of Reg D is $512/548 = 0.934$ MW effective and should be paid as such