



Regulation Market Issues Senior Task Force Meeting

NextEra Energy Resources Comments

September 27, 2017

NextEra supports many of the PJM/IMM proposed changes; NextEra also supports Dominion's proposal to allow uprate testing once per month

Proposal Matrix Summary

- **5: Static or Dynamic**
 - NextEra understands the PJM/IMM change to ramping/non-ramping periods by season and accepts this change
- **14: Qualification testing**
 - If 15 minute neutrality is maintained, NextEra supports Dominion's recommendation that resources should be allowed to perform uprate testing one per month rather than the currently allowed once per day
- **16: Components of performance scoring and weighting**
 - NextEra supports PJM/IMM's proposed threshold check on precision and change to precision only when score $< 75\%$ ($1/3*0 + 1/3*0 + 1/3P$)
- **17: Minimum allowable participation threshold**
 - NextEra supports PJM/IMM's proposed change increasing the 40% score to 75% historic performance score (average across the last 100 operating hours)
 - NextEra would support an even higher threshold of 80% or 85% as long as 15 minute neutrality is retained
- **18A: Change in cleared commitment – performance score**
 - NextEra supports PJM/IMM's change where self de-selection results in a zero score for the remainder of the hour, unless the PJM dispatcher de-selects the resource

NextEra does not support the PJM/IMM proposal to adopt the Marginal Rate of Substitution (MRTS) for clearing and settlement

Proposed MRTS Market Clearing Flaw

- The Performance Adjusted RegD approach does not appropriately consider asset performance
 - NextEra’s position is that the clearing methodology must include performance score
 - NextEra supports the status quo performance score with tie break logic, when required

Resource	Type	Installed MW	Performance Score	Performance Adjusted MW	Bid	Reliability Value	Proposed MRTS
Perfect Asset	D	7.5	1.00	7.5	\$1.00	HIGH “D”	ALL RESOURCES HAVE THE SAME RELIABILITY VALUE
Low Performer	D	10.0	0.75	7.5	\$1.00	LESS “D”	
Perfect Asset	A	7.5	1.00	7.5	\$1.00	HIGH “A”	
Low Performer	A	10.0	0.75	7.5	\$1.00	LESS “A”	

- The PJM/IMM proposal oversimplifies the relationship between RegA and RegD and does not appropriately consider reliability value

The Perfect RegD Asset provides more value than the Low RegD Performer

NextEra agrees with the Independent Market Monitor's view that RegD resources are not compensated appropriately

Independent Market Monitor Report⁽¹⁾

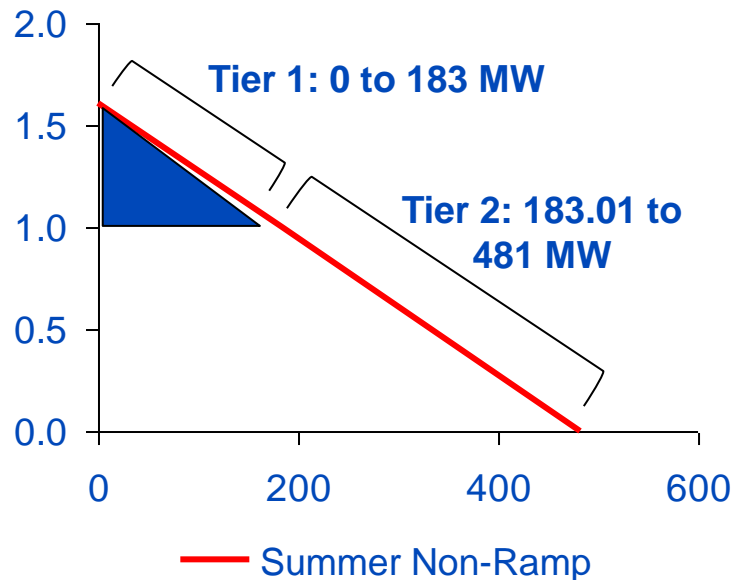
- “When the marginal benefits factor is above one, RegD resources are generally underpaid on a per effective MW basis.”
- “When the marginal benefit factor is less than one, RegD resources are generally overpaid on a per effective MW basis.”
 - emphasis added

NextEra proposes that a solution be implemented to address this concern

1) “PJM State of the Market - 2016, Section 10 Ancillary Service Markets, August 11, 2016

NextEra recommends the Marginal Rate of Substitution (MRTS) process be modified to a tiered approach for clearing and settlement

RegD Market Clearing



- Poor performing/high cost RegD resources that do not clear Tier 1 will compete for market share in Tier 2 and receive reduced payments

RegD Market Settlement

- Tier 1: RegD resources that clear the market up to $MRTS \geq 1.0$ should be paid the following:

$$\text{Net Price} = [(PCP \times \text{Mileage Ratio}) + CCP \times MRTS] \times \text{Performance Score}$$

- Tier 2: RegD resources that clear the market up to $MRTS < 1.0$ should be paid the following:

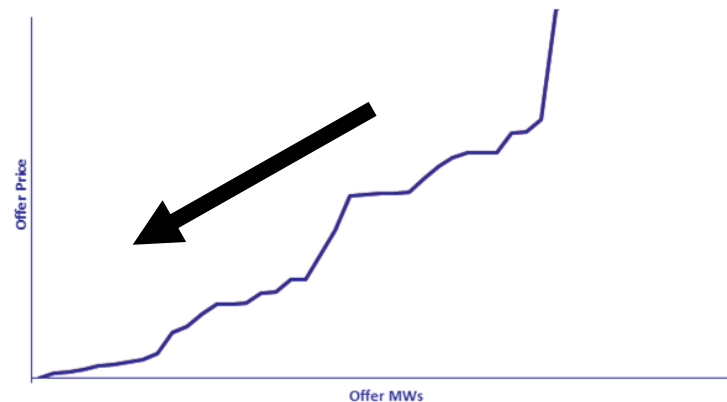
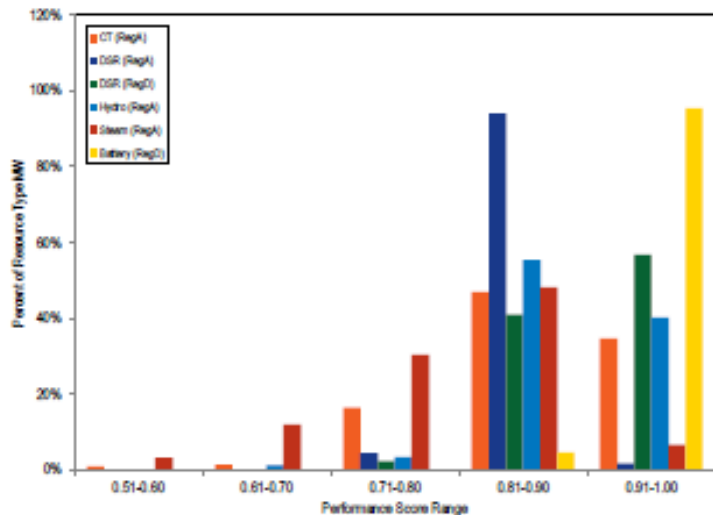
$$\text{Net Price} = [(PCP \times \text{Mileage Ratio} + CCP) \times MRTS] \times \text{Performance Score}$$

This Tiered clearing and settlement approach provides RegD resources pay for performance and appropriately considers high performing assets

NextEra's two tier approach will ensure the desired mix of RegD and RegA resources are procured to support reliability

Benefits of Two Tier Approach

- Tier 1 ensures resources seek the highest possible performance scores and resources continue to deploy technology to improve performance
- Tier 2 RegD resources clear the market and are compensated when MRTS is less than 1.0
- Tier 2 RegD can reduce the cost of regulation for customers



This tiered approach provides both reliability and market benefits

NextEra does not support the change from the 15 minute neutral signal to the 30 minute conditionally neutral signal

Proposal Matrix Summary

- **2: Characteristics of signals**
 - NextEra supports retaining the status quo; 15 minute neutrality on the RegD signal
 - Market participants have made significant investments in PJM resources to provide RegD services assuming the 15 minute neutral requirement
- **PJM's proposed change to 30 minute conditional neutrality is a significant modification to the market**
 - Changing the signal to 30 minutes unfairly shifts regulation burden to RegD
 - The change in spinning reserves is unclear and unanswered
- **Before proceeding with a change, PJM should make the signals available for an extended period to allow resources time to adjust operating procedures**
 - A change to 30 minute conditional neutrality is a significant change

RegD resources are designed for fast response and the 15 minute neutral signal should not change

Summary

- **NextEra supports many of the proposed PJM/IMM changes**
- **NextEra strongly believes the proposed Tier 1 and Tier 2 approach provides benefits to all stakeholders**
- **If PJM does move forward with any change in RegD signal, NextEra believes PJM should make the proposed signal available for an extended period as part of a transition so that resources can evaluate the impacts well ahead of the implementation date**
- **NextEra looks forward to working with all stakeholders as discussions continue**