PJM Regulation Market Issues Senior Task Force
Executive Summary of NextEra's Proposal
February 6, 2017

NextEra Energy Resources, LLC ("NextEra") is submitting this updated its alternate proposal in response to proposed changes to the current PJM Regulation market being evaluated by the Regulation Market Issues Senior Task Force ("RMISTF").

NextEra understands the challenges PJM has experienced related to resource selection and its concerns with respect to accuracy of price signals. NextEra therefore supports some of PJM's proposed changes, including the following aspects:

1) Minimum allowable participation threshold increase from 40% with transition to 55%, and
2) Adoption of the ramping/non-ramping seasonal periods implemented on January 9, 2017[1].

However, NextEra strongly disagrees with other aspects of PJM's proposal and has provided a package to the RMISTF describing alternate methods to address these items. Below is a summary of NextEra's previously provided package along with additional background related to our opposition of the key components described.

Transition

NextEra's proposal provides for a transition to allow changes to be implemented over time in a manner that is defined and allows stakeholder visibility related to market clearing and settlements. Exhibit 1 provides the transition timing for the key aspects related to signal, performance score, market clearing, and settlements.

Exhibit 1. NextEra Proposed Transition

Items	Go-live +1 Year	Go-live +2 Years	Go-live +3 Years	Go-live +4 Years	Go-live +5 Years	Go-live +6 Years	Go-live ongoing
Signal	30 minute conditional neutrality						
Participation Threshold Score	0.55						
Clear resources down to MRTS =	0.8	0.7	0.6	0.5	0.4	0.3	0.1
Settlements Calculation Tier 1	**MRTS >= 1:** [(PCP x mileage ratio)+(CCP x MRTS)] x Performance Score						Tier 1 Settlements Calculation
Settlements Calculation Tier 2	**MRTS < 1:** [((PCP x mileage ratio) + CCP) x MRTS] x Performance Score						

[1] NextEra agrees with the changes in the defined periods; however, the adequacy of the MW quantity of regulation procured remains under review and additional procurement may be necessary (Winter off-ramp = 525 MW, Winter on-ramp=800 MW).

PJM Signal Change

NextEra continues to evaluate the ramifications of the Regulation D signal from the new PJM conditional neutrality controller that was placed into service on January 9, 2017. Regulation D signal pegging is a concern.

Marginal Rate of Substitution ("MRTS") Market Clearing Methodology

NextEra does not support the adoption of the MRTS for market clearing and settlement as proposed by PJM. The proposed MRTS contains a flaw in that it does not consider asset specific performance in an effective and efficient manner. The PJM proposal oversimplifies the relationship between Regulation A ("Reg A") and Regulation D ("Reg D") resources and does not consider each resource's contribution to reliable operations. Although PJM's current proposal adjusts market offers based on performance scores, it leads to a scenario that inappropriately equates two resources that are in fact providing different levels of performance to the system. In NextEra's opinion, this structure would create scenarios that provide incentive to perform ONLY at a minimum level of service. In essence, a race to the bottom for resource providers is created as there is no incentive to be a high performer since those megawatts offered are equated to megawatts offered by a lower performing unit. There would be no incentive for resource owners to design and/or build better performing units, which is the core goal of FERC's pay-for-performance requirements. The Independent Market Monitor ("IMM") has already observed a form of this scenario in the 2016 PJM State of the Market report in which the IMM stated, "when the marginal benefits factor is above one, REGD resources are generally underpaid on a per effective MW basis…and when the marginal benefit factor is less than one, REGD resources are generally overpaid on a per effective MW basis." The scenario in which Reg D resources are not appropriately compensated will only be exacerbated by implementing the MRTS clearing methodology as proposed by PJM. PJM therefore would fail to comply with Order 755's requirement that resources be paid for performance that reflects the quantity of frequency regulation service provided when accurately following the signal.

For the above reasons, NextEra proposes that a phased approach such that the MRTS clearing floor is reduced over time. This proposed phased approach allows a transition the final MRTS floor value of 0.1.

Two Tier Settlement Methodology

NextEra proposes that a two tiered approach for settlement should be implemented along with PJM's adoption of the MRTS. A two tiered approach allows the market to appropriately consider and incentivize higher performing resources thus improving PJM's system reliability while also communicating an appropriate price signal to market participants. With the proposed two tier approach, resources that clear at MRTS levels greater than or equal to 1.0 would receive the Tier 1 settlement value (*see Exhibit 2*). PJM continues to propose that resource-specific historical performance scores will be used to rank any resources that offer to provide Reg D at the same bid price. Resources that clear when the MRTS is less than 1.0 will receive Tier 2 compensation. Resources that clear in Tier 1 and Tier 2 would be compensated based on the following formulas:

Tier 1 Settlement Value (MRTS >= 1.0) = [(PCP x Mileage Ratio) + (CCP x MRTS)] x Performance Score

Tier 2 Settlement Value (MRTS < 1.0) = [((PCP x Mileage Ratio)+ CCP) x MRTS] x Performance Score

It is noted that Tier 1 resources would continue to be paid a mileage payment consistent with FERC Order 755, but the MRTS adjustment is only applied to the CCP. Tier 2 offers that clear receive reduced compensation since the MRTS applies to both the PCP and CCP. Resources would thus be incentivized to perform at a higher level and at a lower cost. NextEra believes that the tiered approach to market clearing and settlement should be implemented for a six year transitional period (*see Exhibit 2*). PJM has a history of implementing changes with transitional periods when changes which have significant stakeholder impact occur. A recent example is the implementation of the PJM capacity market's pay-for-performance provisions which will not be fully implemented until the 2020/2021 capacity period.

Exhibit 2. NextEra Proposed Tier 1 and Tier 2 Market Settlement Example