

**PJM Regulation Market Issues Senior Task Force  
Executive Summary of NextEra’s Package/Proposal  
December 8, 2016**

At the October 25, 2016 PJM Regulation Market Issues Senior Task Force (“RMISTF”) meeting, NextEra Energy Resources, LLC (“NextEra”) presented an alternate proposal in response to proposed changes to the current PJM Regulation market being evaluated by the Task Force in light of the on-going Regulation Market Study.

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

- 1) Minimum allowable participation threshold increase from 40% with transition to 75%
- 2) Components of performance scoring and weighting
- 3) Change to ramping/non-ramping seasonal periods

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. Following 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	15 minute conditional neutrality	30 minute conditional neutrality					
Participation Threshold Score	0.6 Implement Go-live + 3 months	0.6	0.75				
Clear resources down to MRTS =	0.8	0.7	0.6	0.5	0.4	0.3	0.1
Settlements Calculation Tier 1	<b>MRTS &gt;= 1:</b> [(PCP x mileage ratio)+(CCP x MRTS)] x Performance Score						Tier 1 Settlements Calculation
Settlements Calculation Tier 2	<b>MRTS &lt; 1:</b> [((PCP x mileage ratio) + CCP) x MRTS] x Performance Score						

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**PJM Proposed Signal Change**

NextEra and other stakeholders have requested that PJM provide data related to a change from a 15 minute energy neutral signal to a 30 minute conditionally neutral signal, along with projected impacts to existing resource types. To date, PJM has provided limited information consisting of data covering a two week period of time that does not take into account seasonality such as the proposed ramp/non-ramp periods. Additionally, PJM has not made available for peer review the study supporting the proposed regulation changes, including all relevant assumptions.<sup>1</sup> It is imperative that PJM provide more significant data if the new signal is to be implemented in January 2017 as the latest RMISTF timeline suggests. The data is needed so that stakeholders can assess both the operational and financial impact the proposal will have on existing resources. Given the dramatic change in operational characteristics that have broad impacts to all stakeholders, time is needed to assess and potentially request third party verification of the internal studies PJM has performed. If PJM cannot provide such data as requested, then NextEra believes it prudent for PJM to implement the signal change as outlined in our proposal in Exhibit 1: implement a 15 minute conditionally neutral signal for one year and then 30 minute conditionally neutral thereafter. This implementation would allow all stakeholders the necessary time and data to make informed decisions related to operational capabilities as well as future economic decisions.

**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

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<sup>1</sup> In 2011, PJM commissioned KEMA study to analyze trade-offs for A/D signals. The KEMA study assumptions and details are available for peer review.

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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  $\geq$  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.

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

