California Independent System Operator
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NextEra Energy Resources Comments on the CAISO's Proposed Draft Final Cost Allocation Principles and Flexible Ramping Product Cost Allocation Proposal dated March 15th

NextEra Energy Resources, LLC ("NextEra") provides these comments on both the California Independent System Operator's ("CAISO") Draft Final Cost Allocation Principles and the Cost Allocation Proposal for the Flexible Ramping Product ("FRP") dated March 15, 2012.

Cost Allocation Principals

As a starting point for these comments NextEra would like to highlight that resource owners, and in particular variable resource owners, are often not the Scheduling Coordinators (SCs) for their resources and that Load Serving Entities ("LSE") have typically taken that responsibility for commercial reasons. It should also be noted that if the CAISO's intent is to change the resource owner's or the SC's scheduling practice for variable generation resources, such as wind and solar, there will be very little that either can do to improve forecasting 37.5 minutes before the hour. Forecasting in that timeframe has similar accuracy as forecasts 4 hours before the hour. Submitting schedules much closer to real-time is the only real way to reduce deviations. Therefore, schedulers for variable resources, whether affiliated with the resource owner or the buyer, will have little opportunity to mitigate these costs through improved behavior. Moreover, given that schedulers for variable resources are predominantly the LSEs that purchase the resource resources for compliance with state policy, it remains unclear what the overriding objective and benefit is from the CAISO proposal. Equally important, it remains uncertain, and more discussion is required to properly assess, what category(ies) of market participants is best positioned to mitigate the risk of FRP costs through other longer-term deployment of technology or portfolio modification. It should be noted that, pursuant to AB 2514, the California Public Utilities Commission has commenced a proceeding to determine the potential merits of assigning to its jurisdictional utilities an obligation to procure storage capabilities (R10-12-007). Such a proceeding suggests that those entities may be most able to financially make the long-term investments to address the impacts of greater system variability and uncertainty.

Notwithstanding the foregoing, NextEra supports the CAISO's proposal to create a more efficient ramping product to optimize dispatch, but believes that the starting point for the discussion should be the benefits created by the new market efficiency and minimizing total costs for procuring the new product. Neither of these principals is listed by the CAISO.

Benefits and not just Costs

In approaching any CAISO new product development, NextEra encourages the CAISO to focus on the product benefits in addition to the costs. Efficient market operation is a core responsibility of ISOs. NextEra is supportive of the CAISO's effort to create a market for the resources it requires to operate the system and optimize those resources efficiently so that products are procured and dispatched efficiently. For example, in the case of the Flexible Ramping Product ("FRP"), optimizing the CAISO market to secure required resources should result in savings through a more liquid real-time market, reduction in price spikes from transitory ramp scarcity, reduction in out of market procurement, and more market efficiency generally. These benefits will accrue to load and should not be ignored in any discussion of costs.

A more robust real-time market can be encouraged through various approaches including adjustments to market rules and new products, such as the FRP. Some approaches have costs while others may not, but all should have market benefits. In considering cost allocation for products that increase the efficiency of the CAISO market, the CAISO should also consider who shares the benefits of the market efficiencies associated with the market improvement. For example, if the flexible constraint or the FRP reduce exceptional dispatches or the incidents of scarcity pricing, load benefits from these market improvements. MISO, for example, is currently considering a product similar to the FRP, but proposes to allocate the cost to load since its studies indicated that the reduction of ramp scarcity events and extreme pricing more than offset the cost of the new product itself. A similar holistic approach is suitable in this process.

Minimizing Total Procurement Costs

While accurate price signals and proper assignment to entities most capable of managing the cost burden are important, the CAISO should also emphasize a principal of minimizing total procurement costs ultimately borne by consumers. Currently the CAISO procures energy and ancillary services required to meet its reliability requirements by pooling the resources in the system and securing what is necessary. Assuming efficient CAISO markets, this leads to the allocation of minimum costs to loads, but does not ensure revenue adequacy for suppliers resulting in continual efforts to recover the missing money. In the case of the FRP, the CAISO's intent is to shift the cost burden for needed flexible capacity to individual resources and loads that deviate from their updated 15 minute profiles. This structure ignores the reality that for many existing commercial arrangements the LSE procuring variable resources for RPS compliance is the scheduler for the resource. Therefore, if the intent is to increase the cost allocation to the variable generators themselves, this will not occur in the near term and may only happen in new commercial transactions.

New commercial transactions, however, will not lead to alignment with the principle of minimizing procurement costs. Each generator would need to estimate the potential cost exposure over a 20 year or longer period and factor those assumptions into the contract price. Given the virtual impossibility of pricing the product over that time horizon,

contracting entities must be conservative. This is very likely to inflate the total cost of this product collected from consumers via contract prices. Accordingly, while the CAISO will have a transparent price in the market, the risk premium factored into commercial transactions that consumers ultimately shoulder will not be apparent. Therefore it is unlikely that the CAISO's proposal to have generators pay for this ancillary service on a generator-by-generator basis represents the most efficient means to manage the totality of the costs of this product.

Cost Responsibility Manageability

As discussed more fully below, NextEra supports the principal that market participants should have the tools available to manage costs. Specifically, the CAISO states:

> *Allocating unmanageable costs does not provide market participants with the opportunity to minimize the cost drivers the cost allocation is intended to incent.*

The CAISO's proposal to allocate these costs to SCs, whether for load or resources, will provide an incentive to reduce schedule deviations. However, the reasonable capabilities of the resource must be taken into account (as they have been in the past for traditional generation resources). In the case of dispatching variable resources, an important issue is to provide an opportunity for updating schedules within 15 minutes of the dispatch period so that forecast error can be reduced in a meaningful way. Overall, NextEra strongly encourages the CAISO to provide options for scheduling closer to real-time to allow SCs of variable resources with the opportunity to manage costs and to allow the CAISO market to efficiently integrate renewable resources. In short, while the incentive will exist, the ability to change scheduling behavior for a variable resource in inherently limited.

<u>Flexible Ramping Product Cost Allocation Proposal</u>

There are three primary concerns NextEra has with the March 15th proposal:

1. Timelines for profiles submissions fail to allow adequate management of cost exposure.

2. The CAISO Resource Adequacy proposal that LSEs procure resource adequacy resources with specified operating capabilities already serves to provide generators with a revenue stream for flexibility attributes, so FRP constitutes a potentially redundant and ineffective approach.

3. The CAISO should clarify the differences in approach for allocating FRP to load and generation with deviations.

Scheduling Timelines

As proposed by the CAISO, the SC for a generation resource will submit an output value for each 15-minute RTPD interval 37.5 minutes prior to the start of the interval (i.e., forecasting 37.5 – 52.5 minutes in advance). This is a particularly problematic forecasting timeframe for variable wind and solar resources. For such resources, persistence (the current output value) works well for the next 15 minutes. Weather models work well for the period of 4-48 hours ahead of dispatch. However, forecasting for the period 30-120 minutes ahead of real-time does not provide a significantly better forecast than the four hour ahead timeframe.

In other ISOs and in the CAISO's dynamic transfer proposal, wind resources are increasingly able to update their schedules closer to real-time to mitigate imbalance energy costs and more efficiently incorporate variable resources into the market. However, the CAISO's FRP commitment timelines do not align well with the timelines when variable resources are best able to provide updated and meaningful forecasts to mitigate exposure to the CAISO commitment costs. In other words, while NextEra does not dispute the merits of the flexible ramping product and the potential market benefits, the proposed timelines for updating schedules fail to provide variable resources any meaningful ability to mitigate or manage these commitment costs.

The CAISO Should Coordinate the Resource Adequacy Proposal with the FRP

It is not clear that creating a separate product within the context of resource adequacy as well as FRP is the best means to assure accurate price signals or consistency in the application of allocation principals. Indeed, such an approach will results in convoluted price signals to the market and create the potential for double payment of resources for flexibility, particularly to resource adequacy resources that should already be making such flexibility available to the market. It is very likely that the market will pay more in totality for FRP than necessary: 1) once through a RA premium; 2) through deviations charges allocated to load and generation; and 2) through commercial transaction costs to the extent generators are asked to factor them into their product price.

Cost Allocation Treatment for Supply and Load requires clarification

It would be helpful if the CAISO could provide additional detail on how it proposes to calculate the deviation charges for load and any difference in how resources are treated comparatively. For example, it appears that demand deviations are aggregated system-wide while generators face a resource specific deviation consideration. Clarification on how this is calculated and how it may ultimately impact the total share of deviation charges for each would be helpful

NextEra appreciates the opportunity to comment on the CAISO's proposal.

Sincerely,

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