

NRG Energy, Inc. Comments on Flexible Ramping Product

Submitted By	Company	Date
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NRG appreciates the opportunity to submit these comments.

The size of the August 9, 2012 Revised Draft Final Proposal – 49 pages – reflects the growing complexity of the proposed Flexible Ramping Product ("FRP").

NRG supports the development of a CAISO market product that reflects the value of ramping capability. It seems likely that the need for flexibility will be increasingly important, and may even become as important a constraint as the need to maintain sufficient capacity to serve load and maintain adequate reserve.

NRG was a strong advocate for moving forward aggressively with the development of a market ramping product after the implementation of the flexible ramping constraint. As the development of FRP has progressed, however, the product has become bewilderingly complicated. That increased complication has not increased the value of providing ramping capability.

The proposed FRP is problematic in several regards:

- The CAISO's proposal to use a demand curve to apportion the procurement of FRP between the day-ahead market and real-time market makes FRP unlike any other CAISO ancillary service. All other ancillary services are procured fully in the day-ahead market based on the CAISO's forecast.
- The failure to adequately procure sufficient FRP to avoid triggering a power balance constraint does not, in and of itself, violate any mandatory standard requirement. This also distinguishes FRP from other ancillary services.
- The CAISO's proposed FRP procurement approach effectively turns FRP into power balance constraint violation "insurance", though the CAISO will not procure enough FRP to ensure that it will not trigger a power balance constraint.
- FRP is treated as capacity but yet not as capacity, because any value inherent in being available is surrendered if energy is dispatched from that held capacity.
- The complexity of the current FRP design, including the proposed cost allocation, strongly suggests it could not be implemented prior to early 2014.

Given these shortcomings, and with the flexible ramping constraint in place, NRG questions whether it is worthwhile to pursue development of the FRP along the current design trajectory.

The CAISO's Department of Market Monitoring has also questioned whether it is reasonable to pursue deployment of the FRP at this time.¹ NRG shares some of DMM's concerns.

If not FRP at this time – then what? NRG notes with no small amount of irony that the Department of Market Monitoring has suggested that an interim approach to implementing the hyper-complex FRP would be to procure additional non-contingent spinning reserve.² While there would be some market modifications required to make use of additional non-contingent spinning reserve, those modifications could not possibly be as complicated as the modifications that would be needed to implement the FRP. While NRG has been repeatedly surprised by what market design changes the CAISO can and cannot implement in a reasonable amount of time, NRG expects that these changes to make use of non-contingency spinning reserve could be implemented more quickly than the changes need to implement FRP as currently contemplated.

Impacts of Order 764

NRG did not support the CAISO's decision to suspend the separate Intertie Pricing and Settlement ("IP&S") stakeholder effort and roll the IP&S effort into the Order 764 compliance process. NRG believes that some form of hourly HASP settlement will survive the Order 764 compliance process, and, consequently, suspending work on replacing the hourly HASP settlement means that eliminating the highly problematic HASP settlement simply will be delayed by another year.

Because it has not yet commenced, it is not possible to know whether the Order 764 compliance process will result in a fundamental redesign of the CAISO's real-time market and the HASP process and settlement. It is possible that the CAISO will seek to create a 15-minute real-time market that dispatches internal and external resources in the same time frame and settles them on the same prices. Should that happen, it is reasonable to expect that the CAISO will need a sub-15-minute ramping product to be able to follow sub-15-minute fluctuations in system energy needs. That product could look like the current five-minute design of the FRP. However, while the implications of procuring, pricing and settling the five-minute FRP in the context of the current five-minute real-time market have been considered (though, as this stakeholder process demonstrates, those implications have not yet fully resolved), the implications of procuring, pricing and using that five-minute product within a 15-minute real-time market have not been considered.

If the CAISO is likely to consider a significant redesign of the real-time market as part of the Order 764 compliance process, it should defer finalizing FRP pending the direction that process takes.

¹ September 4, 2012 Department of Market Monitoring *Comments on the Revised Final Draft Proposal for Flexible Ramping Product* at 2 (available at <http://www.aiso.com/Documents/DMM-Comments-FlexibleRampingProductRevisedDraftFinalProposal.pdf>) ("DMM FRP Comments")

² DMM FRP Comments at 3. NRG proposed this approach in its protest of the flexible ramping constraint. See *Motion to Intervene and Protest of the NRG Companies*, submitted October 28, 2011, in Docket No. ER12-50, at 8-11 (available at <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12805660>).

Combining RUC and IFM

There is merit in combining RUC and IFM. The cost implications of the reliability actions taken in RUC should be reflected in IFM prices. Otherwise, RUC remains a stand-alone process that does not have any meaningful impact on primary market (day-ahead and real-time) prices.

However, NRG agrees with the comments submitted by the CAISO's Department of Market Monitoring that combining the day-ahead integrated market and RUC introduces enough issues, and has enough implications, that considering combining RUC and IFM warrants its own separate stakeholder process.³

Modifications to PIRP to encourage dec bidding

Among the changes the CAISO is considering in the FRP initiative is modifying the PIRP program to allow PIRP resources to submit decremental energy bids. NRG supports this modification to PIRP as proposed by the CAISO. This change to PIRP would complement the CAISO's proposal to lower the bid floor from \$-30/MWh to \$-150/MWh. It would be preferable to allow PIRP resources to reduce output rather than contributing to over-generation that would drive energy prices even lower.

Should the CAISO elect to defer work on FRP, the CAISO should consider separating the PIRP dec bidding effort from FRP and move forward with that effort separately.

Summary

NRG recommends that the CAISO defer the development of the FRP to the Order 764 compliance process.

NRG also respectfully urges the CAISO to instead consider implementing modifications to procure additional non-contingent spinning reserve as an interim market measure.

³ DMM FRP Comments at 5.