



Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: October 25, 2017

Re: Decision on resource adequacy availability incentive mechanism modifications

This memorandum requires Board action.

EXECUTIVE SUMMARY

The ISO developed the resource adequacy availability incentive mechanism (RAAIM) to ensure resource adequacy resources have the proper incentives to (1) be available to the ISO consistent with their must-offer obligation and (2) provide replacement capacity if the resource incurs a forced outage. Shortly after the RAAIM provisions were implemented on April 1, 2017, some market participants raised questions about the validity of their RAAIM settlement charges. In response, the ISO conducted a review of the RAAIM settlement calculation. Through this review, the ISO found that the current RAAIM calculation allows a resource to significantly reduce its incentive to be available consistent with its must offer obligation.

Specifically, the current RAAIM calculation allows a resource providing a large quantity of generic RA capacity to significantly reduce its RAAIM exposure by providing only a single MW of flexible RA capacity. This degrades a RA resource's incentive to provide replacement capacity for an outage of their resource, which can affect the ISO's ability to reliably operate the grid during peak load conditions and result in the need for backstop procurement.

Management proposes to resolve this issue by separately calculating the RAAIM settlement for generic (system and local) RA resources and flexible RA resources. Separating the calculations resolves the issues caused by combining the RAAIM into a single calculation.

Management believes the proposed modifications are necessary to ensure proper incentives are in place for RA resources to meet the must offer and outage replacement obligations. Management proposes to apply these modifications prospectively and will not resettle past charges caused by the existing RAAIM calculation.

Management proposes the following motion:

Moved, that the ISO Board of Governors approves the proposal to modify the resource adequacy availability incentive mechanism as described in the memorandum dated October 25, 2017; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change, as described in the memorandum dated October 25, 2017.

DISCUSSION AND ANALYSIS

The proposed modifications to the RAAIM calculation are designed to provide clear incentives for RA resources to meet their must offer obligations and provide replacement capacity if they incur a forced outage. The current RAAIM calculation was designed as a single value based on the combined performance of a resource in meeting the must offer obligations associated with all the RA products the resource is shown to provide. For example, if a 100 MW resource was shown as having 100 MW of generic RA and 50 MW of flexible RA, the ISO would calculate RAAIM by taking a weighted average of the resource's performance. An unintended consequence of the current RAAIM calculation occurs because flexible RA capacity has 17 RAAIM assessment hours per day, but generic RA capacity has only 5 assessment hours per day. Therefore, in the current combined calculation, flexible RA performance has a much greater weight than generic RA performance. Given this, the current methodology creates an incentive for an RA resource to simply show 1 MW of flexible capacity to significantly reduce its exposure to availability charges. The reduced exposure to availability charges reduces the incentive for resources to follow their RA obligation to offer the resource into the ISO market and to provide substitute capacity during outages.

Management proposes to change the RAAIM calculation to assess availability separately for system and flexible RA. Calculating the performance of generic and flexible RA separately provides clear incentives for meeting the offer obligations of the different products. It also removes the potential for a resource to manipulate its overall availability measurement by taking advantage of the differences between flexible RA and generic RA.

The following example demonstrates the impact that adding one MW of flexible capacity can have on a resource's exposure to RAAIM using the current formula and how Management's proposal effectively mitigates a resource's ability to lower its exposure to RAAIM charges under such circumstances.

Example with current calculation					
Resources	System	Flexible	RAAIM charge from a 5 day outage		
Resource A	100 MW	0 MW	\$69,393		
Resource B	100 MW	1 MW	\$14,567		
Example using proposed modifications					
Resources	System	Flexible	RAAIM charge from a 5 day outage		
			System	Flexible	Total
Resource A	100 MW	0 MW	\$69,049	\$0	\$69,319
Resource B	100 MW	1 MW	\$68,626	\$423	\$69,049

POSITIONS OF THE PARTIES

Stakeholder comments were generally supportive of modifying the RAAIM calculation to eliminate the identified issues and inappropriate incentives. However, some stakeholders assert that the ISO should use approaches that differ from Management's current proposal.

DMM, SCE, and NRG all assert that the ISO should develop separate prices for compliance with generic RA must offer obligations and flexible RA must offer obligations. The primary challenge to reopening the door to separate prices for generic and flexible capacity would be to determine the correct prices for each. RA products are procured by load serving entities bilaterally outside of the ISO market. As a result, the ISO has limited information on the different price values of generic RA and flexible RA capacity. This issue was raised in the initial Reliability Service Initiative – Phase 1 FERC filing as well. FERC determined in its final decision that using the same price for both generic and flexible capacity was just and reasonable. Given this precedent, the challenges of determining the correct prices for each product, and the need to correct RAAIM incentives prior to summer 2018, Management has elected to maintain the single price policy in this proposal.

SDG&E opposes separating the flexible and generic availability calculations. SDG&E asserts that separating generic and flexible capacity availability calculations is a major departure from the policies developed in the reliability service initiative – phase 1 stakeholder process. Management agrees. Therefore, Management will seek additional tariff authority to reflect any necessary changes and will only apply the modified changes prospectively.

DMM offered an alternative calculation for determining availability. Management

considered DMM's alternative methodology and determined that it would reduce incentives for resources to follow flexible RA must offer obligations.

PG&E and Six Cities do not oppose the current proposal, but ask for additional stakeholder engagement through tariff and Business Practice Manual development to ensure a smooth implementation process. Management commits to working closely with stakeholders through the tariff and BPM development process.

CONCLUSION

Management requests the Board approve its proposals for the prospective modifications to the existing resource adequacy availability incentive mechanism calculations. The proposed modifications will provide enhanced incentives for resources to meet their resource adequacy availability obligations.