

Reliability Must Run and Capacity Procurement Mechanism Enhancements Revised Straw Proposal

Comments by Department of Market Monitoring

October 23, 2018

Overview

DMM appreciates the opportunity to comment on *the ISO's Reliability Must Run and Capacity Procurement Mechanism Enhancements Revised Straw Proposal* issued on September 19, 2018.¹

The Revised Straw Proposal includes modifications to the CAISO's current CPM and RMR provisions which represent an appreciable improvement from the current CPM and RMR framework. The ISO's proposed changes are significant incremental enhancements to the existing design. However, DMM believes the ISO's current proposal falls short of "a package of more comprehensive reforms" which FERC encouraged the ISO to propose in its Order on the ISO's Risk-of-Retirement Capacity Procurement Mechanism filing.²

DMM recognizes the challenge of designing truly comprehensive reforms of CPM and RMR provisions of the CAISO tariff given the ongoing effort in CPUC proceedings to develop comprehensive changes to the state's resource adequacy (RA) program. Thus, DMM encourages the CAISO to move forward with changes that address some of the fundamental flaws in the CPM and RMR framework, while continuing to work on more fundamental changes in conjunction with changes to the RA process. DMM suggests that the ISO move forward with important enhancements such as placing must-offer obligations on RMR resources and clawing back net market revenues above the CPM soft offer cap, on an expedited timeline. The ISO could classify these changes as necessary incremental enhancements to the existing design while continuing to develop broader design changes.

RMR versus CPM Procurement

Under the Revised Straw Proposal, the ISO will continue to maintain two backstop procurement frameworks, adding clarification that CPM is to be used as a backstop to the RA program while

¹ *Reliability Must Run and Capacity Procurement Mechanism Enhancements Revised Straw Proposal*, California ISO, September 19, 2018.

<http://www.caiso.com/Documents/RevisedStrawProposal-ReliabilityMustRunandCapacityProcurementMechanismEnhancements.pdf>

² *Order rejecting tariff revisions*, ER18-641-000, April 12, 2018, p. 18.

<https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14887575>

the RMR mechanism will be used to address resource retirements.³ While the ISO outlines a *process* for determining when CPM versus RMR should be used, continuing to offer two backstop procurement mechanisms with distinct compensation schemes will not prevent pivotal resources (with locational market power) from self-selecting designations based on their preferred compensation.

CPM designations will continue to be voluntary and can be declined by suppliers with market power that prefer RMR compensation. DMM shares concerns raised by other stakeholders that under the current and proposed framework, newer pivotal resources with undepreciated capital costs will be incentivized to self-select RMR compensation while older pivotal resources will be incentivized to self-select CPM compensation. It is not clear what efficiencies this self-selection provides.

If two separate backstop procurement mechanisms and compensation structures are necessary, the ISO should provide an economic rationale for maintaining both. If there is no rationale for maintaining two different compensation structures other than the fact that each has been approved by FERC in separate cases, the ISO should consider consolidating CPM and RMR, or at the very least, aligning CPM and RMR compensation and adding supplemental rules to prevent self-selection between designations based on maximization of compensation.

DMM believes the ISO has not yet adequately addressed how backstop procurement mechanisms fit into the overall resource adequacy framework to support efficient bilateral procurement and resource retention, retirement, and replacement. DMM supports the ISO moving forward expeditiously with key incremental enhancements to the CPM and RMR framework such as applying a must offer obligation to RMR resources (with limited exceptions) and clawing back net market revenues above the CPM soft offer cap. However, DMM encourages the ISO to develop more comprehensive changes to its backstop procurement mechanisms than those currently proposed, in order to fully address potential inefficiencies of the overall CPM and RMR design.

Resources “mothballing” vs retiring

A key change in the Revised Straw Proposal is that the CAISO seeks to clarify that the CPM procurement will be used only to backstop the RA program, while RMR procurement will only be used to address resource retirements.⁴ However, the flow diagram in the Revised Straw Proposal clearly indicates that RMR will be used in cases when a “resource provides ISO with formal written notice of retirement or mothball.”⁵

³ *Revised Straw Proposal*, p. 13.

⁴ *Revised Straw Proposal*, p. 13.

⁵ *Revised Straw Proposal*, Figure 2. p. 14

DMM believes that the inclusion of resources indicating they will “mothball” (rather than retire) warrants significant additional discussion and clarification. For instance, is there a minimum time period that a unit would need to assert it will “mothball”? In practice, it may be difficult to distinguish between a unit that indicates it plans to go on an “economic outage” of an undetermined length versus one that would mothball for an extended or indefinite period. DMM believes that details governing the eligibility of units that may mothball for RMR designations may have a major impact on the amount of resources that may end up under RMR contracts.

RMR and CPM compensation

The Revised Straw Proposal misrepresents DMM’s prior recommendations concerning compensation. The Revised Straw Proposal asserts that:

DMM and the CPUC have indicated a desire to change compensation for RMR resources from the existing full cost of service compensation paradigm to Going Forward Fixed Costs (“GFFC”). GFFC does not include any rate of return, and would therefore imply a rate of return of 0%. The ISO does not believe that this would be appropriate, and would contradict recent FERC precedent.⁶

DMM’s prior recommendations clearly suggested that compensation for the ISO’s backstop procurement mechanism (which include CPM and RMR) should include GFFC plus a reasonable profit. As stated in DMM’s comments on the ISO’s prior straw proposal:

Going Forward Fixed Cost (GFFC) plus a reasonable net profit would provide fair compensation to resources contracted for backstop capacity. If a unit needed for reliability would truly retire or mothball if not contracted by the CAISO, then compensating the unit based on its GFFC plus any additional net profit would be more profitable for the unit than if it was actually retired or mothballed. GFFC-based compensation also avoids market distortions that may incent resources to seek a backstop capacity contract rather than participating in the RA process.⁷

DMM’s comment went on to suggest two approaches which ensured recovery of GFFC plus a reasonable profit.

- Compensate resources GFFC plus a reasonable fixed profit and credit net market revenues back to ratepayers; or
- Compensate a resource at its GFFC and allow it to keep net market revenues.

⁶ *Revised Straw Proposal*, p. 25

⁷ *Review of RMR and CPM Straw Proposal and July 11, 2018 working group*, Comments by Department of Market Monitoring, August 17, 2018, p.2.

<http://www.caiso.com/Documents/DMMComments-ReviewofReliabilityMust-RunandCapacityProcurementMechanism-StrawProposal.pdf>

Going Forward Fixed Cost (GFFC) plus a reasonable net profit would provide fair compensation to resources contracted for backstop capacity. If a unit needed for reliability would truly retire or mothball if not contracted by the CAISO, then compensating the unit based on its GFFC plus any additional net profit would be more profitable for the unit than if it was actually retired or mothballed. GFFC-based compensation also avoids market distortions that may incent resources to seek a backstop capacity contract rather than participating in the RA process.

CPM Pricing

As noted in DMM's prior comments, if the current CPM soft offer cap is paid to a resource for all 12 months of an annual CPM, this compensation is likely to exceed the annual GFFC of many resources. In addition to this fixed payment, CPM units keep all market revenues.

To prevent pivotal resources from withholding capacity from the bilateral market in favor of compensation at the soft offer cap which might far exceed a resource's annual GFFC, the ISO should reconsider the level of the soft offer cap for annual CPMs.

Alternatively, the ISO could consider SCE's suggestion discussed in the September 27th stakeholder meeting, which is to apply a market power test to CPM processes. DMM notes that this framework would be similar to other ISOs' application of pivotal supplier tests in capacity auctions. Other ISOs apply pivotal supplier tests to capacity auctions and cap offers of pivotal resources at competitive levels.

In general, other ISOs calculate competitive capacity offers for pivotal resources reflecting GFFC net of forecasted market revenues, or *net avoidable costs*. If resources are uneconomic but are needed for ISO reliability, then suppliers generally have the option to accept compensation at a calculated reference value, or file at FERC for additional out of market compensation. Applying similar processes to the ISO's CPM framework would eliminate a pivotal supplier's incentive to self-select compensation at the soft offer cap when this compensation far exceeds its resource's GFFC.

The Revised Straw Proposal introduces a change to the CPM compensation for units bidding in excess of the soft offer cap. Under the Revised Straw Proposal, units bidding over the soft offer cap which seek compensation including a return on sunk costs under Schedule F of the RMR agreement would credit back all net market revenues. DMM believes that while this is an improvement, this change does not address the fundamental problems with the CPM/RMR payment structure.

RMR Condition 1 compensation

DMM believes the Revised Straw Proposal misrepresents prior FERC orders and rulings in cases directly applicable to the CAISO markets regarding the use of going forward fixed costs (GFFC) versus annual fixed revenue requirements (AFRR) in compensation for resources under reliability contracts. For example, the Revised Straw Proposal asserts that:

In a 2000 initial decision for RMR designations in the ISO, FERC notes that “rates must provide an opportunity for service providers to recover their cost of service, which subsumes both a return of and on investment.”⁸

The complete quotation from the 2000 decision cited by the CAISO is as follows:

It is axiomatic under traditional cost-of-service ratemaking principles that rates must provide an opportunity for service providers to recover their cost of service, which subsumes both a return of and on investment [*citing Hope and Carolina cases*]⁹....[emphasis added]

The 2000 RMR decision then goes on to explain that the Hope and Carolina cases referenced in the FERC order quoted by the ISO is outdated and not applicable in the ISO’s market design:

Hope and Carolina Power reflect a superceded cost-of-service paradigm. That framework envisioned neither competition among service providers nor any opportunity for them to earn market-based rates. In contrast to the regulated environment in which *Hope and Carolina Power* were decided, California's electric industry has been restructured to rely on competitive markets to establish appropriate rates for services And unlike the regulated markets addressed in *Hope and Carolina Power*, competitive markets do not guarantee the opportunity for return of/on investment through cost-based rates. That opportunity is provided through authority to charge market-based rates for services¹⁰

.. even in a pure cost-of-service environment, *Hope and Carolina Power* do not unconditionally guarantee return of/on investment. Those cases stand for the more limited ratemaking principle that rates must provide an *opportunity* for return of/on investment.¹¹

Moreover, prior to the 2000 RMR decision, compensation under Condition 2 of the RMR contract had already been settled under an April 1999 Stipulation and Agreement for a three

⁸ *Revised Straw Proposal*, p. 26, citing “Judge Young Order in 2000”. CAISO has indicated that the order referenced is 91 FERC ¶ 63,008, ER98-495-000, Initial Decision, Issued June 7, 2000 (Judge Young Order) <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=8381621>

⁹ Judge Young Order, p.24

¹⁰ Judge Young Order, p.25

¹¹ Judge Young Order, p.25

year period ending in December 2001. The RMR ruling cited in the Revised Straw Proposal only involved the Fixed Option Payment (FOP) of units under Condition 1 of the RMR contract.¹²

On the issue of Condition 1 compensation, the 2000 RMR ruling found that for units which retained market revenues (which now include units under the current CPM provisions of the ISO tariff), the appropriate level of compensation is the *net incremental cost* approach supported by the CAISO at that time.¹³ As explained in the 2000 RMR decisions:

"Going forward" costs are the costs of keeping an uneconomic unit operating in the absence of RMR obligations. Rational actors in a competitive market would shut down any unit whose going forward costs exceeded net incremental cost compensation. Paying the RMR unit owner the difference between net incremental cost and going forward costs eliminates the economic incentive to shut down the unit, thereby preserving unit availability for RMR dispatch.¹⁴

The decision went on to note that:

In addition, compensating ... RMR availability obligations at net incremental cost would provide appropriate price signals for potential replacement resources. The record indicates that allocating sunk costs to RMR availability payments would create perverse incentives to invest in duplicative or uneconomic generation, transmission and demand-side management.... In addition, allocating sunk costs to RMR availability payments also would undermine the ISO's ability meaningfully to determine and evaluate economically efficient alternatives to RMR generation under its Local Area Reliability System process.¹⁵

DMM provided an example of how providing compensation based on AFFR would encourage uneconomic and inefficient investments in alternatives using approximate values for AFRR and GFFC for the Metcalf Energy Center, which received an RMR designation for 2018.¹⁶

Other FERC Rulings

The Revised Straw Proposal also cites other FERC rulings that do not actually support the CAISO proposal. For example, the ISO indicates that in a 2016 NYISO RMR Order:

¹² Judge Young Order, Section IV, p.13.

¹³ The *net incremental costs* of remaining in service to meet local reliability requirements represents a unit's going forward fixed costs less its net revenue earned from participation in the ISO and bilateral markets.

¹⁴ Judge Young Order, p. 25.

¹⁵ Judge Young Order p. 28.

¹⁶ *Motion to Intervene and Protest of the Department of Market Monitoring of the California Independent System Operator*, ER-641-000, February 2, 2018, pp. 10-11.

http://www.caiso.com/Documents/feb2_2018_DMMIntervention_Protest-RORCPM_ER18-641.pdf

.... the Commission stated that compensation to an RMR generator ‘must at a minimum allow for the recovery of the generator’s going-forward costs, with parties having the flexibility to negotiate a cost based rate up to the full cost of service.’¹⁷

This citation simply indicates that in that case, the Commission found that RMR compensation should be bounded by a minimum level which allows for recovery of GFFC and a maximum negotiated level up to full cost of service.

The ISO also cites a 2006 Order on RMR agreements for Mystic units in the ISO New England footprint:

Consistent with our determinations in other RMR proceedings, the Commission will reject the intervenors’ request to limit cost recovery to going-forward costs or to a form of levelized costs ... full cost of service recovery is consistent with the cost-of-service provisions of Market Rule 1 and thus appropriate for RMR Agreements.¹⁸

Both the NYISO RMR order and the ISO-NE/Mystic order appear to establish full cost of service as an upper bound on compensation for resources needed for reliability, but do not establish this form of payment as a minimum or the only appropriate compensation for such resources.

The fact that the current RMR structure may be consistent with FERC precedent (insofar as it may be within range of reasonableness suggested by some prior rulings) should not preclude the ISO from considering changes to CPM and RMR payment structures that are also consistent with FERC precedent but which drive efficient behaviors and prevent arbitrary self-selection between designations.

Net RUC revenues for RMR resources

While the ISO proposes to claw back net RUC revenues from RMR Condition 2 resources,¹⁹ DMM believes whether to claw back RUC revenues from RMR *Condition 1* resources warrants further discussion

If the ISO believes Condition 1 RMR resources should retain RUC revenues, then forecasted RUC revenues should be included in market revenues netted against the resource’s fixed contract payment. However, RUC payments are capacity availability payments and should therefore be credited back to offset the cost of these capacity payments. RMR capacity is fully contracted and will be treated like RA capacity in other respects under the ISO proposal. RMR units should be treated as RA capacity with respect to RUC payments as well.

¹⁷ *Revised Straw Proposal*, p.26, citing “2016 order on compliance and rehearing to NYISO”. CAISO has indicated that the order referenced is 155 FERC ¶ 61,076, ER16-120-000, Order on Compliance and Rehearing, Issued April 21, 2016. <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14238304>

¹⁸ *Revised Straw Proposal*, p. 26, citing “Mystic Filing”. CAISO has indicated that the order referenced is 114 FERC ¶ 61,200, ER06-427-000, Order Accepting and Suspending Agreement and Establishing Hearing and Settlement Judge Procedures, February 24, 2006. <https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10960068>

¹⁹ *Revised Straw Proposal*, p. 20.

Benchmarking with other ISOs

DMM believes that the CAISO's efforts at comprehensive redesign of the CPM/RMR framework to may benefit from additional benchmarking of the details of how other ISOs have dealt with similar issues.

Assessments of unit economics upon notice of deactivation

Other ISOs have a variety of rules and processes that supplement resource deactivation processes. PJM and NYISO require resource owners to submit detailed cost information to the ISO or their market monitors upon notification of deactivation for purposes of assessing unit economics and the reasonableness of retirement decisions. This information is also used to identify potential market power issues.²⁰ NYISO also uses cost submissions to calculate an Availability and Performance Rate (APR) which the NYISO uses as a basis for RMR compensation.²¹

ISO-NE's market monitor reviews capacity offers of resources seeking to deactivate that exceed a competitive bid threshold. As these offers are expected to exceed auction clearing prices, resource owners must submit detailed cost information to the ISO which will allow its market monitor to assess the validity of capacity offers and address any market power issues.²²

Cost of service compensation

PJM, NYISO, and ISO-NE or their market monitors generally calculate going forward costs or avoidable costs of resources seeking retirement or deactivation and use calculated rates as a starting point for RMR compensation. Though these ISOs allow suppliers to seek cost of service compensation, PJM, NYISO, and ISO-NE generally treat cost of service compensation as an upper bound on RMR compensation and rely on suppliers to justify cost of service rates with FERC. Cost of service compensation is treated as an option rather than the default compensation framework for RMR resources in these ISOs.²³

²⁰ NYISO OATT, 38 OATT Attachment FF Generator Deactivation Process, Section 38.3.
https://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp

PJM OATT, Attachment M, Section IV Deactivation Rates.
<https://www.pjm.com/directory/merged-tariffs/oatt.pdf>

²¹ NYISO OATT, 38 OATT Attachment FF Generator Deactivation Process, Article 4 – Compensation and Settlement. APR consists of avoidable costs, variable costs, and availability and performance incentives. A resource owner may reject the NYISO-calculated APR, however, and separately seek FERC approval of an Owner Developed Rate as specified in Section 38.11.5.

²² ISO New England Tariff Section III, Market Rule 1 Section 13 – Forward Capacity Market, Section 13.1.2.3.2.1.
https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_3/mr1_sec_13_14.pdf

²³ ISO New England Tariff Section III, Market Rule 1 Section 13 – Forward Capacity Market, Section 13.2.5.2.5.19(b). NYISO OATT, 38 OATT Attachment FF Generator Deactivation Process, Article 4 – Compensation and Settlement. PJM OATT, Attachment M, Section IV Deactivation Rates

Facilitation of resource retirement

While the ISO proposes that a resource owner will be required to submit an officer affidavit if it plans to retire a resource, the ISO does not propose additional rules that hold a resource owner accountable for such attestations. Other ISOs supplement the resource retirement process with policies that facilitate both the retirement and replacement of a retiring asset.

For example, as part of NYISO's resource deactivation process, if a reliability issue is identified due to a resource's deactivation the NYISO will open a solicitation for solutions to address the reliability need. Proposed solutions may include generation or transmission projects which are evaluated against the costs of an RMR agreement.²⁴

As part of a comprehensive design, the ISO should consider how CAISO backstop procurement, the RA program, and the Transmission Planning Process will facilitate both resource retirement and efficient entry of new resources or development of transmission solutions to resolve reliability needs.

²⁴ NYISO OATT, 38 OATT Attachment FF Generator Deactivation Process, Section 38.4