# RDRR Bidding Enhancements

# Second Revised Straw Proposal

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# 1. Executive Summary

The CAISO has bifurcated the Reliability Demand Response Resource (RDRR) Bidding Enhancements into two tracks to facilitate board approval and summer 2022 implementation to align RDRR bidding rules with real-time price conditions and leave the rest of the enhancements for a future policy and implementation timeline.

- Track 1 will address aligning RDRR bidding rules with real-time price conditions, consistent with Order No. 831, seeking a March 2022 ISO Board of Governors approval and Summer 2022 implementation.
- Track 2 will address adjusting discrete RDRRs operating range to reflect operational capabilities in real time and re-examining the cap on discrete RDRR registration. It is planning for a May 2022 ISO Board of Governors approval and implementation in either fall of 2022 or 2023.

In this Track 2 Second Revised Straw Proposal, the CAISO proposes select enhancements to real time bidding for the RDRR by:

- Addressing infeasible RDRR real-time dispatches through a market enhancement, recognizing known operational capabilities. The CAISO proposes a solution for discrete RDRRs, whereby the CAISO would re-rate the resource's Pmin below the resource's upper economic limit and a formula will be used to represent to the market the resource's minimum load cost. This is to ensure that the resource is not viewed as "free" by the market, thus preventing a real time infeasible dispatch from occurring. This automatic adjustment will occur after the day ahead market, and will not require any action from Scheduling Coordinators.

- Updating the discrete RDRR cap to 100 MW and allowing for exceptions to the cap on a case by case basis. The CAISO recognizes that the previous concerns regarding an imbalance are solved with the Pmin re-rate functionality being implemented and will allow for a higher discrete RDRR cap.

## 2. Background

On June 24, 2010, in D.10-06-034 the CPUC approved a multi-party settlement in its demand response proceeding (R.07-01-041) that required investor-owned utilities to transition their CPUC-approved retail emergency-triggered demand response programs into a CAISO reliability demand response product.[1] The settlement specified the minimum operating and technical requirements for retail emergency-triggered demand response resources. The CPUC settlement also required these resources be made available for emergency operating procedures. While previously emergency demand response, like RDRR, were triggered under a "Warning" notice it will now be referred to as an "EEA 2". [2]

Consistent with the terms of the CPUC settlement, the CAISO developed the RDRR product. On October 26, 2010, the CAISO Board of Governors authorized the RDRR product. The Board of Governors memorandum approving the RDRR product specifically noted that it would enable the CAISO "to dispatch these emergency-triggered programs when and where they are needed and, appropriately, reflect their value in the [CA]ISO market."[3]

Fast forward ten years to the August 2020 load shedding events, the Final Root Cause Analysis of these events found that RDRRs were manually dispatched out of market by the CAISO system operators versus through the "market" as originally envisioned.[4] As a result, in its 2021 Summer Readiness initiative, the CAISO modified its tariff to dispatch RDRRs in the real-time pre dispatch (RTPD) market run so that RDRRs could be more optimally dispatched through the market provided they have a longer dispatch horizon. Additionally, the CAISO updated its tariff to allow RDRRs to register as 5-, 15-, or 60-minute dispatchable resources to better elect and reflect an RDRR's operating parameters. Resources registered as 15-minute dispatchable are allowed to set the marginal energy price in the fifteen-minute market. Resources registered as 5- minute dispatchable are allowed to set the marginal energy price in RTD. These changes were accomplished by reflecting discrete RDRRs as discrete in the scheduling run, but treating them as continuous in the pricing run. Continuous RDRR's bid curve submitted by the scheduling and pricing runs allows RDRR to set the price. RDRRs registered as 60-minute dispatchable that clears in the hour-ahead scheduling process (HASP) will receive a fifteen-minute market schedule and settle at the corresponding locational marginal price during each fifteen-minute market interval like all other HASP eligible resources.

[1] Details on the CPUC Reliability-Based Demand Response Settlement are available at https://docs.cpuc.ca.gov/publishedDocs/published/Graphics/119817.PDF and https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/119815.PDF

[2] The CAISO's Operating Procedure 4420 outlines when RDRR can be enabled into the market http://www.caiso.com/Documents/4420.pdf

[3] The CAISO Memorandum. Decision on the Reliability Demand Response Product. October 26, 2010. http://www.caiso.com/Documents/101101DecisiononReliabilityDemandResponseProduct-Memo.pdf

[4] Final Root Cause Analysis: Mid-August 2020 Extreme Heat Wave, January 13, 2021, available at: http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf

# 3. RDRR Bidding Enhancements Second Revised Straw Proposal

## 3.1 RDRR "Infeasible Dispatch" Issue

The CAISO in its Summer Readiness initiative modified its tariff to dispatch RDRRs in Real time Pre-Dispatch (RTPD) so they could be optimally dispatched within a longer time horizon to increase the efficiency of the market dispatch. Market dispatch is impacted by the Pmin registration of a RDRR coupled with its minimum load costs. If the Pmin of an RDRR is at or near the Pmax, and minimum load costs are zero, the resource is viewed as a zero cost resource available for start-up to their Pmin at no cost. Alternatively, if the Pmin of a RDRR is set at zero, the resource can also be committed as a zero cost resource at Pmin which could result in dispatch instructions that toggle between from Pmin to their upper economic limit and back to Pmin multiple times under a single start-up instruction, which may be "infeasible" for the resource to respond. From the CAISO's perspective, a resource with zero Pmin and zero commitment costs is considered to be on-line, even at zero, unless it operates at zero for the entire period. While this infeasible dispatch was possible prior to Summer Readiness, with the move to make RDRR dispatched by the market more often, stakeholders raised concerns that the infeasible dispatch could occur more often.

This initiative started by examining minimum load costs as a means of correcting the issue that RDRRs are receiving real time dispatches that may be infeasible, not from a market perspective but from the perspective of a resource. The CAISO's hypothesis was that allowing resources to represent their minimum load cost could enable resources that have also represented the operational capabilities of their resource as their Pmin near their Pmax, to receive compensation and appropriate dispatch. However, the CAISO has observed that RDRR bids are not cost based and the retail tariffs underpinning RDRR only require a single operating level.

This enhancement has pivoted to focus on the infeasible dispatch issue and developing the functionality to recognize RDRRs operational capabilities. The CAISO proposed a solution for discrete RDRRs, whereby the CAISO would re-rate the resource's Pmin below the resource's upper economic limit and a formula will be used to represent to the market the resource's minimum load cost. This is to ensure that the resource is not viewed as "free" by the market, thus preventing a real time infeasible dispatch from occurring.

**Stakeholder Feedback**

Stakeholder feedback on the Revised Straw Proposal fell into five categories: support, extending the functionality, requests for cost representation, implementation clarification, and price formation.

1. **Support:** DMM, CEDMC, PG&E, and SCE generally supported the enhancement.
2. **Extending the functionality**: SCE recommended this apply to continuous RDRRs and in the day ahead market as well. PG&E cautioned against extending this concept to other resources, on the basis of bid cost recovery complexities and gaming opportunities.
3. **Requests for cost representation**: SCE, CLECA, and DMM recommended minimum load costs be included. SCE recommended that startup costs be allowed for RDRR.

DMM recommended that resources be able to reflect a resource-specific Pmin and the corresponding costs of operating at minimum load, subject to a robust process to assess the reasonableness of submitted minimum load bids

4. **Implementation clarification:** CLECA recommended that CAISO and stakeholders test the solution with and without the Pmin re-rate functionality and that CAISO provide the results to stakeholders.
5. **Concerns and questions regarding price formation:** Shell requested clarification on if this enhancement would impact RDRR setting the price. WPFT raised concerns that the proposed solution may dilute price signals.

**Response to Stakeholder Feedback:**

Extending the functionality:

In response to PG&E's concerns regarding extending this functionality to other resources, the CAISO notes that there are no other efforts to extend this functionality to other resources.

In response to SCE's recommendation to apply this functionality to continuous and day ahead resources, the CAISO clarifies that it does not plan to extend this functionality. The Pmin re-rate is intended to reflect the discrete nature of RDRRs. The CAISO does not plan to change this for day ahead or continuous resources. Resources that participate in the day ahead are by definition continuous. By registering as continuous resources, these resources are indicating to the CAISO that they can operate between their Pmin and Pmax, so CAISO will not be making a market change for resources that should change their registration options. By increasing the cap for discrete RDRR resources, the CAISO is hopeful that resources currently registered as continuous due to the discrete cap will be able to better reflect their operational capabilities by registering as discrete in order to utilize this functionality.

Requests for cost representation:

DMM, CLECA, and SCE all recommended the inclusion of minimum load costs. The CAISO observes challenges in representing RDRR minimum load costs as their bids are not cost based and their retail tariffs indicate they do not have a minimum load. RDRRs bids are set at 95-100% of the bid cap in the CAISO's tariff to meet the intent of the RDRR Settlement Agreement that RDRR be used as a last resort resource. In addition, RDRR retail tariffs with Investor Owned Utilities (e.g., the Base Interruptible Program) require resources to reduce load to their designated "Firm Service Level" which is a single operating level. This indicates that RDRR does not have a minimum load level. Without cost based bids or a minimum operating level, the CAISO does not plan to pursue representing minimum load costs.

Implementation clarification:

In response to CLECA's requests to test the Pmin re-rate functionality with and without the proposed enhancement, CAISO notes that the functionality to be applied to RDRRs is an application of existing functionality currently used for generating resources. CAISO believes that the design is applicable as a short to medium term solution to a problem raised by

stakeholders. CAISO does not currently have plans to perform a formal proof of concept analysis.

Concerns and questions regarding price formation:

The CAISO clarifies that this will change the price formation for RDRRs registered as discrete resources. Instead of being able to set the price from their Pmin of 0 to Pmax of 50 MW, they would only be able to set the price from their re-rated min (e.g., if they bid 50 MW their Pmin would be re-rated to 49.9 MW) to their upper economic limit. However, as described above, the CAISO believes that although these resources will not be able to set the price as they were previously able to under Summer Enhancements, this enhancement is still prudent as they will be registered in a manner that best reflects their operational abilities. It also mitigates any imbalance associated with larger RDRR resources, as proposed with the increase to the RDRR cap, thus more accurately reflecting RDRR capabilities especially in those cases in which a RDRR was represented as continuous due to the cap but only operates in a discrete manner.

The CAISO plans to more broadly address price formation in a separate initiative dedicated to scarcity pricing. The CAISO plans to begin the Price Formation Enhancements initiative in mid-2022.

Characteristics of RDRR as of November 18, 2021:

In response to GDS Associates questions at the December 22, 2021 stakeholder call, CAISO would like to clarify that of the 1,440.64 registered RDRRs approximately 88% (1,261.1 MW) are 60-minute dispatchable and 12% (179.54 MW) are registered as 5-minute dispatchable.

As previously highlighted, and in response to WPTF's questions on current RDRR operating characteristics, the CAISO notes that all RDRRs have their Pmin registered at zero and of the 1,440.64 MW of RDRR MW approximately 53% (770.3 MW) are registered as continuous and ~47% (670.34 MW) are registered as discrete. The CAISO recognizes some resources may change their registration options based on proposed enhancements.

**Proposal:**

The CAISO is continuing to propose adjusting discrete RDRRs operating range to reflect operational capabilities by re-rating their Pmin. This enhancement is intended to prevent an infeasible dispatch (e.g., movement up and down between the upper economic limit of the bid and a 0MW Pmin) of discrete RDRRs from occurring as a result of the resource appearing free as well as limitations in the current discrete dispatch functionality. The CAISO continues to propose to raise the Pmin to just below the upper economic limit. In this proposed solution, while there would still be movement between the upper economic limit to the re-rated Pmin, the difference would be small enough to be negligible. This fully solves the infeasible dispatch issue but creates an issue where the resource appears to be very cheap (free) for a large number of MW. To solve that issue, the CAISO plans to calculate a minimum load cost adder based on the bid.

The process will use the CAISO's systems and will not require additional action on behalf of the participant:

1. For resources without day ahead schedules, the CAISO will set the minimum operating limit to a value just below the upper economic limit of the bid (i.e., the maximum megawatt limit of the bid), using existing Pmin-rerate functionality
2. The CAISO will add the value of the product of (bid price)*(upper economic limit) to the existing minimum load cost

This proposed solution, to automatically re-rate the Pmin and input a default minimum load cost, would be automatic and compatible with all discrete RDRR bidding options (5, 15, or 60-minute dispatch options). This will enable the market to commit discrete RDRRs like a generator with a non-zero Pmin and recognize that the resource is not "free" from a startup perspective. The market would then publish the Pmin re-rate and minimum load cost to pre-settlement systems for Bid Cost Recovery purposes. Mirroring RDRR's current BCR eligibility, only 5-minute and 15-minue RDRRs will be eligible for BCR.

The Constrained Output Generator (COG) market model uses a similar functionality, but differs in a few key areas. In light of the various similarities, CAISO presents the table below to provide a clear comparison of both market models. As of January 2022, the CAISO does not have any COG resources registered in its market.

***Table 1: Comparison on Discrete RDRR Proposed Functionality and COG Functionality***

| Feature | Discrete RDRR | COG |
|---|---|---|
| Operational Capability | Discrete | Discrete |
| Registration | Master File | To receive COG status resources must make an election before each calendar year. Resources with zero operating range must participate as COGs, and resources with a non-zero operating range have the option to participate as a COG. The SC on behalf of a COG must registered the resource's Pmin in the Master File as equal to its Pmax less 0.01 MW. |
| Pmin Re-Rate | Automatically adjusted after the close of the day ahead market if there is no day ahead award. | The market utilizes the master file Pmin. |
| Bids Submitted | Registered RDRRs may submit an energy bid to indicate participation in the market for the relevant trading hour. The submitted energy bid will serve as the minimum load cost, so that the resource is not seen as "free". | Registered COGs may submit an energy bid to indicate participation in the market for the relevant trading hour. The submitted energy bid will be replaced by the CAISO with a calculated energy bid determined by dividing its minimum load cost by MW quantity of the resources Pmax. |
| Price Setting Range | The CAISO treats a discrete RDRR true to its operating range of a value just below its Pmin to its Pmax. | To allow COGs to set the price in the real time market, the CAISO treats a COG as if it were flexible with an infinite Ramp Rate between 0 and its Pmax and uses the COG's calculated energy bid. |
| BCR Eligible | BCR eligible if they are short for the day (5-min and 15-min registered resources) | COGs are eligible for Minimum Load Bid Cost compensation in the RTM, but not eligible in the IFM. COG is eligible for Start-Up Bid Cost recovery as determined in IFM, RUC, STUC or RTUC. |

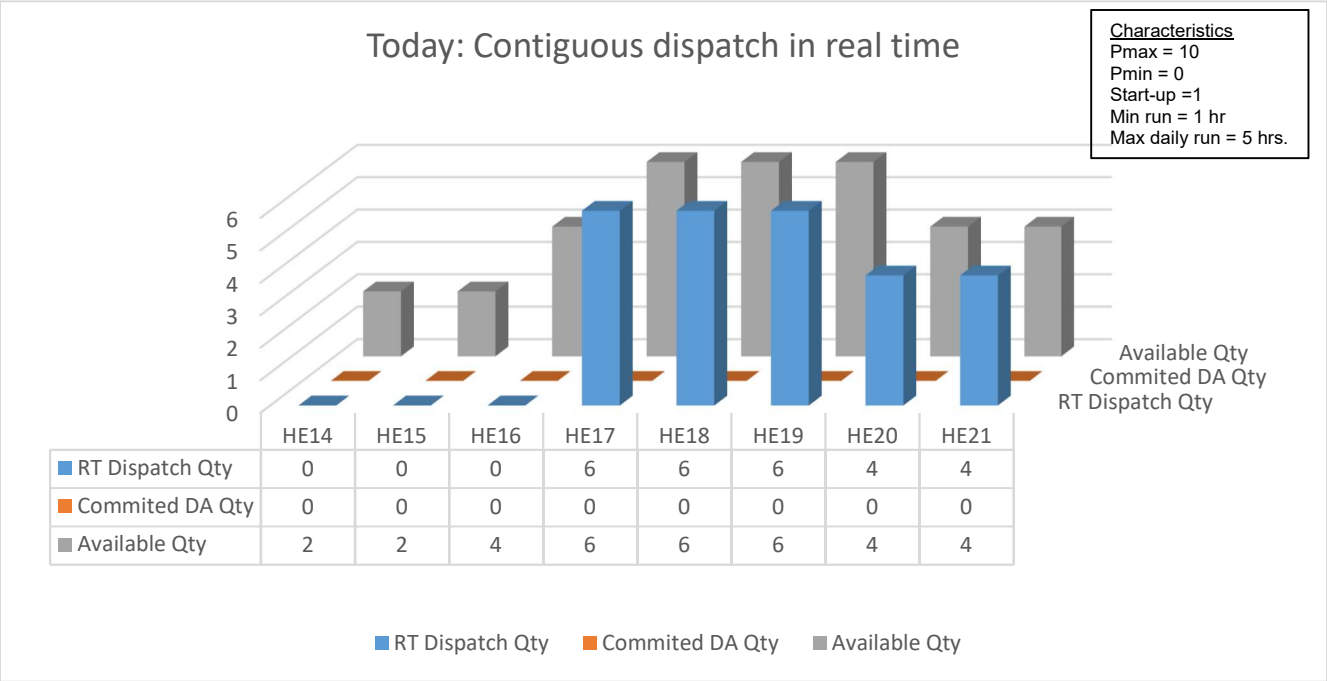
## Examples:

### Example A: State of the world today

Figure 1 and 2 below illustrate the situation RDRRs face today where in real time they can be dispatched either contiguously or non-contiguously (also referred to as “infeasible” by market participants).

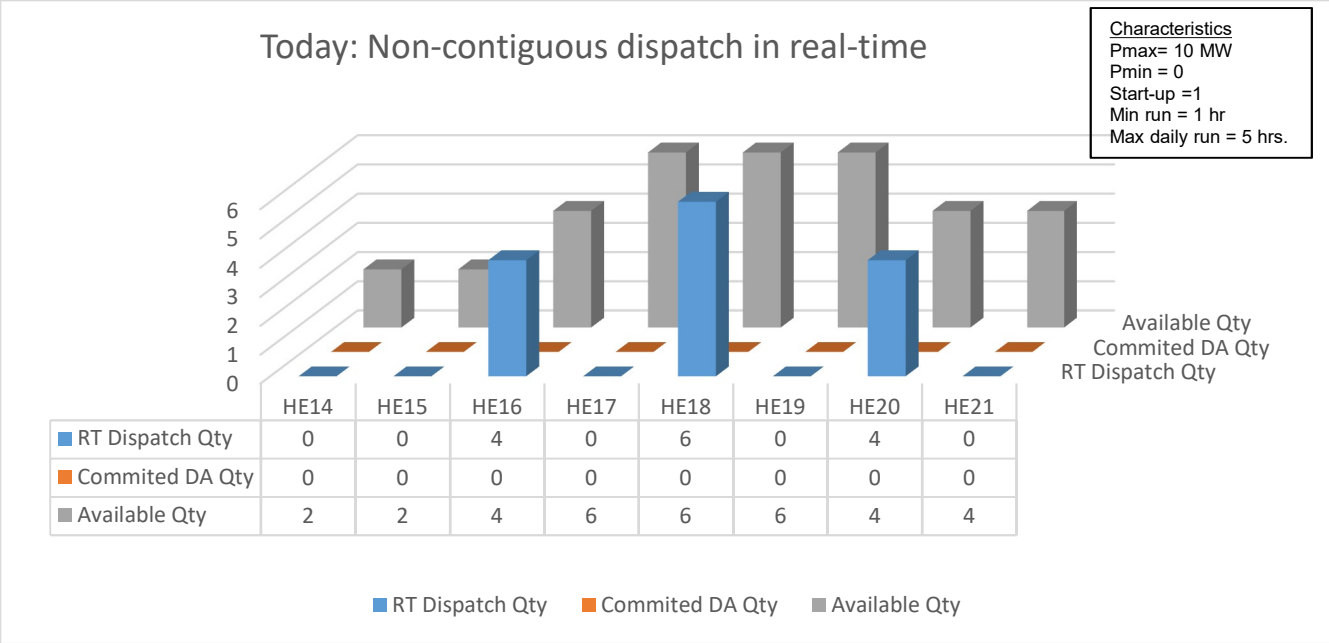
Figure 1 and Figure 2 represent a resource with a Pmax of ten, Pmin of zero, a daily number of start-ups of one, a minimum runtime of one hour, and a maximum daily run time of five hours. Both figures demonstrate how the CAISO’s optimization views both scenarios as respecting the max daily run time parameter. In general, a resource with zero Pmin and zero commitment costs will be considered on-line, even at zero, unless at zero for the entire period. In Figure 1 the resource is dispatched at HE 17 and contiguously on for five hours, which respects the max run time parameter. In Figure 2, the resource is dispatched starting in HE 16 and is moved between its upper economic limit and Pmin over the course of five hours and is an example of also respecting the max daily run time parameter.

***Figure 1: Contiguous dispatch in the real-time market***




| | HE14 | HE15 | HE16 | HE17 | HE18 | HE19 | HE20 | HE21 |
|---|---|---|---|---|---|---|---|---|
| RT Dispatch Qty | 0 | 0 | 0 | 6 | 6 | 6 | 4 | 4 |
| Commited DA Qty | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available Qty | 2 | 2 | 4 | 6 | 6 | 6 | 4 | 4 |

***Figure 2: Non-contiguous dispatch in the real-time market***




| | HE14 | HE15 | HE16 | HE17 | HE18 | HE19 | HE20 | HE21 |
|---|---|---|---|---|---|---|---|---|
| RT Dispatch Qty | 0 | 0 | 4 | 0 | 6 | 0 | 4 | 0 |
| Commited DA Qty | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available Qty | 2 | 2 | 4 | 6 | 6 | 6 | 4 | 4 |

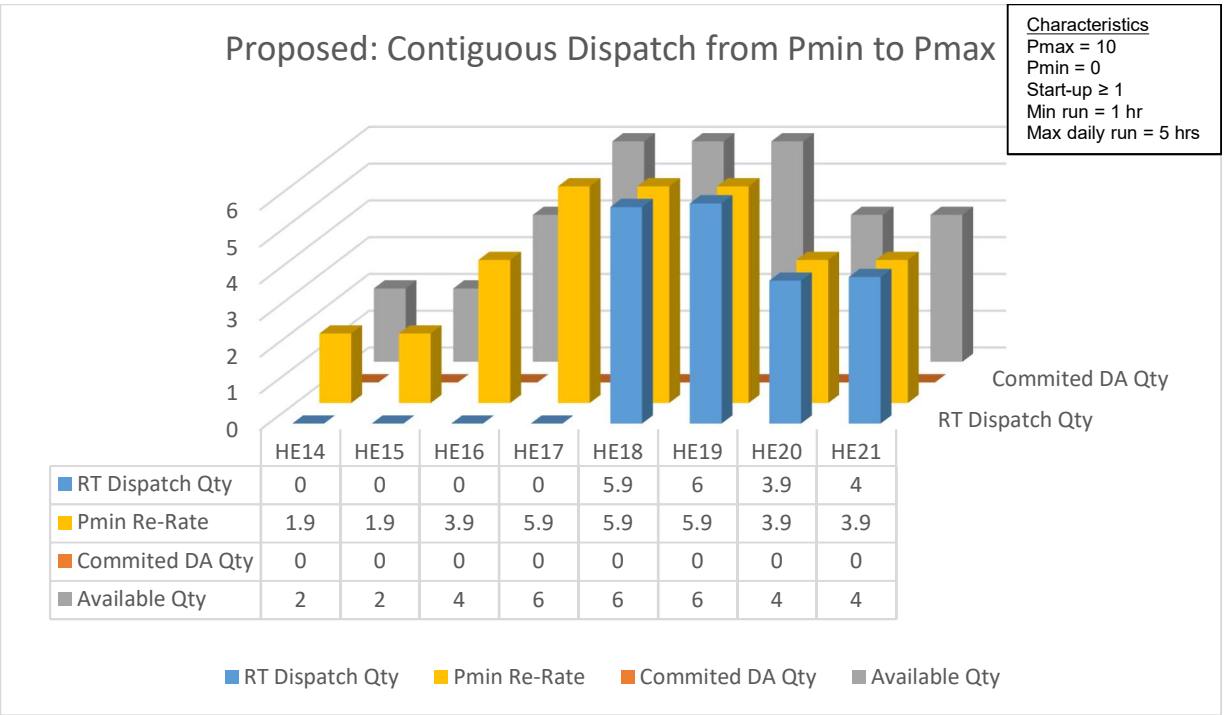
**Example B: Proposed solution**

This example demonstrates how the CAISO's proposed solution of a Pmin re-rate and value for minimum load cost help resolve the infeasible dispatch issue. In this example the RDRR has a Pmax of ten, Pmin of zero, a daily number of start ups of one, a minimum runtime of one hour, a maximum daily run time of five hours, and a minimum load cost of zero. The resource has submitted real time bids for $950 for all real time intervals. The resource does not have any day ahead awards. As a result, the CAISO will automatically:

- Re-rate the minimum operating level (Pmin, reflected as the yellow bar in Figure 3) to below the upper economic limit (bid, reflected as the grey bar in Figure 3). As a result, the market will now view the re-rated Pmin as the resources Pmin in real time.
- Set the minimum load cost to ($950/MWh) * (5.9 MW) = $5,605/hour. The CAISO will consider this value the resource's commitment costs.

If committed the resource could be dispatched to 5.9 MW (re-rated Pmin) or 6 MW (bid). If we look at a single interval, in HE 18 when the resource is dispatched to 5.9 MW, their minimum operating limit of 5.9 MW and minimum load cost of $5,605/hour will be eligible for Bid Cost Recovery consideration if the resource is short over the course of the day.

***Figure 3: Pmin re-rate and value for minimum load cost***




| | HE14 | HE15 | HE16 | HE17 | HE18 | HE19 | HE20 | HE21 |
|---|---|---|---|---|---|---|---|---|
| RT Dispatch Qty | 0 | 0 | 0 | 0 | 5.9 | 6 | 3.9 | 4 |
| Pmin Re-Rate | 1.9 | 1.9 | 3.9 | 5.9 | 5.9 | 5.9 | 3.9 | 3.9 |
| Commited DA Qty | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available Qty | 2 | 2 | 4 | 6 | 6 | 6 | 4 | 4 |

## 3.2 RDRR Registration

RDRRs may register as either continuous or discrete, depending on their abilities. Discrete registration indicates the resource has one bid segment and when dispatched will generate to its Pmax. Continuous (non-discrete) registration indicates that a resource can operate anywhere between its Pmin and Pmax, based on the cleared bid quantity. The CAISO currently has a 50 MW cap on discrete RDRR. There is no cap on the size of an RDRR that is registered as continuous. The designation in the CAISO's Masterfile as continuous or discrete may be updated once per RDRR season.[5] It is a product of the RDRR settlement agreement that the CAISO allows RDRR to bid as a discrete resource. In general, blocky discrete resources do not promote efficient market outcomes—discrete bidding is an exception afforded to RDRRs and COGs.

**Stakeholder Feedback**

The CAISO solicited feedback from stakeholders on CAISO's previous proposal to not change the discrete RDRR cap. In response, a majority of stakeholders opposed not increasing or eliminating the discrete RDRR 50 MW cap. DMM was the sole supporter of maintaining the current discrete RDRR cap at 50 MW in light of the discrete to continuous issue and pricing impacts. Feedback from other stakeholders can be categorized as either a request to increase or remove the cap based on load operations and analysis into the imbalance issue.

- Stakeholders requesting the cap be increased or removed include CEDMC, CLECA, Enchanted Rock, and SCE. CLECA, Enchanted Rock, and SCE highlighted that there are instances of load in excess of 50 MW that cannot be split for operational or safety reasons. SCE raised challenges from an operational perspective with splitting resources including: operator ability to confirm the accuracy of the dispatch in multiple systems, confusion between customers and account managers to know what their instructions are, the costs of upgrades to systems to enable granular dispatch, and the inconsistency this policy has with other resources.
- Enchanted Rock, WPTF, and SCE all requested a form of analysis. Parties either requested that CAISO provide examples of when imbalances occurred in the past and/or that CAISO forecast the future magnitude of the issue.
- CEDMC, flagged that the imbalance issue will be a lower priority during periods of grid stress, and CAISO should encourage as much load curtailment as possible during periods that RDRR would be called.

[5] A season is a six month period (summer and winter). Once selected, the status shall be maintained throughout the season.

**Response to Stakeholders:**

Rationale for the current cap:

The current cap exists to mitigate the discrete-to-continuous treatment. As described in the Market Enhancements for Summer 2021, the move towards minimizing exceptional dispatch of RDRRs and increasing the market dispatch included making changes to allow 15-minutue and 5-minute dispatchable discrete RDRR to set market prices. To allow discrete resources to set the prices, the CAISO reflects these resources as discrete in the scheduling run, but treats them continuous in the pricing run.[6]

Every resource that uses the discrete option it has to potential to create an imbalance. For example, the market may need to dispatch a resource at 25MW when in reality the resource can be at 50MW. The delta creates an inconsistency in the market which will drive some pricing problems and can also create an imbalance between what the market does and what the actual system sees. When this results in an imbalance (i.e. energy generated does not equal energy consumed), area control error (ACE) could increase or decrease from zero, which can result in frequency deviations. If a discrete-continuous imbalance occurs it has to be absorbed in the CAISO's system through ACE or regulation, the larger it is the more meaningful it becomes to impact the operation of the system and the CAISO may have to procure more regulation or take more frequently outside the market actions like load conformance.[7]

In addition, from a pricing perspective when a discrete resource sets prices in the pricing run it will most often set a higher price than the price that the final and most expensive continuous resource dispatched in the scheduling run would have set. Coupled with a $0/hr min load cost, any final continuous resources in the bid stack will be dispatched to a point on their bid curve where their bid cost is less than the price set by the discrete resource. Thus the final continuous resource, whose costs are less than the price they could receive from the market have an incentive to deviate from dispatch instruction. The delta creates an inconsistency in the market which will drive some pricing problems and can also create an imbalance between what the market does and what the actual system sees.

Analysis on Imbalance Issues:

Stakeholders requested two types of analysis regarding the imbalance issue – both analysis on instances of the imbalances occurring previously due to RDRRs and the projected magnitude of the imbalance issue if the cap were lifted under various sensitives.

Based on feedback from CAISO's analysis team, neither analysis is practicable. Looking back, it is not feasible to isolate the imbalance of one resource from the overall imbalance. The CAISO system sees all of the imbalances (e.g., as deviations on the ties, lagging and or deviations from internal resources, load forecast errors, demand response, and other resources). Attempting to dissect RDRR from the imbalance is not feasible. Projecting future imbalances under various

[6] Market Enhancements for Summer 2021 Readiness Final Proposal, California ISO, March 19, 2021, p. 33: http://www.caiso.com/InitiativeDocuments/FinalProposal-MarketEnhancements-Summer2021Readiness.pdf

[7] Load conformance refers to the process of updating the load forecast to account for observed system conditions.

increases to the cap creates an inordinate number of sensitivities. The scenarios for various system conditions, load online, the composition of various generation available, and various scenarios of discrete RDRR caps does not lend itself to producing meaningful results.

**Proposal:**

Upon further reflection, the CAISO observes that the imbalance issue identified as a challenge with increasing the cap is mitigated if the Pmin re-rate functionality is implemented. This is because the Pmin re-rate changes what the pricing run sees as available and eliminates the imbalance between the pricing run and scheduling run. So for example when previously a resource was hypothetically seen in the pricing run as operating as continuously and dispatched at 5 MW when it was actually 50 MW in size, a 45 MW imbalance could occur. However, with the Pmin re-rate functionality, the pricing run will see the resource as 49.9 MW and as 50MW in the scheduling run producing a possible imbalance of 0.1 MW.

In light of the Pmin re-rate functionality mitigating the discrete to continuous imbalance, the CAISO is proposing to double the cap by increasing it to 100 MW. Additionally, in light of the mitigating measures produced by the Pmin re-rate functionality, the increase to the discrete cap is conditional on the Pmin re-rate functionality being implemented. The CAISO has restricted it to 100 MW in light of operational challenges with load fluctuations with resources coming back online.

Additionally, CAISO is proposing that RDRRs in excess of 100 MW may apply annually for Master File registration exceptions. These registrations would be reviewed on a case by case basis. The CAISO is considering this as an option for resources from a single load source (i.e., are not aggregated) that cannot be operationally or safely split. In addition, resources would need to indicate the source of their load curtailment. Additional criteria may also be developed. Resources would need to apply annually, to ensure that future system conditions do not create challenges.

## 4. EIM Governing Body Role

This initiative proposes changes in the representation of discrete RDRR to the CAISO market. The CAISO staff believes that the EIM Governing Body has joint authority with the Board of Governors over each of these elements.

The role of the EIM Governing Body with respect to policy initiatives changed on September 23, 2021, when the Board of Governors adopted revisions to the corporate bylaws and the Charter for EIM Governance to implement the Governance Review Committee's Part Two Proposal. Under the new rules, the Board and the EIM Governing Body have joint authority over any proposal to change or establish any CAISO tariff rule(s) applicable to the EIM Entity balancing authority areas, EIM Entities, or other market participants within the EIM Entity balancing authority areas, in their capacity as participants in EIM. This scope excludes from joint authority, without limitation, any proposals to change or establish tariff rule(s) applicable only to the CAISO balancing authority area or to the CAISO-controlled grid. Charter for EIM Governance § 2.2.1.

The tariff changes to implement the elements of this initiative would be "applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM." EIM balancing authority areas may use the RDRR model assuming they have approval from their local regulatory authority and meet the requirements of RDRR participation. Accordingly, the proposed changes to the RDRR model fall within the scope of joint authority.

This proposed classification reflects the current state the initiative and could change as the stakeholder process moves ahead. The CAISO did receive comments from PG&E regarding this misalignment with the current BPM language. The CAISO plans to update the RDRR BPM to align with this EIM governing body role during the implementation phase.

## 5. Stakeholder Engagement Plan

| Date | Milestone |
|---|---|
| 1/24/2022 | **Publish second revised straw proposal** |
| 2/2/2022 | Stakeholder conference call on second revised straw proposal |
| 2/16/2022 | Stakeholder comments due on second revised straw proposal |
| 3/9/2022 | **Publish draft final proposal** |
| 3/16/20222 | Stakeholder conference call on draft final proposal |
| 3/25/2022 | Stakeholder comments due on draft final proposal |
| 4/12/2022 | **Publish final proposal an draft tariff language** |
| 4/18/2022 | Stakeholder conference call on final proposal an draft tariff language |
| 4/28/2022 | Comments due on final proposal an draft tariff language |
| 5/10/2022 | **Present RDRR Bidding Enhancements to EIM Governing Body** |
| 5/12/2022 | **Present RDRR Bidding Enhancements to CAISO Board** |

## 6. Next Steps

In this revised straw proposal, the CAISO has tried to capture and describe the open issues stakeholders want resolved and the enhancements stakeholders would like to see made to the CAISO RDRR model. The CAISO will hold a stakeholder call on February 2, 2022 to review the revised straw paper and seek clarity on the issues or enhancements that stakeholders believe were not fully addressed or captured. The CAISO encourages all stakeholders to submit comments on the second revised straw proposal by February 16, 2022.