



15445 Innovation Drive
San Diego, CA 92128

November 17, 2020

Governor Ashutosh Bhagwat
Governor Severin Borenstein
Governor Angelina Galiteva
Governor Mary Leslie
Governor David Olsen

RE: Hybrid Resources Initiative, Phase 2 – RAIM applicability

Dear Governors Bhagwat, Borenstein, Galiteva, Leslie, and Olsen:

I am writing this letter on behalf of EDF-Renewables (EDF-R). Headquartered in San Diego, EDF-R is one of the largest renewable-energy developers in California, with over 1,500 MW of renewable and hybrid generation projects in operation, under construction, or in contract. We serve all three major investor-owned utilities, energy service providers, municipal utilities, community choice aggregators, and individual customers.

EDF-R's first projects arose in the infancy of non-hydro renewables in the state. Our projects under development include several large mixed-fuel projects combining solar generation with energy storage; those projects will be developed mostly as Co-located Resource (CLR - two Resource IDs), as opposed to Hybrid Resources (HR - single Resource ID), with some literally coming on-line as we speak.

EDF-R's mixed-fuel projects of zero-emissions solar and battery storage are among the first of many to come on line in California over the next several years. This is a special moment of innovation and success—California will be served with the most flexible and clean wholesale generation that is feasible in the global electricity sector, and at a time when it is needed to address both climate and reliability needs, including resource adequacy.

Accordingly, the need to get the rules right on renewable-and-battery mixed-fuel projects is a massive but necessary and top-priority task, and we appreciate CAISO's essential work on that front. As a California-born and -based company, we will be ongoing and responsible partners in that effort. These comments are made in that context.

EDF-R has been an active participant in the CAISO's Hybrid Resources initiative, including multiple comment submissions for the Phase 2 topics before you at the November 18 meeting. This letter addresses one of the Phase 2 proposals – applicability of the CAISO's Resource



Adequacy Availability Incentive Mechanism (RAAIM) to storage CLRs, while exempting HRs that contain storage capacity.

RAAIM penalizes most RA Resources for availability below a target level, e.g., for forced outages or de-rates. Stand-alone Variable Energy Resources (VERs - solar or wind projects) are already exempt from RAAIM, because the CPUC methodology used to determine RA value for those resources already considers forced outages/de-rates, so a RAAIM penalty would be double-counting.

The CAISO had proposed, since the beginning of Phase 1 of this initiative, to similarly exempt VER CLRs from RAAIM, but to apply RAAIM to HRs. This was the CAISO's policy throughout Phase 1 and most of Phase 2, despite arguments from some stakeholders that this unfairly subjected VER capacity in HRs to RAAIM, i.e., disadvantaged the VER capacity in HRs compared to VER CLR Resource IDs.

At the Final Proposal stage, the CAISO suddenly revised its position, seemingly agreeing with stakeholder arguments and exempting HRs completely from RAAIM. In making this change, it has turned the prior HR disadvantage to a CLR disadvantage, i.e., now the storage capacity in HRs will not be subject to RAAIM but storage CLR Resource IDs will be.

EDF-R contends that both the CAISO's earlier position and its new position are inconsistent with CPUC decisions regarding Resource Adequacy (RA) for VER-storage mixed-fuel projects. The June 2020 CPUC decision in Track 2 of the RA Proceeding (19-11-009) adopted, as a foundational principle, the concept that the RA value for mixed-fuel projects should be treated the same, regardless of whether projects are configured as CLRs or HRs.

Extending this principle to the current situation, this means that RAAIM application to mixed-fuel projects should not differ based on their configurations as CLRs or HRs. In other words, if storage capacity in an HR configuration is exempt from RAAIM (since now the entire combined resource will be exempt), then storage capacity in a CLR configuration should also be exempt from RAAIM.

Moreover, the current proposal exacerbates disadvantages CLRs already face under the CAISO framework, despite statements in the stakeholder initiative that CAISO management prefers this configuration. Specifically, the framework does not allow CLRs to provide Ancillary Service (A/S) until fall 2021, due to software changes needed to accommodate that.

In short, to comply with CPUC directives and treat mixed-fuel resources fairly, the CAISO should revise this portion of the Phase 2 framework to exempt storage CLRs from RAAIM, just like storage capacity in HRs. As the CAISO has pointed out in the initiative, RAAIM is proposed to be eliminated in favor of an alternative method starting in 2023, but maintaining parity between mixed-fuel projects in the interim is an important principle that should be maintained.



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Thank you for the opportunity to offer this input. EDF-R will be represented during Public Comment on November 18th to answer any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "Virinder Singh".

Mr. Virinder Singh

Vice President—Regulatory & Legislative Affairs