Application No.:	18-05-007
Exhibit No.:	CAISO-___
Witness:	Neil Millar

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) for a Certificate of Public Convenience and Necessity: Eldorado-Lugo-Mohave Series Capacitor Project	Application 18-05-007

REBUTTAL TESTIMONY OF NEIL MILLAR ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

November 18, 2019

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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I. INTRODUCTION

Q1. Have you previously provided testimony in this proceeding?

A1. Yes, on November 4, 2019, I provided opening testimony supporting the need for Southern California Edison Company's (SCE) Eldorado-Lugo-Mohave Series Capacitor Project (Proposed Project). My educational and professional background and job responsibilities are detailed in my opening testimony.

Q2. What is the purpose of your rebuttal testimony?

A2. The purpose of my rebuttal testimony is to respond to certain assertions made by the California Public Advocates Office (PAO) and Wild Tree Foundation (WTF) in opening testimony. Specifically, I address the following issues:

(1) The need for the Proposed Project to meet statewide renewables portfolio goals; and

(2) The significant access to new resource adequacy capacity-eligible resources that will be provided by Proposed Project.

II. THE PROPOSED PROJECT IS NECESSARY TO MEET STATEWIDE RENEWABLES PORTFOLIO GOALS.

Q3. Please address PAO's and WTF's claims that the Proposed Project is not needed to meet state Renewables Portfolio Standards (RPS) Goals.

A3. In opening testimony, I discussed the interrelationship between the Commission's planning and procurement processes and the CAISO's transmission planning process in detail. However, I emphasized that the Commission considers statewide renewable generation needs through its Integrated Resource Planning Process (IRP).[1] In this process, the Commission develops renewable generation portfolios that specify the quantity, location, fuel-type, and deliverability status of expected renewable generation resources that the Commission's jurisdictional load-serving entities will rely on to meet the RPS goals. During the resource planning process, the Commission considers all viable alternatives to meet the state's policy goals, including grid-connected resources, distributed resources, and demand-side resources. After the Commission develops these detailed renewable portfolios and transmits them to the CAISO, the CAISO conducts its policy-driven analysis to ensure that the necessary transmission infrastructure is in place to accommodate the Commission-developed portfolios.

In the present case, the Commission's resource planning process identified the need for a significant amount of renewable resources in the Desert area to meet RPS goals. The CAISO identified the need for the Proposed Project to effectuate the Commission's resource procurement planning decision.

Q4. Did the CAISO identify the need for the Proposed Project to meet SCE's individual RPS goals as an individual load-serving entity?

A4. No, the CAISO plans the transmission system to meet statewide policy goals, not the specific RPS goals for individual load-serving entities. PAO and WTF incorrectly

[1] R.16-02-007. Previously, renewable generation needs were considered through the Commission's long-term procurement plan and renewables portfolio standard proceedings.

emphasize the RPS needs of SCE as an individual load-serving entity. The emphasis on SCE's specific RPS requirements undermines the statewide planning and procurement process outlined above, and places an undue burden on SCE to identify the RPS requirements for other LSEs.

Q5. Are PAO's concerns regarding potential increased renewable curtailment and ramping issues warranted?

A5. No, in the first instance, PAO provides no evidence that the Proposed Project will increase renewable curtailment or exacerbate ramping concerns. Rather, PAO assumes that new solar resources that will be accessed as a result of the Proposed Project will increase curtailment and ramping concerns. This assumption is unsupported, as PAO provides only generalized statements regarding existing curtailment and ramping issues. PAO fails to note that many of the existing curtailments occur due to local transmission constraints or economic bidding. PAO also fails to consider that many of the projects seeking deliverability via the Proposed Project are storage or solar/storage hybrid projects, which could potentially reduce curtailment and mitigate ramping issues.

Secondly, as the CAISO explained above, the Commission makes statewide generation planning decisions in its resource planning and procurement processes. Neither SCE nor the CAISO make system-wide generation resource planning decisions. The Commission addresses these topics—including the impacts of curtailment—holistically and comprehensively through the IRP. The Commission should not attempt to reconsider these resource planning decisions in permitting applications for individual transmission projects.

Q6. Please address WTF's claim that SCE ratepayers should not pay for the Proposed Project if the renewable generation it enables meets the needs of other load-serving entities.

A6. CAISO transmission owners recover the cost of transmission infrastructure from all load served by the CAISO. The costs associated with the Proposed Project will be classified as regional transmission costs, which the CAISO recovers on behalf of transmission owners through its regional transmission access charge. All load served by the CAISO pays the regional transmission access charge based on a volumetric postage stamp rate recovery. This regional cost recovery approach for transmission costs within the CAISO footprint is aligned with the principle that all load-serving entities have equal access to the transmission system and the generation in the area the Proposed Project supports.

Q7. PAO asserts that Full Capacity Deliverability Status (FCDS) is "irrelevant to determining whether a generator can contribute to the state's RPS goals." Is this correct?

A7. No. As I noted in my initial testimony, until recently, all renewable generation in the Commission-developed RPS portfolios for purposes of CAISO transmission planning required FCDS for new renewable generation projects. More recent Commission-developed portfolios identified incremental amounts of renewable generation that could be energy-only, *e.g.*, not deliverable and without FCDS. However, the incremental energy-only resources that may be needed to meet the RPS goals do not lessen the need for the Proposed Project, which is supported by the renewable resources designated as FCDS in the Commission-developed portfolios, as Mr. Barave noted in opening testimony.

Further, generation interconnection applications demonstrate that deliverability continues to be a necessary attribute for renewable generation projects to be successful in most, if not all, procurement processes. In fact, 100% of the interconnection requests in Queue Cluster 11 (all cluster study request submitted in 2018) and Queue Cluster 12 (all cluster study requests submitted 2019) requested FCDS.

III. THE PROPOSED PROJECT WILL PROVIDE ACCESS TO SIGNIFICANT AMOUNTS OF NEW RESOURCES THAT CAN MEET SYSTEM RESOURCE ADEQUACY NEEDS.

Q8. Please Address PAO's assertion that the Proposed Project will not effectively meet the resource adequacy need identified in Rulemaking (R.) 16-02-007.

A8. As a procedural update, I note that the Commission voted to approve procurement of 3,300 MW of new resource adequacy capacity in Decision (D.) 19-11-016 on November 7, 2019. To meet resource adequacy requirements, the entire 3,300 MW of new procurement will need to be deliverable to CAISO load. As Mr. Barave noted in his opening testimony, the Proposed Project will provide FCDS (*i.e.*, deliverability) to 3,715 MW of generation, 3,677 MW of which would be eligible to provide incremental capacity pursuant to D.19-11-016 by August 1, 2023.[2] PAO argues the Proposed Project will not effectively meet the capacity need because a significant amount of additional eligible resources would be solar, which have a relatively low Qualifying Capacity value. However, PAO underestimates the amount of storage associated with renewable/storage hybrid resources that will receive FCDS with completion of the Proposed Project. PAO asserts that only 44 MW of storage resources will be deliverable with completion of the Proposed Project. As Mr. Barave's rebuttal testimony points out, the CAISO estimates that a minimum of 2,748 MW and a maximum of 5,173 MW of resource adequacy capacity will be made accessible by the Proposed Project. Storage resources may count toward the 3,300 MW procurement requirement on a MW-for-MW basis if built within the timeframe included in D.19-11-016. Although the Commission has not determined a specific counting methodology for hybrid resources that may result in qualifying capacity values that exceed the sum of the contribution of the storage and solar resources individually, there is no basis for assuming values that are less than the sum of the qualifying capacity of the individual components, not to exceed the interconnection capacity

[2] 3,715 MW less the 38 MW of natural gas capacity in the queue.

The CAISO also clarifies that although PAO is correct that each incremental additional MW of solar generation provides slightly less incremental Qualifying Capacity value than the preceding MW, the incremental impact is always positive. Adding solar resources provides a higher total Qualifying Capacity value, even if the incremental impact for each MW is reduced. The CAISO notes that the Commission considers the reduced Qualifying Capacity value of solar resources in its resource procurement and planning processes, and D.19-11-016 specifically allows for solar resources to count toward the incremental resource adequacy procurement.

IV. CONCLUSION

Q9. Does this conclude your testimony?

A9. Yes.