Resolution E-5183. Southern California Edison request for approval of Emergency Reliability Engineering, Procurement, Construction, and Maintenance Contract for Utility-Owned Storage Resources

PROPOSED OUTCOME:
• This Resolution Approves Southern California Edison’s Emergency Reliability Engineering, Procurement, Construction, and Maintenance Contract for 535.7 Megawatts of Utility-Owned Storage.
• This Resolution finds that the projects do not require a Certificate of Public Convenience and Necessity or Permit to Construct to be issued from the Commission.

SAFETY CONSIDERATIONS:
• The Emergency Reliability Engineering, Procurement, Construction, and Maintenance agreement contains detailed safety provisions.

ESTIMATED COST:
• The estimated total cost of this contract is $1.226 billion.

By Advice Letter 4617-E, Filed on October 21, 2021.

SUMMARY
The Southern California Edison (“SCE”) Engineering, Procurement, Construction, and Maintenance (“EPCM”) contract with Ameresco, Inc. (“AME”) for the engineering, procurement, construction and maintenance of 535.7 megawatts (“MW”) of energy storage to address summer reliability is approved. This Resolution approves the requested relief in Advice Letter (“AL”) 4617-E, with the
exception that the contract capacity will not be applied towards load serving entities' Mid-Term Reliability procurement obligations at this time.

BACKGROUND

In Decision ("D.") 21-02-028, the Commission authorized the investor owned utilities ("IOUs") to contract for capacity available to serve peak and net peak demand in the summer of 2021 on behalf of all benefitting customers, including incremental energy storage capacity.\(^1\) The Commission also determined that potential resources may include utility-owned generation, and authorized the IOUs to submit utility-owned generation for summer 2021 through a Tier 2 AL.\(^2\)

In March 2021, the Commission issued D.21-03-056 which authorized the IOUs to continue their procurement efforts on behalf of all benefitting customers by targeting an effective increase in the planning reserve margin ("PRM") from 15 to 17.5-19 percent for the summers of 2021 and 2022 and to exceed their respective targets by as much as an additional 50 percent for incremental supply-side generation and in-front-of-the-meter storage resources.\(^3\) The Commission expressed a continuing preference for storage contracts.\(^4\)

On July 30, 2021, Governor Newsom issued a Proclamation of State of Emergency ("Emergency Proclamation") due to the increasing effects of climate change and their impact on the state’s electric system. The Emergency Proclamation requests that the Commission “work with the State's load serving entities on accelerating plans for the construction, procurement, and rapid deployment of new clean energy and storage projects to mitigate the risk of capacity shortages and increase the availability of carbon-free energy at all times of day.\(^5\) It also requests that the Commission expedite its actions, “to the maximum extent necessary to meet the purposes and directives of this proclamation, including by expanding and expediting approval of demand response programs and storage and clean energy projects, to ensure that California has a safe and reliable electricity supply through October 31,2021, to reduce strain on the energy infrastructure, and to ensure increased clean energy capacity by October 31, 2022.”\(^6\)

\(^1\) D. 21-02-028 at 11, 14, OP 1.
\(^2\) Id. at 11.
\(^3\) D.21-03-056 at OP1, 13-14 Attachment 1 at 20-22.
\(^4\) Id. at OP1, Attachment 1 at 22.
\(^6\) Id. at paragraph 13.
On September 17, 2021, the Assigned Commissioner in R.20-11-003 issued an Assigned Commissioner's Ruling ("ACR") to clarify issues regarding utility-owned generation and storage procurement in 2022. The ruling clarified that “Decision (D.) 21-02-028 and D.21-03-056, read together, allow utility-owned generation (UOG) and storage procurement for summer 2022, submitted for California Public Utilities Commission approval by a Tier 2 Advice Letter, as long as the investor-owned utilities (IOUs) remain within the parameters set forth in those decisions.”

On October 21, 2021, SCE submitted AL 4617-E requesting approval of an EPCM contract with AME for 537.5 MW of utility-owned energy storage projects on SCE-owned and operated sites to provide incremental capacity available to serve peak or net peak demand to meet summer 2022 reliability needs. The Commercial Operation Date of the proposed projects is August 1, 2022. The projects are to be sited at three SCE substations: 225 MW at Springvale Substation in the Big Creek-Ventura local area, 200 MW at Hinson Substation in the LA Basin local area (Western), and 112.5 MW at Etiwanda Substation in the LA Basin local area (Eastern). The estimated total cost of the projects is $1.226 billion.

The EPCM contract was selected through a competitive procurement process conducted between August 25 and October 20, 2021 and overseen by an independent evaluator ("IE"). SCE states that it considered project conformity and viability and used least-cost, best-fit principles in the evaluation process. In addition to the costs of development, maintenance, interconnection, station power, demand charge and project development, SCE considered capacity benefits, energy benefits, ancillary service value benefits, residual value when evaluating proposals.

SCE plans to initially operate the storage resources as distribution assets interconnected to non-California Independent System Operator ("CAISO")- controlled facilities. SCE notes that it will connect the projects at existing substations to 66 kV sub-transmission systems considered local distribution by the Federal Energy Regulatory Commission ("FERC") and CAISO. For the first five years of operations, the Utility-Owned Storage ("UOS") projects will not

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participate in the CAISO market. “Instead, the UOS Projects will operate as a load modifying resource that will be responsive to system-wide grid conditions helping to address the emergency, while also functioning similarly to other SCE distribution assets to manage local distribution system conditions and will operate in accordance with grid conditions and reliability needs.” SCE further explains that, after this initial operation period (expected to be five years from the start of operations), SCE will transition the UOS projects from distribution assets to resources that participate in the wholesale market. To transition the UOS projects, SCE will submit an interconnection request to do so pursuant to the Wholesale Distribution Access Tariff ("WDAT") and thereafter proceed through the interconnection process like any other Customer.

During the initial period, in which the UOS projects will be operated as distribution assets, SCE proposes to recover the revenue requirement associated with the utility-owned storage and independent evaluator from all benefitting customers in its service area on a non-bypassable basis through distribution charges. During this period, SCE states that the energy benefits of the storage will be recorded to the Energy Resource Recovery Account ("ERRA") balancing account. To ensure that these benefits are allocated to all benefitting customers, SCE intends to debit the ERRA balancing account and credit the distribution subaccount of the Base Revenue Requirement Balancing Account ("BRRBA-D").

Once the UOS projects can participate in the wholesale market and receive supply side resource adequacy credit, SCE proposes to allocate the costs and benefits using the Cost Allocation Mechanism ("CAM") which is recovered through the New System Generation Balancing Account ("NSGBA").

SCE proposes to establish the Emergency Reliability Energy Storage Balancing Account ("ERESBA") to record the actual revenue requirements associated with the utility-owned storage costs. The balance in the ERESBA will transfer on a
monthly basis to the BRRBA-D during the period when the resources are interconnected to non-CAISO-controlled facilities and operating as distribution assets. Once the projects become RA-eligible, the balance in the ERESBA will transfer monthly to the NSGBA via the CAM.

SCE states that the Commission's General Order ("GO") 131-D governs the permitting of certain electrical facilities but is silent regarding utility-owned storage projects. Given the lack of guidance from GO 131-D and the fact that the UOS projects are being built in response to the Commission's Summer Reliability decisions, the ACR, and the Governor's Emergency Proclamation, SCE asserts that the projects are statutorily exempt from GO 131-D compliance pursuant to GO 131-D, Section III.B.1.h, which governs the construction of projects that are statutorily or categorically exempt pursuant to Section 15260 et seq. of the Guidelines adopted to implement the California Environmental Quality Act (CEQA), 14 Code of California Regulations Section 15000 et seq. SCE also notes that the Pacific Gas and Electric ("PG&E") UOS project at Moss Landing was allowed to go forward without a Certificate of Public Convenience and Necessity ("CPCN") or Permit to Construct ("PTC") and requests similar treatment of the EPCM contract.

SCE states that the contract meets the requirements for the 2023 Integrated Resource Planning ("IRP") Mid-Term Reliability ("MTR") procurement ordered in D.21-06-035 and requests that the Commission allow SCE and the other load serving entities ("LSEs") in its service territory count the procurement towards their procurement requirements.

SCE requests that the following relief be approved by the Commission:

1. Approval of the Emergency Reliability Contract in its entirety;
2. A finding that the Emergency Reliability Contract is consistent with the Summer Reliability Decisions and the ACR;
3. A finding that total cost (capital and operations & maintenance ("O&M")) of the Utility-Owned Storage Costs of $1.226 billion (nominal) is reasonable;
4. Authorization to recover the Utility-Owned Storage Costs in the manner proposed. SCE will not recover amounts in excess of $1.226 billion (nominal) in Utility-Owned Storage Cost unless it obtains Commission approval of any excess amounts through a separate reasonableness review in an appropriate venue;
5. Authorization for SCE to allocate Utility-Owned Storage Costs and benefits to all benefitting customers through the distribution charge and when interconnected through the applicable jurisdictional process, participating in the wholesale market, and RA eligible, in accordance with the CAM;

6. Authorization for SCE to establish the ERESBA, effective as of March 25, 2021, and to make monthly transfers to either BRRBA-D or NSGBA;

7. Authorization for SCE to include a forecast ERES revenue requirement in rate levels as part of SCE’s annual consolidated revenue requirement and rate change process;

8. Authorization to recover the IE costs and allow SCE to allocate the IE costs of SCE’s emergency reliability procurement efforts to all benefitting customers through the distribution charge. SCE will not recover amounts more than $15,000 in IE costs unless it obtains Commission approval of any excess amounts through a separate reasonableness review in an appropriate venue;

9. Authorization for SCE and other LSEs in its service territory to count the Emergency Reliability Contract toward their D.21-06-035 MTR procurement requirements for 2023 based on their cost allocation for the utility-owned storage projects and using the nameplate capacity of the projects; and

10. Authorization to proceed without an application for a CPCN, PTC, or notice of exempt construction or associated California Environmental Quality Act ("CEQA") analysis by the Commission pursuant to GO 131-D.

NOTICE

Notice of AL 4617-E was made by publication in the Commission’s Daily Calendar. SCE states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

SCE’s Advice Letter 4617-E was timely protested by 8minute Solar Energy ("8minute"), American Clean Power-California ("ACP-CA"), the Alliance for Retail Energy Markets and Direct Access Customer Coalition ("AREM-DACC"), Aypa Power ("Aypa"), Broad Reach Power (Broad Reach), Clearway Energy Group (Clearway), the Independent Energy Producers Association and the
Large-Scale Solar Association ("IEP-LSA"), the Public Advocates Office ("Cal Advocates"), Shell Energy Solutions ("Shell"), the Solar Energy Industries Association ("SEIA"), Strata Clean Energy ("Strata"), Upstream Energy Services ("UES"), and the Western Power Trading Forum ("WPTF") on November 1, 2021. Responses to the Advice Letter were timely received from the California Energy Storage Alliance ("CESA"), Hecate Grid LLC ("Hecate"), and Vote Solar. We organize the discussion by topic, below.

**Interconnection**

CESA, Broad Reach, Hecate, Strata, WPTF, IEP-LSA, 8 minute, ACP-CA, Aypa, Clearway, SEIA, Vote Solar, and UES raise questions regarding the impact of these projects on the WDAT and CAISO interconnection queues and seek additional information on the timing of the interconnection process for the proposed UOS projects.

Broad Reach states that additional information is needed to allow the Commission to determine how the proposed projects will displace transmission power flows so that the Commission can consider their impacts on deliverability of other existing or queued projects. Broad Reach suggests that in order to limit controversy over SCE's proposal, the Commission should encourage the IOUs to continue to pursue development of third-party storage resources.10

8minute, Clearway, IEP-LSA, WPTF, Strata, CESA, Hecate, and Aypa express concern regarding the proposed interconnection process and potential negative impacts on market participants and projects participating in the CAISO and SCE WDAT study process.11

CESA expresses a preference that the storage projects remain distribution assets indefinitely and only be allowed to operate during emergency conditions. If the UOS projects are allowed to operate in non-emergency periods, CESA recommends that they should be interconnected into the CAISO market as soon as possible but should not be given advantages in the queue process or for resource adequacy ("RA") counting. Further, CESA states that the full

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10 Broad Reach Protest at 2-5.
deliverability status of the UOS projects, should be required to receive RA credit or supply-side benefits.\textsuperscript{12}

8minute, ACP-CA and Aypa also question how proposed interconnection process squares with federal open access requirements.\textsuperscript{13}

WPTF questions SCE's claim that the storage will be used to manage peak and net peak loads. WPTF is unclear on how the resource will be treated as a resource that will reduce the load curve, given that load modifiers are limited to registered demand response program participants. WPTF expresses concern that in spite of SCE's assertion, the storage will in fact be interconnected to the Bulk Electric System element. In such a case, the resource would more properly be categorized as "energy storage as transmission" asset, subject to CAISO and FERC jurisdiction. WPTF requests additional information regarding the planned mechanism of interconnection and potential impacts on the wholesale energy market, the RA market, and the interconnection requests of other developers.\textsuperscript{14}

SEIA, IEP-LSA, WPTF, and Aypa question the fairness of allowing SCE to bring the storage projects online prior to WDAT interconnection.\textsuperscript{15}

UES, Aypa, Hecate, and Clearway suggest that the Commission prioritize acceleration of the WDAT interconnection process for third party storage projects so that they could be online for summer 2022 or 2023; this would avoid the need for expedited procurements.\textsuperscript{16}

**Permitting**

Broad Reach, Hecate, and Aypa state that SCE's arguments that the project qualifies for exemptions to CEQA are without merit since Resolution E-4949 which granted exemptions for PG&E's Moss Landing storage project was a "test case" that does not serve as a precedent. Further, they argue that the exemption for emergency projects under GO 131-D does not apply since this is not a "sudden, unexpected occurrence, involving a clear and imminent danger,

\textsuperscript{12} CESA Response at 4-5.
\textsuperscript{13} 8minute Protest at 2-4, ACP-CA Protest at 2, IEP-LSA Protest at 3, Aypa Protest at 3.
\textsuperscript{14} WPTF Protest at 4-5.
\textsuperscript{15} SEIA Protest at 2-3, WPTF Protest at 7, Aypa Protest at 3.
\textsuperscript{16} UES Protest at 1-2, Clearway Protest at 5-6, Hecate Protest at 4-5, Aypa Protest at 2.
demanding immediate action to prevent or mitigate loss of, or damage to life, health, property, or essential public services."¹⁷

**Cost**

8minute, ACP-CA, AReM-DACC, Cal Advocates, and WPTF cite that the cost of SCE’s procurement not only violates “just and reasonable” cost principles under California Public Utilities Code §451, but is also well above the levelized cost of similar resources that are available in the market,¹⁸ despite being sited on SCE’s own property.”¹⁹ AReM-DACC further cites that SCE’s proposed revenue requirements is eight times the average local resource adequacy price ($3.58) as reported in the Commission’s 2019 Resource Adequacy report and six times the local resource adequacy waiver threshold price.²⁰ Broad Reach and IEP-LSA protest that SCE’s cost premiums due to the expedited timeline translate to a project cost that is 65-75% above market prices.²¹ Strata contends that SCE’s installed costs ($570/kWh) are substantially higher than the reference prices developed by independent parties such as the Pacific Northwest National Laboratory ($385/kWh) and the National Renewable Energy Laboratory ($340/kWh).²²

Cal Advocates protests that SCE’s cost comparisons do not meet the requirements of D. 21-03-056 because SCE failed to provide examples of recent and approved storage projects. For example, SCE claims that the project’s $/kW-mo. Net Present Value ("NPV") value is higher than offers that responded to SCE’s Market Notice but were not selected. IEP-LSA cites that SCE’s efforts did not include bids for third-party projects that have similar limitations as SCE’s (e.g., no Full Capacity Deliverability Status, no RA capacity, and no defined duration) but offered at lower cost.²³ Moreover, Cal Advocates argues that despite SCE’s assertion that there is limited available comparison data, SCE could have instead compared its procurement against the 770 MW storage

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¹⁷ Broad Reach Protest at 7-8, Hecate Response at 5-6, Aypa Protest at 1-2.
¹⁸ 8minute Protest at 1 and 2, ACP-CA Protest at 1-2, AReM-DACC Protest at 2-3, Cal Advocates Protest at 4, WPTF Protest at 2.
¹⁹ Id., at 4-5.
²⁰ AReM-DACC Protest at 2.
²¹ Broad Power Protest at 6, IEP-LSA Protest at 2.
²² Strata Protest at 5.
²³ IEP-LSA Protest at 3.
contract approved by Resolution E-5101 or the utility-owned Mira Loma facility approved by Resolution E-4769.

8minute, ACP-CA, AReM-DACC, Aypa, Broad Reach, CESA, and IEP-LSA argue that SCE’s request should be rejected because the utility is using the emergency reliability procurement framework to bring their own substantial and costly resources online. The Commission should reject SCE’s attempt to obtain approval for a “just-in-time procurement” at any price.24 Instead, the Commission should get ahead of emergency procurements by providing signals for longer-term projects that not only will avoid expensive cost premiums but also address the systems’ continued capacity shortfalls.25 Alternatively, should the Commission approve SCE’s request, ACP-CA, Aypa, and Broad Reach asks that the project should be treated only as an exception and not as a precedent for procurements beyond 2022.26

Cost Recovery

Broad Reach states that because SCE’s projects will be grid connected upon operation, the storage discharge cannot be limited to deliver power only to the distribution system and would effectively provide reliability during net peak and other times of need. Accordingly, SCE’s resources should be recovered under the CAM mechanism for the life of the project.27

CESA requests that if SCE’s project is treated only as a distribution asset, cost recovery should occur under distribution rates. However, and less desirably, should the Commission treat the project as a market asset, once interconnected, the project costs should be recovered under CAM.

Shell Energy requests that the Commission confirm that only the cost of storage resources incremental to SCE’s 15% PRM will be allocated to departing load customers, consistent with D. 21-03-056.28

24 8Minute Protest at 1-2, ACP-CA Protest at 2, AReM Protest at 2-3, CESA Response Protest at 5, IEP-LSA Protest at 3.
25 ACP-CA Protest at 2, Aypa Protest at 5, Broad Reach Protest at 5, CESA Response Protest at 5.
26 Id.
27 Broad Power Protest at 7.
28 Shell Protest at 3.
AReM-DACC argues that since the MTR decision did not authorize utility procurement on behalf of non-utility LSEs, SCE cannot recover costs simultaneously through distribution rates (or CAM) and allocate capacity to the MTR requirements of non-utility LSEs.\(^{29}\) AReM cites that, consistent with PG&E’s CAM treatment of its emergency storage procurement through 2023, D. 21-06-035 only permitted LSEs to procure towards their own MTR obligations.\(^{30}\) This means that costs after the two-year emergency period should only be borne by bundled utility customers and count towards SCE’s MTR obligations.\(^{31}\)

SEIA states that SCE should be allowed to rate base the UOS projects and recover O&M costs through the emergency period but that, once the emergency period has ended, the costs should be removed from the rate base until SCE has completed the interconnection process since under normal circumstances SCE would not have been able to rate base the UOS prior to bringing it online.\(^{32}\)

**Utility Ownership**

Several Parties question SCE’s procurement process and suggest that the UOS was pursued at the expense of third-party options. Broad Reach questions whether SCE provided all participants in its Request for Information the opportunity to develop storage resources on SCE-owned or –controlled sites with the opportunity to expedite connection to SCE’s distribution system. Clearway asserts that SCE’s proposal amounts to a reallocation of capacity from other contracts.\(^{33}\) Parties also questioned whether projects currently in the interconnection queue were offered the opportunity for streamlined interconnection in order to become operational in 2023.\(^{34}\)

**Viability**

Several parties protested SCE’s advice letter on the grounds of viability. Cal Advocates cites the significant ratepayer risk associated with SCE’s reliance on a single contractor (AME) with limited experience not only with large operations,

\(^{29}\) AReM-DACC Protest at 3-4  
\(^{30}\) Id.  
\(^{31}\) Id.  
\(^{32}\) SEIA Protest at 4.  
\(^{33}\) SEIA Protest at 4.  
\(^{34}\) Broad Reach Protest at 5, Clearway Protest at 5.
but with energy storage projects.\textsuperscript{35} Cal Advocates asserts that SCE’s $1.226 billion, three-location project represents five times the size of AME’s previous projects.\textsuperscript{36}

Cal Advocates argues that the Commission could protect ratepayers from potential project failure and achieve risk mitigation by removing the smallest project (Etiwanda).\textsuperscript{37}

Broad Reach notes that by its own admission, SCE acknowledges that the required substation for interconnection is out of service and that its associated 66 kV line would be removed.\textsuperscript{38} Assuming this status is remains accurate, the lack of substation accessibility threatens the project’s viability.

**MTR Allocation**

CESA and Strata argue that SCE’s project should not be MTR-eligible unless SCE can demonstrate interconnection. However, CESA states that, in the event the Commission treats the resource as an immediate market asset, the resource can receive eligibility through a full application process.

Should the Commission approve SCE’s resources for CAM treatment beyond 2023, AReM-DACC and Shell request that the Commission allow non-utility LSEs to count SCE’s procurement toward non-utility LSEs’ MTR obligations. Such provision would include details on notifying non-utility LSEs whose customers will be paying for SCE’s procurement.\textsuperscript{39} In the event incremental resources are not CAISO-interconnected in time to meet the MTR requirements, penalties should only be borne by SCE.\textsuperscript{40} Moreover, MTR tranches and details should be established so that LSEs can allocate the procurement to the appropriate obligation. (i.e., treatment of SCE’s storage resource charged from the grid versus from a renewable resource).\textsuperscript{41}

\textsuperscript{35} Cal Advocates Protest at 4-5.
\textsuperscript{36} Id.
\textsuperscript{37} Cal Advocates Protest at 6.
\textsuperscript{38} Broad Power Protest at 6.
\textsuperscript{39} AReM-DACC Protest at 5 and Shell Protest at 4.
\textsuperscript{40} Id.
\textsuperscript{41} Id.
SCE REPLY TO PROTESTS

On November 5, 2021, SCE timely responded to the protests and responses of Cal Advocates, 8minute, ACP-CA, AReM-DACC, Aypa, Broach Reach, CESA, Clearway, Hecate, IEP-LSA, SEIA, Shell, Strata, UES, Vote Solar, and WPTF.

SCE explains how it has leveraged its unique position as an IOU and distribution system operator to respond to emergency procurement needs. SCE states that only SCE can own and operate distribution assets on its existing substation parcels and connect to non-CAISO-controlled portions of the grid outside of the traditional interconnection process. Furthermore, it has the benefit that permitting of assets sited at utility-owned substations and connected to the distribution system is exclusively within the jurisdiction of the Commission. Additionally, SCE states that its unique position as a load serving entity and distribution owner and operator allows it to directly control the storage devices outside of the CAISO market and adjust its load bids to reflect the capacity of the resource.  

In response to questions about the operation and capacity value of the UOS while the projects are operating as distribution assets, SCE states that it intends to reflect the charge and discharge of the UOS projects in its daily day-ahead load bid to the CAISO. Based on SCE’s forecast of expected periods of abundant energy, SCE will plan to charge the UOS Projects during those periods and reflect that increased load in its load bid for those hours. Conversely, based on SCE’s forecast of the periods of most need, SCE will plan to discharge the UOS projects during those periods and make a corresponding decrease to its load bid for those hours.

During the summer, this charge and discharge cycle typically occurs during periods of abundant solar generation in the middle of the day, and during the net peak for the times of most need. The difference in value of these periods reflect the energy value of the resource. In real-time, SCE will operate the individual UOS projects consistent with its load adjustment unless other reliability needs, including local distribution system needs, arise that would require a change in operation to meet that emergent system need.

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42 SCE Reply to Protests at 4-5.
Additionally, SCE states that the UOS projects' load reduction will be reflected in future California Energy Commission ("CEC") load forecasts for RA compliance. SCE plans to work directly with the CEC to ensure the proper application of this load reduction and that all benefitting customers receive their equal share of this load reduction or work with the Commission’s Energy Division to allocate the load reduction so that it is reflected in the RA compliance filings of LSEs in SCE’s service territory.

**Interconnection**

SCE states that it "strove to minimize impacts on its distribution customers and has preserved open and non-discriminatory access to its distribution system while responding to the Emergency Proclamation." In order to do this, SCE states that it will be adding a 220/66 kV transformer at both the Springvale and Etiwanda substations in order to increase capacity to accommodate load growth or additional distributed energy resources at those sites. Similar upgrades are taking place at the Hinson substation. Overall, SCE states that the upgrades will result in over 300 MW of additional capacity that customers already in the interconnection queue may be able to leverage, as they would when SCE installs distribution upgrades to accommodate overall system growth and evolving customer needs.

SCE provides the following table which details these expected system benefits:

<table>
<thead>
<tr>
<th>Substation</th>
<th>Nameplate BESS Size</th>
<th>Nameplate Additional Transformer Size</th>
<th>Net Capacity Increase (Normal System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springville</td>
<td>225 MW</td>
<td>280 MW</td>
<td>55 MW</td>
</tr>
<tr>
<td>Hinson</td>
<td>200 MW</td>
<td>280 MW</td>
<td>80 MW</td>
</tr>
<tr>
<td>Etiwanda</td>
<td>112.5 MW</td>
<td>280 MW</td>
<td>167.5 MW</td>
</tr>
</tbody>
</table>

Additionally, SCE states that it is not violating federal open access requirements since the projects will operate as distribution-level assets that do not participate in the CAISO market for the first five years of operation. SCE asserts that the initial operation of these projects is outside the jurisdiction of FERC and within the Commission's exclusive jurisdiction.

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43 SCE Reply to Protests at 8.
Specifically, SCE argues that “[b]ecause SCE will connect the UOS Projects at its existing substations to 66 kV sub transmission systems considered local distribution by FERC and CAISO and will not initially participate in the CAISO market, the WDAT does not apply here as a matter of law. SCE is thus not required to submit an interconnection request under it to connect UOS as a distribution asset. When, in the future...SCE transitions the use of the UOS Projects from a distribution asset to a storage resource that participates in the wholesale market, it will submit an interconnection request to do so pursuant to the WDAT. SCE will thereafter proceed through the interconnection process like any other customer.”

Permitting

SCE responds that the Commission should reject Aypa and Broad Reach's contentions that the UOS projects are not subject to emergency exemption from permitting requirements, provided in the Governor’s Emergency Proclamation. Specifically, SCE notes that proclamation states that, both utilities and the CPUC are mandated to “act immediately to achieve energy stability during this emergency” and to accelerate plans for the “construction, procurement, and rapid deployment of new clean energy and storage projects to mitigate the risk of capacity shortages and increase the availability of carbon-free energy at all times of day.”

SCE explains that the UOS projects and associated upgrades, facilities or modifications are being constructed in response to Commission decisions, the ACR and the Governor’s Emergency Proclamation. Therefore, the projects are statutorily exempt from GO 131-D compliance pursuant to GO 131-D, Section III.B.1.h, which governs the construction of projects by investor-owned utilities that are statutorily or categorically exempt pursuant to Section 15260 et seq. of the Guidelines adopted to implement the CEQA, 14 Code of California Regulations Section 15000 et seq.

In response to Aypa and Broad Reach’s argument that a PTC or a CPCN is necessary because Resolution E-4949 noted that PG&E’s utility-owned

45 SCE Reply to Protests at 20.
46 SCE Reply to Protests at 18.
47 Id. at 18.
storage was subject to CEQA. SCE states “that the storage project in that case was subject to CEQA review because it was in the coastal zone and required a coastal development permit from Monterey County through its state-delegated powers under the California Coastal Act.” Further SCE notes that in E-4949 the Commission determined no CPCN or PTC was required, therefore no CEQA review by the Commission was triggered.

Finally, SCE asserts that its UOS projects, like the PG&E storage project approved in E-4949, “are located within substation property on flat parcels that require minimal grading and are not located in High-Risk Fire Areas”

**Viability**

In response to Cal Advocate’s viability concerns, SCE reiterates its arguments from the AL filing, that it believes the August 1, 2022, online date is reasonable as it selected sites that facilitate expedited construction timelines. Additionally, SCE cites the track record of AME and its suppliers Contemporary Amperex Technology Co. Ltd. and FlexGen Power Systems, Inc. as well as contract provisions such as termination rights and liquidated damages for unexcused delays that incent AME to deliver the project on time.

**Cost Reasonableness**

SCE responds that the costs of the contract are reasonable given the limited pool of storage resources that were able to come online by summer 2022. SCE argues that the comparisons made by ACP-CA, 8minute, and Broad Reach that costs are excessive are flawed as they compare pricing for resources that come online at a later date and that are not procured on an emergency basis. Similarly, SCE explains that Cal Advocates comparisons to Aliso Canyon and System Reliability procurements are not directly comparable to the UOS projects given differences in development timelines and forecasted price curves. SCE also claims that AReM-DACC's comparison to the local RA price and local waiver threshold are

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48 SCE Reply to Protests at 18-19
49 SCE Reply to Protests at 19
50 Id. at 10-11.
51 Id. at 12-13.
52 Id. at 14.
not valid since short-term capacity prices paid to existing resources are not representative of the cost of new storage resources.\textsuperscript{53}

SCE states that the storage costs are reasonable as it resulted from a competitive solicitation process overseen by an independent evaluator. Additionally, SCE asserts that costs are competitive with those of the limited number of similar projects with expedited construction timelines.\textsuperscript{54}

**Cost Recovery**

In response to AReM-DAC's argument that SCE should recover costs from all customers only during the emergency period through July 2023 and then recover costs from SCE bundled customers because the Commission authorized this cost recovery treatment for PG&E’s four power purchase agreements, SCE states that there is no basis to require identical cost recovery treatment between SCE's UOS projects and the four PG&E power purchase agreements.\textsuperscript{55}

Additionally, SCE states that contrary to SEIA's request to only allow SCE cost recovery during the emergency period and thereafter only once they are interconnected to CAISO facilities, the UOS projects will provide reliability benefits during emergency and non-emergency conditions, and since it is not possible to purchase equipment for only the emergency period, cost recovery from all benefitting customers should be for the life of the asset. \textsuperscript{56}

**MTR Eligibility**

In response to AReM-DACC and Shell, SCE explains that it has requested authority to allow SCE and all LSEs in its service territory to count the UOS projects towards their IRP MTR procurement requirements established in D.21-06-035 based on the cost allocation of the UOS projects and their nameplate capacity. SCE notes that assuming the emergency period is extended through summer 2023, as proposed in the recent Emergency Reliability proposed

\textsuperscript{53} Id. at 13.
\textsuperscript{54} Id. at 13-14.
\textsuperscript{55} Id. at 16.
\textsuperscript{56} Id. at 17.
decision, then the projects should be counted towards 2024 MTR procurement requirements, rather than 2023 MTR procurement requirements as proposed in AL 4617-E. SCE asserts that Shell's suggestion of a workshop on the details of the MTR allocation would not be necessary because the allocation would be based on a simple LSE load share basis consistent with all other costs and benefits of the UOS projects.

DISCUSSION

The Commission has reviewed the Advice Letter, the protests, and the reply of SCE. We consider issues raised by protesters and respondents to AL 4617-E in the following discussion. However, we find that SCE’s request in AL 4617-E, with one modification, is reasonable overall.

Consistency with Commission decisions, D.21-02-028 and D.21-03-056, and the September 17, 2021, ACR

We find that SCE’s AL 4617-E filing is consistent with Commission decisions, D.21-02-028 and D.21-03-056, and the September 17, 2021, ACR. As directed in the decisions, SCE has filed a Tier 2 AL seeking approval of its EPCM contract with AME. The EPCM contract is for 537.5 MW of incremental storage capacity expected to be online by August 1, 2022, that can dispatch to meet peak and net peak demand.

Further, the showing includes the following elements as outlined in the decisions:

- Discussion of the procurement process and resources selected;
- Operational information on the resources selected;
- Pricing and net market value analysis and summary of key contract terms;
- Independent evaluator report;
- Showing of cost competitiveness to extent comparable data exist; and
- A demonstration that the resource has a path to deliver its online date.

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57 See PD of Administration Law Judge Thomas, issued on October 29, 2021, in R.20-11-003, addressing the need for additional resources in the summers of 2022 and 2023 to help maintain reliability in the most extreme weather events.

58 SCE Reply to Protests at 16-17
Procurement Methodology, Evaluation, and Cost Reasonableness

SCE initiated a solicitation on August 25, 2021, with a Request for Information ("RFI") seeking feedback from suppliers if they could meet the aggressive August 1, 2022, online date for utility-owned storage projects on SCE substation parcels with a minimum capacity of 50 MW with 4 hours of dispatch capability. SCE notified suppliers that the procurement was driven by the Governor’s Emergency Proclamation and that the schedule would be expedited. SCE utilized the following procurement schedule.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 25, 2021</td>
<td>RFI Release</td>
</tr>
<tr>
<td>September 3, 2021</td>
<td>RFI Response</td>
</tr>
<tr>
<td>September 8, 2021</td>
<td>SCE Review and Shortlist</td>
</tr>
<tr>
<td>September 9, 2021</td>
<td>Full RFP Document Release</td>
</tr>
<tr>
<td>September 10, 2021</td>
<td>Contractual Negotiations Start</td>
</tr>
<tr>
<td>September 20, 2021</td>
<td>Initial Pricing</td>
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<tr>
<td>September 30, 2021</td>
<td>Final Pricing</td>
</tr>
<tr>
<td>October 20, 2021</td>
<td>Agreement Execution</td>
</tr>
<tr>
<td>October 21, 2021</td>
<td>Submission for CPUC Approval</td>
</tr>
</tbody>
</table>

SCE retained Merrimack Energy Group, Inc., as the IE for its emergency reliability ownership efforts. Merrimack reviewed SCE’s selection methodology and criteria for the proposals and conducted its own independent evaluation, joined, and contributed to numerous conference calls and negotiation sessions, and reviewed email traffic and other documents exchanged by the parties. The IE also participated in the CAM procurement review group meeting. The IE analysis is included in SCE’s AL 4617-E Confidential Attachment D. The IE found that the evaluation methodology was reasonable and was applied fairly to all bidders. The IE finds that the EPCM contract with Ameresco was "reasonably negotiated, was generally competitive with other storage contracts from the third-party bilateral negotiations and other solicitations based on the information
presented to the IE at the time of offer selection and was generally in the best interests of customers and ensuring system reliability.\footnote{SCE AL 4617-E, Public Attachment D at 46.}

SCE states that the storage costs are reasonable as it resulted from a competitive solicitation process overseen by an independent evaluator. Additionally, SCE asserts that costs are competitive with those of the limited number of similar projects with expedited construction timelines.

We have reviewed Confidential Attachment C and the IE report which contain price comparisons to the other UOS offers received as well as third party RA-only contracts under consideration by SCE. On balance, we concur with the IE that the costs of the EPCM contract with AME are generally reasonable given the unique, expedited nature of this procurement. We agree with SCE that there are very few comparable projects with which to compare costs given the extremely expedited development timeline. The contracts Parties point to for comparison purposes cannot be compared directly as they have key differences in development timeline, and/or contract execution date.

Given the expedited development timeline, we direct SCE to regularly update the CAM PRG on project milestones during development as well as on operations and market impacts once the projects are online.

**Cost Recovery**

In D.21-02-028 and D.21-03-056, the Commission directed the IOUs to continue procurement efforts to meet or exceed the effective 17.5 percent planning reserve margin with a preference for new storage contracts, including UOS, with costs to be recovered through CAM. While there was a preference for shorter duration contracts, the Commission did not prohibit or limit longer duration contracts.

As longer duration contracts are allowed, cost recovery from all benefitting customers is appropriate for the duration of the contract. We agree with SCE, that it is there is no basis to require identical cost recovery treatment between SCE's UOS projects and the four PG&E power purchase agreements, as proposed by AReM-DACC. PG&E could have chosen to recover costs from all customers
for the duration of the contract but did not do so. We thus reject AReM-DACC and SEIA's protests.

In addition, we find that it is appropriate for SCE to recover costs from all benefitting customers through a distribution charge during the period when the UOS is interconnected to non-CAISO-controlled facilities and not participating in the wholesale market. This cost recovery mechanism is consistent with the approach used in CAM, but more appropriate for a distribution asset.

Once the storage resources achieve full deliverability status and are participating in the wholesale market, costs and benefits shall be allocated through CAM as directed by D.21-02-028 and D.21-03-056.

During the period covered by the summer reliability proceeding's targeted emergency procurement, RA benefits, (whether in the form of load reduction or RA capacity) will not be allocated to LSEs since they will apply towards the additional procurement to meet effective PRM.

SCE is authorized to establish the ERESBA to record the actual revenue requirements associated with the UOS project costs. During the period when these resources are interconnected to non-CAISO-controlled facilities and operating as distribution assets, the balance in the ERESBA will transfer on a monthly basis to the BRRBA-D. Balances recorded in the BRRBA-D are recovered from all benefitting customers via distribution rate levels. Once the projects have completed the applicable interconnection process and are participating in wholesale markets and become RA-eligible, the balance in the ERESBA will transfer monthly to the NSGBA.

Interconnection

SCE has proposed to leverage its position as a distribution utility in order to bring the UOS projects online before they have formal interconnection to the CAISO grid. According to SCE, the UOS will initially be interconnected to non-CAISO-controlled facilities as distribution assets and their operation will be reflected in load bids to the CAISO. SCE will then seek WDAT interconnection as any other project would.

Many Parties question the fairness of such a plan on the grounds that it appears that SCE is circumventing the interconnection process or that the UOS projects
may have negative impacts on third party projects already online or in the WDAT queue.

While it is impossible to fully ensure that the UOS will have no negative impacts on other projects, we find that SCE has taken reasonable actions to minimize those impacts by selecting sites that can accommodate the storage resources in addition to projects already in the interconnection queue and undertaking upgrades to substations as needed that result in net increases in interconnection capacity.

While SCE has utilized its unique position to bring the UOS projects online rapidly, SCE will receive no preference in the WDAT interconnection process. Additionally, we direct SCE to ensure that existing staff resources are not diverted to the UOS project from third party interconnection or procurement work. During the period when the UOS is operating as a distribution asset, it will not be eligible for supply side RA value and will not participate in the CAISO market.

We also note that SCE did seek summer of 2022 projects from third party storage resources in addition to the UOS. It did so by re-engaging parties from previous market outreach and engaging in discussions with existing counterparties and canvassing all MTR RFO bidders. To date, these efforts have resulted in one executed third-party contract for a large project that can meet the expedited 2022 deadline. Given the urgency of the need for additional resources in summer 2022, we encourage SCE to continue to pursue all viable opportunities. While we have expressed a strong preference for RA eligible resources such as those that might have been bidders into the MTR RFO, SCE is also encouraged to consider contracts for non-RA eligible resources (or not yet RA eligible resources) to the extent that they can supply energy at net peak.

**CEQA Exemption**

The Governor's July 30, 2021, Emergency Proclamation declared a State of Emergency due to risks to electricity reliability posed by extreme heat, drought, and fire. In the Proclamation, the Governor requested that the Commission work with load serving entities to rapidly deploy new clean energy and storage projects that can be online by October 31, 2022. Additionally, the Order addresses
expedited permitting of projects and states that "these emergency circumstances may be deemed an unforeseen emergency situation."\(^{60}\)

While we agree with Parties that PG&E's Moss Landing project should not serve as a precedent in this decision, we disagree with their assertion that this is not an emergency situation and that the exemption for emergency projects under GO 131-D does not apply. The Governor has declared a state of emergency and requested that the Commission act rapidly to ameliorate the situation. As SCE signed the EPCM contract in direct response to Commission decisions to expedite procurement and the Governor's Emergency Proclamation, we find that the emergency provisions in CEQA do apply.

We agree with SCE that the UOS projects are exempt from GO 131-D compliance pursuant to GO 131-D, Section III.B.1.h, which governs the construction of projects by investor-owned utilities that are statutorily or categorically exempt pursuant to Section 15260 et seq. of the Guidelines adopted to implement CEQA, Title 14 of the California Code of Regulations Section 15000 et seq. Specifically, we find that the UOS projects are subject to Section 15269(c) of the Guidelines, which exempts "actions necessary to prevent or mitigate an emergency."

**MTR Eligibility**

SCE requests that the Commission allow SCE and other LSEs in its service territory to count the UOS projects toward their D.21-06-035 MTR procurement requirements after the period covered by the summer reliability proceeding's targeted emergency procurement based on their cost allocation. SCE also proposes that the MTR value be based on the nameplate capacity of the projects rather than the effective load carrying capability ("ELCC") methodology adopted in D.21-06-035.

D.21-12-015 states that "if an IOU elects to continue to charge all customers in its service territory for the ongoing costs of UOS resources after 2023, the resource will not count toward the IRP MTR requirements for the LSEs in the utility’s service territory."\(^{61}\) Since all customers in SCE's service territory will be charged

\(^{60}\) Governor's Emergency Proclamation, July 30, 2021, Order 13.

\(^{61}\) D.21-12-015 at 108-9.
for the UOS for the life of the projects, they are not eligible to count towards IRP MTR requirements.

**COMMENTS**

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission’s website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution is neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on November 12, 2021.

SCE, the California Community Choice Association (CalCCA), Cal Advocates, CESA, ACP-CA, IEP, SEIA-LSA and Clearway timely filed comments on draft Resolution E-5183 on December 6, 2021.

SCE expresses its support for the Draft Resolution and requests clarification of the language describing the process for filing an application for reasonableness review in the case of cost overruns. These clarifications have been incorporated.

CalCCA expresses general support for the Draft Resolution, but seeks clarification of how the Commission will administer ongoing oversight of the UOS projects. We clarify that least cost dispatch standards outlined in D.05-01-054 will apply to the UOS resources as they do for all other utility operated resources. We expect that least cost dispatch may be reviewed using meter data reflecting the timing of the resources’ charging and discharging and whether SCE is bidding load reasonably in the day ahead market given historical load patterns. The actual energy benefit will be the savings resulting from shifting load from peak to off-peak hours. We envision that review of least cost dispatch will take place in ERRA, as it does for other IOU operated resources=.

IEP comments that costs of the UOS are unduly high. Cal Advocates reiterates arguments relating to cost comparisons made in their protest stating that it is appropriate to compare costs of the EPCM contract to IRP procurement directed
under D.19-11-016. Cal Advocates also restates concerns regarding high costs and project viability. While there is procurement that can be compared to the EPCM contract, we find that the development timeline and market conditions of procurement directed under D.19-11-016 are substantially different so the contract prices cannot be fairly compared. We continue to find that costs are reasonable given the extremely expedited nature of the development timeline and contract provisions.

Clearway states that the price differential with other projects is related to the expedited timeline, not the product procured, as stated in the Draft Resolution. We agree and have removed the reference to product procured.

SEIA-LSA, Clearway, ACP-CA, and IEP reiterate concerns about impacts of the projects on the WDAT queue. SEIA-LSA, ACP-CA, and Clearway request documentation from SCE indicating that SCE staff will not be diverted from interconnection and procurement work. CESA requests regular reports on key project milestones and validation of assumptions made. While we decline to require SCE to file regular reports, we direct SCE to keep the CAM PRG apprised of project status and to ensure that additional staff is hired for work related to the UOS projects.

CESA and SEIA-LSA recommend that the Commission maintain the finding that UOS projects should not be eligible for MTR procurement compliance. CESA states that “there are many factors between now and the project becoming deliverable as a Resource Adequacy (“RA”) resource that must be demonstrated before determining the appropriate “count” for MTR procurement compliance purposes.”62 SEIA-LSA notes that while the Draft Resolution leaves the issue of MTR counting open for further discussion in the IRP proceeding, D.21-12-015 states that UOS procured for summer 2022 and 2023 reliability can be used by the IOUs for MTR requirements under certain conditions. We update the language in this Resolution to match the language in the recently adopted D.21-12-015.

FINDINGS

1. Commission Decisions D.21-02-028 and D.21-03-056 directed the IOUs to contract for incremental capacity available to serve peak and net peak

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62 CESA Comments to Resolution E-5183 at 2.
demand during the summers of 2021 and 2021 on behalf of all benefitting customers and expressed a preference for storage resources. The Commission determined that potential resources may include utility-owned generation and authorized the IOUs to submit utility-owned generation projects through a Tier 2 Advice Letter.

2. On July 30, 2021, Governor Newsom proclaimed a state of emergency in California due to the increasing effects of climate change and their impact on the state’s electric system.

3. The Emergency Proclamation requests that the Commission “work with the State’s load serving entities on accelerating plans for the construction, procurement, and rapid deployment of new clean energy and storage projects to mitigate the risk of capacity shortages and increase the availability of carbon-free energy at all times of day.”

4. SCE’s methodology to evaluate energy storage procurement solicitations is reasonable and consistent with prior energy storage solicitations.

5. It is reasonable for SCE to initially interconnect the storage projects to non-CAISO-controlled facilities as distribution assets then seek formal interconnection according to the requirements of the Wholesale Distribution Access Tariff.

6. The cost of the Emergency Reliability Engineering, Procurement, Construction, and Maintenance contract with Ameresco, Inc. is reasonable given the expedited nature of the procurement.

7. SCE’s requests for cost recovery are reasonable.

8. SCE’s request to recover costs of the utility-owned storage projects through a non-bypassable distribution charge during the period when the utility-owned storage resources are interconnected to non-CAISO-controlled facilities and not participating in the wholesale market, is consistent with the cost allocation principles of D.21-02-028 and D.21-03-056.

9. SCE’s request to recover the costs of the utility owned storage projects through the Cost Allocation Mechanism once the facilities have received a formal interconnection and can participate in the wholesale energy market, is reasonable.

10. It is reasonable to allow SCE to recover costs of the independent evaluator up to $15,000 through the non-by passable distribution charge.

11. It is reasonable to require SCE to file an application for reasonableness review of actual costs of the utility-owned storage projects that exceed the cost estimate approved in AL 4617-E within 90 days after its operational start date, if SCE seeks to recover any of the actual costs of the project that exceed the cost estimate contained within AL 4617-E.
12. It is reasonable for SCE to regularly update the Cost Allocation Mechanism Procurement Review Group on project milestones during development as well as on operations and market impacts once the projects are online.

13. The utility owned storage projects are governed by Commission General Order 131-D as it relates to permitting electric facilities in California.

14. The development of the utility owned storage projects constitutes a CEQA exempt emergency action under 14 CCR section 15269(c). As such, section III.B.1.h of GO 131-D exempts the projects from the requirement to file an application with the Commission requesting authority to construct.

15. A Certificate of Public Convenience and Necessity, Permit to Construct, or notice of exempt construction from the Commission is not required for the Utility-Owned Storage Projects identified in SCE AL 4617-E.

SINCE ALL CUSTOMERS IN SCE’S SERVICE TERRITORY WILL BE CHARGED FOR THE UOS FOR THE LIFE OF THE PROJECTS, THEY ARE NOT ELIGIBLE TO COUNT TOWARDS IRP MTR REQUIREMENTS UNDER D.21-12-015.

THEREFORE IT IS ORDERED THAT:

1. The request of SCE to approve the Emergency Reliability Engineering, Procurement, Construction, and Maintenance Contract for Utility-Owned Storage as requested in Advice Letter 4617-E is approved.
2. The total cost (capital, operations, and maintenance) of $1.226 billion is reasonable given the expedited nature of the procurement.
3. SCE is required to file an application for reasonableness review of actual costs of the utility-owned storage projects that exceed the cost estimate approved in AL 4617-E within 90 days after their operational start date, if SCE seeks to recover any of the actual costs of the project that exceed the costs projected in AL 4617-E.
4. SCE is authorized to recover costs of the utility-owned storage from all customers through a non-by passable distribution charge during the period when the utility-owned storage resources are interconnected to non-CAISO-controlled facilities and not participating in the wholesale market.
5. Once the facilities have received a formal interconnection so that they can participate in the wholesale energy market and are eligible for resource adequacy, net costs and benefits will be allocated via the Cost Allocation Mechanism which is recovered via New System Generation charges.
6. SCE is authorized to establish the ERESBA, effective as of March 25, 2021, and to make monthly transfers to either the BRRBA-D or NSGBA.
7. SCE is authorized to include a forecast of the ERES revenue requirement in rate levels as part of SCE’s annual consolidated revenue requirement and rate change process.
8. SCE is authorized to recover the independent evaluator costs up to $15,000 and allocate costs to all benefitting customers through the distribution charge. Any costs above $15,000 may not be recovered unless SCE obtains Commission approval through a separate reasonableness review.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on December 16, 2021; the following Commissioners voting favorably thereon:

_____________________
Rachel Peterson
Executive Director