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**Witnesses:**
- E. Castano
- E. Keating
- E. Molnar
- J. Nelson
- W. Walsh

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**SOUTHERN CALIFORNIA EDISON**

An EDISON INTERNATIONAL® Company

(U 338-E)

**Reply Testimony of Southern California Edison Company-Phase 2.**

Before the

**Public Utilities Commission of the State of California**

Rosemead, California

September 10, 2021
SCE-05: Reply Testimony of Southern California Edison – Phase 2

Table Of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Witness</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>1</td>
<td>E. Keating</td>
</tr>
<tr>
<td>II.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>5</td>
<td>E. Castano</td>
</tr>
<tr>
<td>D.</td>
<td>8</td>
<td>E. Molnar</td>
</tr>
<tr>
<td>E.</td>
<td>9</td>
<td>E. Keating</td>
</tr>
<tr>
<td>III.</td>
<td>10</td>
<td>W. Walsh</td>
</tr>
<tr>
<td>A.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>20</td>
<td>J. Nelson</td>
</tr>
</tbody>
</table>

Appendix A Witness Qualifications
I. INTRODUCTION

Southern California Edison Company (SCE) provides this reply testimony in response to proposals made by parties in their opening testimonies served September 1, 2021. Given the short timeframe for serving reply testimony, SCE is not attempting to respond to every proposal made by the dozens of other parties that offered opening testimony. SCE has prioritized responding to proposals that show particular promise with respect to the goals of this rulemaking, are of greatest concern, or otherwise warrant a response. SCE’s non-response to any particular proposal or position stated in another party’s opening testimony should not be construed as an endorsement of that proposal or position.

In Chapter II of this reply testimony, SCE addresses demand response (DR)/demand reduction proposals in other parties’ opening testimony. SCE reiterates its overarching view that while traditional emergency DR programs have a role in providing emergency grid relief, there should be a broader shift to include programs that do not require customers to shut off power completely by using available technologies to mitigate peak demand without noticeably impacting customer comfort or business operations. For example, SCE envisions a single DR program offered to all residential customers that will enable greater grid flexibility, allow customers to optimize incentive payments, and no longer require customers to choose between competing investor-owned utility (IOU) programs or different smart appliances or devices. SCE also notes as a preliminary matter in this reply testimony that insofar as Phase 2 of this rulemaking now encompasses changes to DR programs in 2023, the California Public Utilities Commission (Commission) will need to authorize incremental funding for such changes, to the extent they are not covered by already-authorized funds. As to other parties’ specific proposals, SCE provides the following responses. First, as to the Emergency Load Reduction Program (ELRP) Pilot, the Commission should not add a capacity payment for enrollment, and should not add a residential component, even on an opt-in basis. Second, interconnection should remain subject to the procedures and requirements set forth in Tariff Rule 21. Third, SCE is open to the
“Pilot UNIDE Program” proposed by TeMix Inc. (TeMix), provided that certain safeguards and limitations are in place. Fourth, the Commission should not require sharing of customer DR participation data, as requested by certain parties.

In Chapter III, SCE replies to supply-related proposals in parties’ opening testimony. First, SCE addresses San Diego Gas & Electric Company’s (SDG&E) utility-owned energy storage proposal and explains why the Commission should provide direction on authorization and a cost recovery mechanism for the IOUs to deploy utility-owned storage resources to meet emergency reliability needs in summer 2022. Second, SCE responds to the California Independent System Operator Corporation’s (CAISO) and Middle River Power LLC’s (MRP) proposals regarding changes to resource adequacy (RA) requirements for 2022 and 2023, and addresses why the Commission should not make changes to the RA program in this rulemaking. Third, SCE explains why American Clean Power – California’s (ACP-California) recommendation to open a new Assembly Bill (AB) 970 proceeding is unnecessary.

II.

SCE’S REPLY ON DEMAND-RELATED PROPOSALS

A. Incremental Funding Will be Needed to Support New and/or Modified DR Programs and Pilots In 2023

To the extent that through Phase 2 of this rulemaking changes to DR programs pursuant to Decision (D.) 21-03-056 are extended into 2023, the Commission will also need to approve incremental funding to continue those activities through 2023. Specifically, in D.21-03-056, the Commission approved SCE’s request to increase Base Interruptible Program (BIP), Summer Discount Plan (SDP), and Capacity Bidding Program (CBP) incentives for 2021 and 2022, and modified the Smart Energy Program (SEP) to allow all residential customers, bundled and unbundled, to be eligible to enroll in the program. While some of the changes adopted in D.21-03-056 were permanent (e.g., allowing all residential customers to be eligible to enroll in the SEP), some changes, such as increased incentive changes, were authorized for 2021 and 2022 only. As such, funding for these temporary incremental activities, which SCE estimates at $40
million (including approximately $35.5 million for incentives) will be needed for 2023.1 If the
Commission does not authorize incremental funding, SCE will need to make appropriate
modifications, such as reducing DR program incentive rates, to ensure program expenditures are
within their authorized amounts.

B. ELRP Pilot

1. The Commission Should Not Adopt Capacity Payments for ELRP

Certain parties assert that adding a capacity payment to ELRP would encourage
participation in the program and lead to greater load reduction during emergency events.2 These
parties reason that without a capacity payment, minimum number of dispatches, or other means
of guaranteeing a predictable revenue from the program, customers will lack incentive to enroll
in the ELRP.

SCE does not support adding a capacity payment to ELRP. Given that ELRP
participants face no penalty for non- or under-performance during an ELRP event, a capacity
payment for the program would essentially amount to a sign-up bonus with no performance
requirements. A customer could simply enroll in the program, collect the capacity payment, and
ignore dispatch alerts during ELRP events. This is not a cost-effective way of achieving load
reduction. Any capacity payment made to a customer that did not subsequently perform during
an ELRP event would be a poor use of customer funds. As a general matter, utilities should not
engage in the practice of providing lump sum payments to participating customers that do not
result in any demonstrable benefit for all other ratepayers. Further, such a practice may result in
equity concerns among different customer groups.

To the extent that the Commission approves an ELRP capacity payment, it should
also require participating customers to commit to load reduction during an ELRP event. Such a

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1 Amount includes $2.5 million needed to support the TeMix demonstration pilot if approved by the
Commission.

2 See Opening Phase II Prepared Testimony Of [ ] Advanced Energy Economy, pp. 3-4; Opening Phase
2 Prepared Testimony of Polaris Energy Services, p. 7; Prepared Direct Testimony Of [ ] Sunrun Inc.,
requirement would appropriately require performance from the participating customer and thereby benefit other ratepayers. In order to enforce the customer’s performance obligation (i.e., certain load reduction during ELRP events), a penalty would need to be added for non-performance. But if the ELRP is to remain a non-penalty program, no capacity payment should be added to the program.

SCE supports allowing customers to dual participate in the ELRP and other DR programs that provide a capacity payment, but on the condition that in order to receive compensation under the ELRP, such participating customers would be required to demonstrate that they achieved incremental load reduction (ILR) as ELRP participants, above and beyond the load reduction commitment of any other DR program in which such customers are participants.

2. **SCE Does Not Support A Residential Option For The ELRP, Even If Enrollment Is On An Opt-In Basis**

In its opening testimony, SCE identified a number of problems with the Staff Concepts proposal that ELRP be expanded to residential customers through automatic/default enrollment, with no required sign-up or acknowledgment process. Other parties raised similar concerns about a residential ELRP built on automatic enrollments. However, some parties expressed support for the concept of extending the ELRP to residential customers not through automatic enrollment, but through a voluntary opt-in process.3

Even if enrollment were on an opt-in basis, SCE does not support Staff’s residential ELRP proposal due to the complexities of the design. As stated in SCE’s opening testimony, Staff recommends that payments for residential ELRP be based on a meter-verified ILR relative to a “simple” baseline. This incentive calculation method would be administratively challenging to implement and would require significant outreach to inform and educate customers about the incentive they are receiving. In addition, it is unclear what the baseline

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3 See Phase 2 [ ] Opening Prepared Testimony of Joint Demand Response Parties, p. 26; Opening Phase 2 Prepared Testimony of the Joint Parties [ ], p. 9; Opening Phase 2 Prepared Testimony of Oracle Utilities, p. 11 of 13; Prepared Phase 2 Direct Testimony of [SDG&E] Regarding Demand-Side Actions [ ], pp. 18-19.
would be or would require with respect to SCE’s billing system and necessary system enhancements to support the proposal.

Give that the challenges with baselines and settlements will exist regardless of the mode of enrollment (automatic or opt-in) in a residential ELRP, the Commission should adopt SCE’s Whole Home Savings Program (WHSP) Pilot (discussed in SCE’s opening testimony), because the customer settlement calculation would be less impactful and easier for customers to understand. The WHSP Pilot represents a residential DR program that expands on the ideas in the Staff Concepts document in a way that SCE believes is more conducive to achieving effective and sustainable residential load reduction in the long term based on its past experience running the Peak Time Rebate Program. As stated in SCE’s opening testimony, the WHSP would compensate customers for load reduction during reliability events, with auto enrollment for high usage customers who have opted in to receive transactional emails, optional enrollment for others, and cross-promotion with the SDP and SEP (this includes the option to unenroll).

SCE estimates this approach could result in the enrollment of up to two million service accounts and 100-160 MW in those programs, and presents other significant benefits relative to a proposed residential ELRP program.4

C. Interconnection Should Remain Subject To The Requirements Of Tariff Rule 21

Certain parties advocate for a streamlined or provisional interconnection process (including waivers or expedited review of interconnection requests) outside of what is currently allowed under Electric Rule 21, the tariff that sets the interconnection and other requirements for generation facilities to be connected to a utility’s distribution system.5 Rule 21 is designed to

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4 See Direct Testimony of Southern California Edison Company-Phase 2 (SCE Testimony), pp. 7-14.
5 See Opening Testimony of [ ] the California Energy Storage Alliance, p. 39; Phase 2 [ ] Opening Prepared Testimony of Joint Demand Response Parties, p. 30; Opening Phase 2 Prepared Testimony of the Joint Parties [ ], p. 6; Prepared Direct Testimony of [ ] the Microgrid Resources Coalition, pp. 5, 9.
provide customers seeking to install generating or storage facilities with access to the grid while
protecting the safety and reliability of distribution and transmission systems.6

While SCE agrees that interconnection should be facilitated as efficiently as possible, the
Commission should not modify or provide waivers for interconnections outside of Rule 21’s
procedures. The proper way to evaluate a project’s ability to export to the grid safely and
reliably is through the Rule 21 process. Rule 21 already provides for expedited review of
applications by customers that wish to convert non-exporting projects into exporting projects,
with rules that are designed to prevent safety and reliability risks. Risks that would arise with
any attempted shortcuts to the Rule 21 process would include exceeding thermal capacity of
distribution wires and systems (system overloads), creating excessive overvoltage conditions in
the distribution system, potentially leading to system failures and unsafe conditions to the
distribution grid and public (overvoltage of customer’s equipment), and inability of the
generation system to sense and disconnect in the event of a distribution system fault condition,
such that faulted/downed wires could remain energized and become a hazard.

Moreover, allowing certain interconnection projects to leapfrog the Rule 21 process, with
others presumably still required to follow that process, would undermine the interconnection
queue, raise equity concerns, and run counter to cost-causation principles. The interconnection
processes are designed to evaluate the effect of proposed new projects on the electrical system
and identify what upgrades are needed prior to interconnection. This evaluation is done on a
sequential basis to assign proper cost responsibility to the requesting projects. Allowing non-
export projects to export without following the queuing practices would affect the upgrades
being identified for other projects already in the queue and, in doing so, would likely disrupt the
evaluation and resolution of pending interconnection applications for exporting.

SCE also notes that only energy storage projects fully charged from renewable resources
are eligible to export under Rule 21. Thus, the ability for stand-alone energy storage projects to

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export would have to be evaluated under SCE’s Wholesale Distribution Access Tariff, not Rule 21.

California Energy Storage Alliance proposes that the Rule 21 non-export notification-only pilot should be expanded to include non-exporting storage retrofits to exporting solar generation and to remove the developer cap per circuit. However, Rule 21 behind-the-meter-non-exporting is still a pilot in progress under D.21-06-002, and implementation is still underway. Given that the pilot commenced in July 2021 and no data has been collected to evaluate the efficacy of the pilot, it would be premature to expand the scope of the pilot at this time.

FuelCell Energy, Inc. requests an extension of the sunset date of the FC-NEM schedule beyond December 31, 2021, in response to the Governor’s July 30, 2021 Proclamation of a State of Emergency (Emergency Proclamation). However, that sunset date was established in Public Utilities Code Section 2827.10 by AB 1637, and the Emergency Proclamation does not authorize extension of this legislatively-mandated sunset date. While the FC-NEM schedule provides compensation for exported energy from eligible fuel cell technologies, there is no restriction on fuel cell projects to interconnect as non-exporting under the current Rule 21 process, thus avoiding the need to subscribe to the FC-NEM schedule.

Finally, Microgrid Resources Coalition (MRC) proposes to add an “Emergency Capacity Services Tariff” (ECST) to the interconnection processes under Rule 21 to compensate export energy provided to SCE under some type of operating dispatch. Traditionally, compensation for energy has been decoupled from the rules and obligations under the interconnection agreements in order to remove any potential for violation of standards of conduct in the procurement of energy. Although SCE does not have any objection to such program, ECST should be a separate rate schedule (like SCE’s NEM-ST or RES-BCT) and offered to interested customers on a

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2 Phase 2 Opening Testimony of [ ] California Energy Storage Alliance, p. 44.
4 Prepared Direct Testimony of [ ] the Microgrid Resources Coalition, pp. 13-18.
voluntary basis, without modifying the parties’ obligations under the corresponding interconnection agreements.

D. **SCE Is Open to A Transactive Energy Pilot with Limitations**

TeMix proposes a “Pilot UNIDE Program” that would use the TeMix RATES™ platform architecture for pilots arising from this rulemaking and other Commission proceedings, for a period of three years or longer if requested. The TeMix proposal to pilot the unified, universal, dynamic economic (UNIDE) platform (a proof of concept proposal from the Energy Division demonstrated in a May 25th workshop) leverages the TeMix RATES™ platform architecture piloted by California Energy Commission (CEC) Electric Program Investment Charge (EPIC) grant EPC-15-054 and demonstrated in SCE’s territory as a subscription-based transactive retail pricing model. The continuation of this research can provide a forum to explore options for both transactive price models and real time pricing with other parties and stakeholders, and demonstrate how new forms of distributed energy resources can act as both customer assets and grid interactive resources.

SCE is interested in exploring new pricing tariffs and enabling software that can facilitate local grid reliability and wholesale market optimization. SCE also recognizes innovative tariffs and changes to customers’ utility bills to incorporate wholesale market prices should not be implemented without significant smaller-scale review. Hourly or sub-hourly pricing with locational granularity down to the distribution circuit requires significant investments in advanced information technology and billing systems to accommodate the exponential increase in data collection, storage, billing, communication, and management that such pricing would entail, and this functionality is not expected to be available prior to 2023. Furthermore, customer interest in opting for such a real-time tariff and manufacturer interest in providing supporting services is uncertain at this time. Thus, the TeMix proposal should be viewed as a step along the way to demand flexibility in rates. Further consideration of the operational and customer

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10 See Opening Phase 2 Prepared Testimony of TeMix Inc., pp. 2-4.
focused items will be required for full deployment. SCE appreciates innovators such as TeMix for transferring the research investments from the CEC EPIC program into opportunities for further demonstrations that can accelerate solutions for system reliability for 2022 and 2023. If the TeMix proposal were to be pursued, SCE would require incremental funding to support this demonstration pilot.\(^{11}\) SCE and stakeholders like TeMix share a common vision for the development of an automated demand flexibility infrastructure. However, it is important that only a pilot approach is recommended for the UNIDE proposal (and not a full integration or roll out that would impact the customer’s utility bill) as that approach is necessary to conduct comprehensive studies that fully assess the costs and benefits of real-time rates, including required infrastructure, manufacturer interest, and customer impacts.

**E. The IOUs Should Not Be Required to Share Customer DR Participation Data**

The Commission should not adopt MCE’s proposal that the Commission should “direct all IOUs to share customer participation data in all DR programs, and other pertinent data as relevant.”\(^{12}\) Nor should the Commission adopt Recurve’s proposal that the Commission “ensure that non-LSEs are granted secure access to covered information (non-participant data) under a non-disclosure agreement to facilitate targeting and comparison group analysis to support reliability.”\(^{13}\) SCE already shares DR program participation data with CCAs of customers served by those CCAs. Allowing a CCA to receive DR participation data of customers that the CCA does not serve raises a host of customer data and privacy issues, and SCE’s data privacy policies are guided by applicable laws and Commission decisions.\(^{14}\) SCE does not believe that non-disclosure agreements would allow for circumvention of those customer data and privacy rights.

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\(^{11}\) Approximately $2.5 million for administration, systems, metering, etc. would be needed to support this demonstration pilot.

\(^{12}\) Marin Clean Energy Prepared Direct Testimony [ ] In [R.]20-11-003, p. 3-5-3-6.

\(^{13}\) Comment and Testimony of Recurve Analytics, Inc. [ ], pp. 11-12.

\(^{14}\) Please see D.11-07-056 and D.14-05-016, and Public Utilities Code section 8380 and Civil Code section 1798 et seq., SCE customers’ specific information gathered by SCE in the course of providing electric service is maintained as confidential and cannot be disclosed to third parties except under (Continued)
In addition, SCE’s current data delivery platform cannot support sharing all non-participant customer usage and other covered information with third parties. Such data sharing issues are the subject of pending proceedings. In SCE’s Click-Through application (A.18-11-016), among other things, SCE proposes to re-architect its data delivery processes that will eventually serve as the Operational Data Store (ODS) for the customer account and usage data shared with third-party providers.\textsuperscript{15} The ODS will provide SCE the system scalability and foundational capabilities to support the daily provision of customer usage data transfer to CCAs and other third parties that are authorized to receive customer data. The Commission has not issued a decision on SCE’s Click Through proposal. In addition, on November 13, 2020, SCE filed a Motion requesting that the Administrative Law Judge issue an order approving an interim Click-Through and Rule 24 Memorandum Account so that SCE may timely track costs in the account that it anticipates incurring until the Commission’s disposition of SCE’s Click Through Application. The Commission has yet to authorize SCE’s motion for a memorandum account.

III.

**SCE’S REPLY ON SUPPLY-RELATED PROPOSALS**


SDG&E proposes that the Commission issue a ruling by September 15, 2021 (to be confirmed in the final Phase 2 decision issued on November 18, 2021) authorizing SDG&E to request through its Utility Development Team function Commission approval of new utility-owned energy storage projects capable of meeting peak and net peak demand in 2022 and/or 2023 via a Tier 2 Advice Letter, with costs recovered through a new non-bypassable charge such

\textsuperscript{15} A.18-11-016, SCE Updated Testimony - SCE-0100 (formerly identified as 02), pp. 33-44.
as that proposed by Commission Staff and discussed in SDG&E’s testimony. SDG&E has identified potential utility-owned storage projects that could come online in late 2022 and 2023 under its proposal.

SCE agrees with SDG&E that development of utility-owned storage resources is a promising solution for helping to alleviate the emergency reliability risks identified in the Governor’s Emergency Proclamation. As SDG&E notes, “[i]t is generally the case that development on sites owned or controlled by an [IOU] allows for an expedited construction schedule for new resources as compared to non-IOU properties where additional time is required for land acquisition and permitting”; thus, “there is a comparatively higher likelihood that a project on IOU property or to-be owned IOU property will be able to deliver value within the expedited timeframe contemplated in this proceeding.” SCE also agrees with SDG&E that “[i]n order to expedite the deployment of additional resources and ensure that 2022 and 2023 online dates are feasible, projects must begin development as soon as possible.” The need to begin immediately is particularly critical for the IOUs to be able to deploy utility-owned storage resources for summer 2022.

SCE is focused on bringing additional resources online for the summer of 2022. SDG&E’s utility-owned storage approval timeline will not allow for approval of projects in time to meet emergency reliability needs for summer 2022. Accordingly, there is still a need for the Commission to provide direction to enable SCE to deploy utility-owned storage for summer 2022.

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16 See Preparad Phase 2 Direct Testimony of San Diego Gas & Electric Company Regarding Proposals for Increasing Supply During Peak and Net Peak Demand Hours Through Addition of Utility-Owned Resources (SDG&E McKay Testimony), pp. 1-14.
17 See id., pp. 8-11.
18 Id., p. 3.
19 Id., p. 2 (emphasis in original).
20 See SCE Testimony, pp. 55-56.
As discussed in SCE’s opening testimony, SCE is actively exploring opportunities to develop, install, and deploy utility-owned storage for summer 2022.\textsuperscript{21} SCE is conducting a Request for Information/Request for Proposals process. To deploy utility-owned storage resources for summer 2022, SCE would need to enter into agreements in mid-October, SCE’s vendors would likely begin incurring costs immediately after contract execution, and SCE would likely need to make deposit payments shortly after contract execution. Waiting for a final Phase 2 decision in this rulemaking in November 2021 and then for approval of a Tier 3 Advice Letter (as proposed by Commission Staff) or even for a ruling and a subsequent Tier 2 Advice Letter approval (as proposed by SDG&E) would be too late to deploy utility-owned storage resources for summer 2022 because there would not be enough lead time to construct the resources in a timely fashion even assuming SCE could access battery supply and a vendor. Therefore, SCE recommends the Commission provide direction on a cost recovery mechanism for the IOUs to develop and install utility-owned storage resources and associated upgrades, facilities, or modifications to meet the summer 2022 emergency reliability needs identified in the Emergency Proclamation.

Due to interconnection timelines, these utility-owned storage projects would likely need to be interconnected to non-CAISO-controlled portions of the electric system under the jurisdiction of this Commission and the operational control of the IOUs and operate outside of the CAISO wholesale market, but would provide reliability by discharging to the grid during the peak and net peak periods and charging during high solar or low load periods. The resources could be located at or near substations where there would be benefits to the overall system, such as within load pockets, local capacity requirement areas, or substations in areas with significant solar generation or existing transmission capacity. Eventually, the IOUs could seek a formal interconnection through the appropriate mechanism.

\textsuperscript{21} See \textit{id.}, pp. 58-59.
SCE proposes the following parameters for IOU deployment of utility-owned storage resources for summer 2022:

- The IOUs may develop one or more in-front-of-the-meter storage resources totaling no more than the MW total equivalent to the 19 percent “effective” planning reserve margin (PRM) upper end target capacity amounts for each IOU set forth in D.21-03-056 (e.g., 675 MW in the case of SCE) and other associated upgrades, facilities, or modifications to facilitate larger-scale resources.

- The IOUs would continue to pursue third-party procurement to meet their procurement targets for summer 2022 pursuant to D.21-03-056 on behalf of all benefitting customers. This utility-owned storage opportunity would be in addition to these efforts to improve reliability for 2022 and would not compete with that procurement.

- All utility-owned storage resources developed by the IOUs must be located in their respective service territories and the IOUs shall endeavor to deploy such storage resources by August 1, 2022.

- In order to be operational by the summer of 2022, the utility-owned storage may be interconnected to non-CAISO-controlled facilities at or near strategic utility substations (e.g., near load centers or solar generation) and operated in a manner to maximize reliability of the grid by charging during periods of excess generation and discharging during periods of need. The IOUs do not need to submit an interconnection request to operate a utility-owned storage facility not directly connected to a CAISO-controlled facility and under the IOUs’ operational control.

- The utility-owned storage resources may initially be operated by the IOUs as non-CAISO-controlled grid assets, and fully within the jurisdiction of the Commission. As a result, they would not need to participate in the wholesale energy market or qualify for RA credit by summer 2022. In order for the utility-owned storage to
participate in the wholesale energy market and be eligible for RA credit, the IOUs shall submit the appropriate interconnection request as soon as is feasible.

- The IOUs and other load-serving entities (LSEs) may count any utility-owned storage projects toward their mid-term reliability procurement requirements in D.21-06-035 based on their cost responsibility for such projects.

- Given the tight time constraints to bring resources online by summer of 2022, the IOUs shall not be required to demonstrate that the utility-owned storage resources are price- or cost-competitive with third-party procurement or to provide third parties the opportunity to develop such storage resources. The IOUs will be required to demonstrate that the costs to construct and interconnect the utility-owned storage resources are just and reasonable given emergency system reliability needs, the ability of such resources to meet these emergency needs, and the shortened time frame to develop the project(s).

- To the extent General Order (GO) 131-D is applicable to energy storage projects, these utility-owned storage projects (including any other associated upgrades, facilities, or modifications) constructed in response to the Emergency Proclamation are statutorily exempt from GO 131-D compliance pursuant to GO 131-D, Section III.B.1.h (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.).

- The utility-owned storage resources and the other associated upgrades, facilities, or modifications will benefit all customers connected to the grid. Therefore, all such customers must bear the costs. For the period when the utility-owned storage resources are interconnected to non-CAISO-controlled facilities, and not participating in the CAISO wholesale market, the costs of such resources shall be recovered from all distribution customers in the IOUs’ respective service territories.
through distribution charges. When the utility-owned storage resources are interconnected through the appropriate mechanism and participate in the wholesale energy market, the net costs and benefits of such resources shall be allocated to all benefitting customers through the Cost Allocation Mechanism.

- The Commission shall authorize an Emergency Reliability Storage Memorandum Account for each IOU upon Tier 1 Advice Letter submissions to the Energy Division to record the development, acquisition, installation, and interconnection costs of the utility-owned energy storage resources and any other associated upgrades, facilities, or modifications. The IOUs are authorized to record the costs of each utility-owned storage resource and any other associated upgrades, facilities, or modifications in those memorandum accounts, including costs incurred before the resource becomes operational.

- Once a utility-owned energy resource or associated upgrade, facility, or modification becomes operational, the IOU may transfer the recorded costs of that utility-owned storage resource or associated upgrade, facility, or modification to the relevant balancing accounts, as specified in the IOU’s advice letter establishing the operation of the memorandum account, on a monthly basis for recovery in rates, subject to refund until the Commission’s reasonableness review and cost recovery approval. These costs, which shall not include labor costs, are incremental to already-approved expenditures, such as those authorized in General Rate Cases.

If the Commission also adopts SDG&E’s utility-owned storage proposal, the same authorization provided to SDG&E should be provided to SCE and Pacific Gas and Electric Company (PG&E) as an option, but not a requirement, and be expanded to include projects that fit the parameters identified above. Additionally, some aspects of SDG&E’s proposal should not be requirements for an IOU to seek approval of utility-owned storage pursuant to the Tier 2 Advice Letter process proposed by SDG&E. First, the Commission should provide for cost recovery from all benefitting customers regardless of whether a new non-bypassable charge is
implemented and/or whether the IOU proposes to use the new non-bypassable charge if one is adopted. As discussed above, the costs of this utility-owned storage will benefit all customers connected to the grid and all such customers should bear such costs. However, there are other appropriate cost recovery mechanisms besides a new non-bypassable charge including distribution charges or the Cost Allocation Mechanism, as applicable. Second, SDG&E’s proposed due date for Tier 2 Advice Letters of November 19, 2021 should not be a requirement for all utility-owned storage projects. While SCE agrees that time is of the essence (particularly for summer 2022 projects), the IOUs should have an option to submit Tier 2 Advice Letters after November 19, 2021, especially if the Commission authorizes utility-owned storage for 2023.

B. The Commission Should Not Make Changes to the RA Program in This Rulemaking

As explained in SCE’s opening testimony, the Commission should not increase RA penalties in this rulemaking because LSEs and their customers should not be penalized for market-level scarcity when they have made all commercially reasonable efforts to meet their RA obligations and the Commission has already made recent changes to RA penalties that would impose potential double or triple penalties for multiple deficiencies. Western Power Trading Forum correctly notes that, “[s]ince Staff has not presented any evidence that the current summer penalty of $8.88 kw-month and the recently adopted escalation mechanism are inadequate to incentivize LSE compliance, there is not a sufficient record basis in this proceeding for increasing system RA penalties for summer 2022.” MRP supports considering an increase to the system RA penalty price, but acknowledges that system RA penalties were increased in 2020 and the “point” system imposing increased penalties for multiple violations was adopted in 2021; therefore “there is a rather thin record on which to determine whether RA penalties should be increased.

22 See SDG&E McKay Testimony, p. 7.
23 See SCE Testimony, p. 78.
24 Western Power Trading Forum Phase 2 Opening Testimony, p. 4.
increased again.”25 While aligning penalties with the cost of RA is a reasonable objective, with a tight RA market in the summer months, several recent updates to RA penalties, and little evidence on the efficacy of increased RA penalties in increasing reliability for summer 2022, the Commission should not increase RA penalties for 2022 or 2023 on the expedited schedule of Phase 2 of this rulemaking. Any changes to the RA penalty structure should be considered in the RA proceeding. If the Commission does increase RA penalties, it should also allow LSEs to file waivers demonstrating that they made commercially reasonable efforts to meet their RA obligations before levying this increased penalty and maintain the waiver process for the provider of last resort.26

The CAISO and MRP also propose that the Commission make significant changes to LSEs’ system RA requirements for 2022 and 2023. Specifically, the CAISO proposes that the Commission set an additional system RA requirement for June through October 2022 and all of 2023 to meet the 8:00 p.m. demand with an appropriate reserve margin.27 The CAISO argues there is a need for additional resources to meet net peak demand and the 8:00 p.m. hour serves as a proxy for the net demand peak period.28 The CAISO proposes “additional processes” to establish system RA requirements at the 8:00 p.m. hour, including using the system hourly load forecast from the CEC’s Integrated Energy Policy Report to derive LSE-specific 8:00 p.m. load forecasts and removing all stand-alone solar and co-located solar from the supply stack to determine eligible supply for the 8:00 p.m. obligation.29 Additionally, the CAISO proposes that the Commission increase the PRM at a minimum to 17.5 percent and consider increasing the PRM to 20 percent.30

26 See SCE Testimony, p. 78.
28 See id., p. 2.
29 See id., pp. 9-11.
30 See id., pp. 1, 12-14.
SCE shares many of the CAISO’s concerns and has advocated for structural changes to the RA program to better ensure the grid can meet its net peak demand. SCE also generally agrees with the CAISO that the Commission should reexamine the appropriate PRM given changing electric system conditions, including growing renewables penetration in California. SCE supports adoption of rules that ensure the net peak demand can be met in the RA structural reform process underway in the RA proceeding based on D.21-07-014. Moreover, SCE supports reevaluation of the PRM in the Integrated Resource Planning proceeding, in coordination with the RA proceeding, and believes that any change in the PRM should be based on robust loss-of-load expectation (LOLE) analysis and a stakeholder process that provides more time for vetting of the PRM needed to support grid reliability under changing system conditions and the increasing effects of climate change, while also considering impacts on affordability for customers.

In the shorter-term, however, SCE is concerned with the CAISO’s proposals to make major changes to LSEs’ system RA requirements for June through October 2022 and 2023 in this rulemaking. A final decision in Phase 2 of this rulemaking is scheduled for November 18, 2021. That is too late to make changes to LSEs’ RA obligations for 2022. The CAISO acknowledges that the final decision will be after LSEs’ year-ahead RA showings for 2022 and only proposes to apply these changes for the month-ahead showings for June through October 2022.\(^{31}\) However, LSEs have already made contractual commitments to meet their RA obligations for summer 2022 and must demonstrate that they have met 90 percent of their system RA requirements for May through September 2022 in their year-ahead RA showings. A change in system RA requirements to impose a new 8:00 p.m. obligation could disrupt these contracts and leave customers paying for RA that may no longer meet LSEs’ RA obligations. In a tight market, there is also little, if any, evidence that changing LSEs’ RA requirements at this late date will increase supply. Further, it is unclear how the implementation of these new RA requirements

\(^{31}\) See id., p. 11.
would be vetted with LSEs and other stakeholders. As the CAISO recognizes, they would require new load forecasts, and LSEs and other stakeholders would need an opportunity to provide input on that process, which is not available in the expedited timeframe of Phase 2 of this rulemaking.

In D.21-03-056, the Commission already directed the IOUs to continue their procurement efforts on behalf of all benefitting customers and endeavor to meet and exceed their respective incremental procurement targets to achieve an “effective” increase in the PRM from 15 percent to 17.5 percent for the months of May through October 2022, with encouragement to exceed their respective targets by up to 50 percent.32 That procurement is already targeting resources that are available at the net peak.33 If any adjustments are needed for summer 2022, the Commission should adjust the targets for this procurement, not make changes to LSEs’ RA obligations. In addition, given the tightness of supply to meet these increased targets, any procurement should continue to be under a “best efforts” standard and should not be a requirement.

Changes to RA requirements for 2023, if any, should be considered in the RA proceeding in conjunction with the ongoing process to restructure the RA program. In D.21-07-014, the Commission directed parties to undertake workshops to develop the implementation details of an RA structure based on PG&E’s slice-of-day proposal.34 The Commission also recently declined to adopt an increase in the RA PRM to 17.5 percent for 2022 based, in part, on the “effective” increase in the PRM already adopted in this rulemaking.35 The Commission also stated that Energy Division would issue its LOLE study in the coming months for consideration in a future

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32 See D.21-03-056, Ordering Paragraph (OP) 14, Attachment 1, pp. 20-22.
33 See id., Attachment 1, p. 20.
34 See D.21-07-014, OP 1.
phase of the RA proceeding.\textsuperscript{36} The Commission should evaluate any change to the PRM based on that LOLE study.

Similarly, MRP proposes the Commission implement “multi-year forward system Resource Adequacy requirements in 2022 for the subsequent RA compliance years.”\textsuperscript{37} Notably, this proposal would provide no benefit for 2022 and is a significant shift in the RA framework. It is too late to be implemented for 2022 for the reasons discussed above. Moreover, the Commission has already directed parties to consider multi-year requirement proposals as part of the workshops to consider a new RA framework ordered in D.21-07-014.\textsuperscript{38} Multi-year system RA requirements should be considered in the RA proceeding as part of that process, not in this rulemaking.

C. \textbf{Opening a New AB 970 Proceeding is Unnecessary}

ACP-California expresses concern about access to, and transparency of, information relating to the status of transmission network upgrade projects, and concludes that additional reporting requirements are necessary.\textsuperscript{39} This concern is misplaced. SCE already provides transparent and readily accessible information concerning the status of such projects in its bi-annual Stakeholder Review Process (SRP) Project Data Spreadsheet.

The SRP, which is governed by a FERC-jurisdictional tariff,\textsuperscript{40} establishes a comprehensive procedure for SCE to provide a substantial amount of electric transmission projects information on a semi-annual basis. The SRP Project Data Spreadsheet includes:

\begin{itemize}
  \item \textsuperscript{36} See id.
  \item \textsuperscript{37} MRP Testimony, p. 7.
  \item \textsuperscript{38} See D.21-07-014, p. 45, OP 1.
  \item \textsuperscript{39} See Prepared Opening Testimony of Danielle Osborn Mills on Summer 2022 and 2023 Reliability Enhancements on Behalf of American Clean Power – California, pp. 3-4.
  \item \textsuperscript{40} SCE’s Transmission Owner Tariff, Appendix XII. This tariff (i.e., Appendix XII) was established as part of a settlement that resolved all issues in FERC Docket No. ER19-1553, which concerned revisions to SCE’s FERC-jurisdictional Formula Rate. The Commission was a party to that docket. S. Cal. Edison Co., 172 FERC ¶ 61,270.
\end{itemize}
categories of data concerning a project’s description;\textsuperscript{41} six categories of data concerning project
status;\textsuperscript{42} seven categories of data concerning the status of utility approval and any applicable
CAISO approval;\textsuperscript{43} and seven categories of data concerning the status of any applicable
Commission permit.\textsuperscript{44} The SRP also includes a detailed schedule of meetings for stakeholders to
review the transmission information that has been provided, as well as procedures to request
additional information regarding specific projects.

SCE’s SRP Project Data Spreadsheet provides readily available, transparent information
concerning the status of projects that would otherwise appear on its AB 970 Report.\textsuperscript{45} The
Project Data Spreadsheet is served on all parties to the Investigation (I.) 00-11-001 service list,
which is the same service list that received SCE’s currently-suspended AB 970 Reports.\textsuperscript{46} To
support public accessibility, SCE also makes the SRP Project Data Spreadsheet publicly
available by posting it on its website at: https://www.sce.com/regulatory/open-access-

\textsuperscript{41} SRP, Attachment 1, lines 2-27. These categories include: project location (including longitude and
latitude as well as city/county); project description; related projects; primary and secondary purposes;
transmission miles; voltage level; project IDs.

\textsuperscript{42} Id., lines 45-51. These categories include: project status (e.g., Planning, Engineering less than 50%
completed, Permitting, Construction, Operational, etc.); actual or expected construction start date;
original planned in-service date; current projected or actual in-service date; reason for change in in-
service date.

\textsuperscript{43} Id., lines 28-35. These categories include: status of utility approval; when the project first appeared in
SCE’s long-term transmission investment plan; description of the utility approval process for the
project; years when considered in a CAISO Transmission Planning Process (TPP) or years when
expected to be considered in CAISO TPP; status of CAISO approval; link to TPP where project has
been considered, approved and/or expected to be considered.

\textsuperscript{44} Id., lines 38-44. These categories include: CEQA status; CEQA/National Environmental Policy Act
document type and lead agency; status of any necessary Commission approval; status of any
Commission filing or expected Commission filing.

\textsuperscript{45} Please note that the SRP Project Data Spreadsheet presents project information, project status, and
SCE FERC-jurisdictional costs (e.g., Network Upgrade costs) with significantly more detail than the
AB 970 Report, even though the SRP Project Data Spreadsheet (unlike the AB 970 Report) excludes
Commission-jurisdictional costs or cost estimates that are the sole responsibility of an Interconnection
Customer (such as Interconnection Facilities costs).

\textsuperscript{46} D.21-03-010 exempts SCE from D.06-09-003’s requirement to submit quarterly reports concerning
its transmission projects, until or unless SCE’s reporting requirements in its FERC SRP tariff expire
or are reduced in scope as compared to AB 970’s quarterly reporting requirements under D.06-09-
003. D.21-03-010, OP 1.
information. Further, to facilitate review and improve the data’s usefulness to stakeholders – in particular those stakeholders interested in network upgrade projects that would otherwise appear on an AB 970 Report – SCE (a) includes a column to the spreadsheet that indicates whether a project would otherwise appear on an AB 970 Report and (b) includes reference numbers (e.g., PIN and “TOT,” or “WDAT,” and/or CAISO Interconnection Queue reference, as applicable) that match project identifiers used in its AB 970 Report.

SCE emphasizes that it remains committed to working with stakeholders such as ACP-California to refine and improve its data presentation to facilitate review and to improve the SRP Project Data Spreadsheet’s usefulness to stakeholders based on their feedback regardless of whether they participate in the SRP process. Accordingly, ACP-California’s request to establish a new AB 970 reporting proceeding is unnecessary.
Appendix A

Witness Qualifications
SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF EDUYNG CASTANO

Q. Please state your name and business address for the record.
A. My name is Eduyng Castano, and my business address is 2244 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at Southern California Edison Company.
A. I currently hold the position of Senior Manager of Customer Generation Programs. In this role, I am responsible for the development, implementation and administration of the programs, incentives and tariffs SCE provides to encourage customers to attain self-generation from renewable sources. Some of the programs I oversee include the Self-Generation Incentive Program (SGIP), all the Net Energy Metering (NEM) tariffs, the Green Tariff, etc.

Q. Briefly describe your educational and professional background.
A. I received a B.S. in Mathematics from the Universidad Nacional in Medellin, Colombia in 1990, and a M.S. in Physics from the Universidad de Antioquia in Medellin, Colombia in 1992. In August, 1992, I joined the research team in Theoretical Physics at the University in Texas in Austin. In 1994, I enrolled into the Energy and Mineral Resources Master’s program at the same university. Following my relocation to Southern California in 1999, I enrolled in the University of Southern California for the Master's Degree in Operations Research.
I worked for New Energy Ventures, LLC, as a business analyst and software developer from 1997 to 2000. Then I worked for TruePricing, Inc. in Pasadena as energy consultant and supply analyst. In 2002, I joined Electric Power Group, LLC (also in Pasadena) where I was an energy consultant for the California Department of Water Resources. In 2004, I joined Southern California Edison’s power procurement group as a project manager and contract negotiator. In 2009, I joined SCE’s transmission and distribution
interconnections group also as a project manager and contract negotiator. In December 2010, I was promoted to Senior Manager of Grid Interconnections Processes and Controls. In that role, I oversaw the development and implementation of the interconnection tariffs (including CAISO’s tariff, SCE’s Transmission Owner Tariff, SCE’s Wholesale Distribution Access Tariff and SCE’s Rule 21). In February 2018, I started my current role as Senior Manager of Customer Generation Programs. In this role, I am responsible for the development, implementation and administration of the various programs and incentives SCE provides to customers to encourage self-generation from renewable sources.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to sponsor portions of the enclosed Reply Testimony of Southern California Edison Company-Phase 2, preliminarily marked for identification as SCE-05. I am sponsoring the portions of the testimony with respect to which I am identified as the witness in the above Table of Contents.

Q. Was this material prepared by you or under your supervision?

A. Yes, it was.

Q. Insofar as this material is factual in nature, do you certify under penalty of perjury that you believe it to be correct?

A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgment, do you certify under penalty of perjury that it represents your best judgment?

A. Yes, it does.

Q. Do you adopt this testimony as your sworn testimony in this proceeding?

A. Yes, I do.

Q. Does this conclude your qualifications and prepared testimony?

A. Yes, it does.
QUALIFICATIONS AND PREPARED TESTIMONY
OF ERICA KEATING

Q. Please state your name and business address for the record.
A. My name is Erica Keating, and my business address is 2244 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at Southern California Edison Company (SCE).
A. I am currently the Principal Manager of the Customer Demand and Generation Programs Team within the Customer Programs and Services department at SCE. I am responsible for SCE’s Demand Response and Customer Generation programs and the operational support activities associated with these programs.

Q. Briefly describe your educational and professional background.
A. I hold a Bachelor of Arts Degree in Communications with minors in History and German from California State University at Fullerton. I completed a graduate degree from California State University at Long Beach where I received a Master of Public Administration. I began my career in 2001 at the city of Rancho Cucamonga as the administrator of the city’s capital improvement program, as well as the operations manager for the City’s municipal utility. In 2010, I started with SCE as a contracts and Requests for Offers (RFO) originator in the Energy Procurement and Management Department and progressed to senior originator in 2012. In that period of time I oversaw the procurement of SCE’s resource adequacy portfolio, led the procurement of conventional generation resources in SCE’s Local Capacity Requirements RFO, and more recently was responsible for SCE’s Renewables Portfolio Standard RFO. In 2016, I was promoted to Senior Manager of the Large Power Demand Response programs responsible for approximately 1,000 MW of demand response programs. In 2019, I was promoted to Principal Manager of Demand Response Products and in 2021 the Customer Generation Programs group was combined with the Demand Response group.

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to sponsor portions of the enclosed Reply Testimony of Southern California Edison Company-Phase 2, preliminarily marked for identification as
SCE-05. I am sponsoring the portions of the testimony with respect to which I am identified as the witness in the above Table of Contents.

Q. Was this material prepared by you or under your supervision?
A. Yes, it was.

Q. Insofar as this material is factual in nature, do you certify under penalty of perjury that you believe it to be correct?
A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgment, do you certify under penalty of perjury that it represents your best judgment?
A. Yes, it does.

Q. Do you adopt this testimony as your sworn testimony in this proceeding?
A. Yes, I do.

Q. Does this conclude your qualifications and prepared testimony?
A. Yes, it does.
SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY OF EVA MOLNAR

Q. Please state your name and business address for the record.
A. My name is Eva Molnar, and my business address is 1515 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company.
A. I am the Senior Manager of Pricing Implementation, and I have been in this role since March 2016. My responsibilities currently include overseeing the rollout and budget of major rate initiatives, as well as the launch, enhancement, and management of customer energy management tools.

Q. Briefly describe your educational and professional background.
A. I graduated from the Wharton School of Business, University of Pennsylvania in 1994 with a Bachelor of Science in Economics. I received my MBA from Pepperdine University in 2006. I have over 20 years of experience with launching programs, products, and rates for a variety of different businesses. I started SCE in 2006 and have worked at SCE for over 11 years in a variety of different positions in Customer Programs & Services.

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to sponsor portions of the enclosed Reply Testimony of Southern California Edison Company-Phase 2, preliminarily marked for identification as SCE-05. I am sponsoring the portions of the testimony with respect to which I am identified as the witness in the above Table of Contents.

Q. Was this material prepared by you or under your supervision?
A. Yes, it was.

Q. Insofar as this material is factual in nature, do you certify under penalty of perjury that you believe it to be correct?
A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgment, do you certify under penalty of perjury that it represents your best judgment?
A. Yes, it does.

Q. Do you adopt this testimony as your sworn testimony in this proceeding?

A. Yes, I do.

Q. Does this conclude your qualifications and prepared testimony?

A. Yes, it does.
SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF JEFFREY L. NELSON

Q. Please state your name and business address for the record.
A. My name is Jeffrey L. Nelson, and my business address is 2244 Walnut Grove Avenue, Rosemead, California 91770-3714.

Q. Briefly describe your present responsibilities at Southern California Edison Company (SCE).
A. I am the Director of FERC Rates and Market Integration at Southern California Edison Company (“SCE”). My duties include managing engagement and filings with the Federal Energy Regulatory Commission (“FERC” or “Commission”) concerning California ISO market related issues, and with the preparation of revenue requirement, rate, tariff, and contract filings. This includes annual filings in support of SCE’s current Formula Transmission Rate, as well as the development of the proposed Formula Rate contained in this filing.

Q. Briefly describe your educational and professional background.
A. I have over 25 years of experience in the electric utility industry. I have held positions as an electrical engineer, analyst, energy trader, and performed regulatory strategy and engagement as both a project manager and a manager. I hold a bachelor’s degree in electrical engineering from the University of California, Los Angeles, as well as an MBA from the Anderson school at UCLA. Also, I was awarded a Charted Financial Analyst charter (CFA charter) in 2003 but am currently not in active standing.

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to sponsor portions of the enclosed Reply Testimony of Southern California Edison Company-Phase 2, preliminarily marked for identification as
SCE-05. I am sponsoring the portions of the testimony with respect to which I am identified as the witness in the above Table of Contents.

Q. Was this material prepared by you or under your supervision?
A. Yes, it was.

Q. Insofar as this material is factual in nature, do you certify under penalty of perjury that you believe it to be correct?
A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgment, do you certify under penalty of perjury that it represents your best judgment?
A. Yes, it does.

Q. Do you adopt this testimony as your sworn testimony in this proceeding?
A. Yes, I do.

Q. Does this conclude your qualifications and prepared testimony?
A. Yes, it does.
Q. Please state your name and business address for the record.
A. My name is William V. Walsh, and my business address is 2244 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at Southern California Edison Company (SCE).
A. I am a Vice President, responsible for managing the Energy Procurement & Management Operating Unit at SCE. My organization’s responsibilities include contracting for wholesale energy supply, including renewables and energy storage; energy compliance; energy solicitations and valuations; energy contract management and financial settlements, and energy market operations, including the bidding and scheduling of SCE’s utility-owned and contracted resources into organized wholesale energy markets.

Q. Briefly describe your educational and professional background.
A. I earned a Bachelor of Arts Degree in Business Economics from the University of California, Los Angeles in 1997. I earned a Juris Doctor Degree from The George Washington Law School in 2000. I was hired by SCE in July 2005 as an Attorney 2. I was promoted to Senior Attorney in 2009 and was responsible for several major energy proceedings including resource adequacy and Renewables Portfolio Standard. From 2010-2011, I served as the Manager 3 of Renewable Procurement and was responsible for leading a team of originators in the procurement of all of SCE’s renewable power through competitive solicitations, bilateral opportunities, and standard renewable procurement programs. In 2014, I was promoted to Director and Managing Attorney for the Resource Policy and Planning group responsible for representing SCE at the Commission in all of its energy and resource policy proceedings. I also managed SCE’s Power Procurement law group and Contracts and Intellectual Property law group. In 2018, I was promoted to Assistant General Counsel in the SCE’s Law Department with responsibility over cybersecurity, litigating the company’s positions before the Federal Energy Regulatory Commission, and all transactional work related to SCE’s energy procurement,
interconnection agreements, and supply management activities. I assumed my current position in February 2020.

Q. What is the purpose of your testimony in this proceeding?
A. The purpose of my testimony is to sponsor portions of the enclosed Reply Testimony of Southern California Edison Company-Phase 2, preliminarily marked for identification as SCE-05. I am sponsoring the portions of the testimony with respect to which I am identified as the witness in the above Table of Contents.

Q. Was this material prepared by you or under your supervision?
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Q. Insofar as this material is factual in nature, do you certify under penalty of perjury that you believe it to be correct?
A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgment, do you certify under penalty of perjury that it represents your best judgment?
A. Yes, it does.

Q. Do you adopt this testimony as your sworn testimony in this proceeding?
A. Yes, I do.

Q. Does this conclude your qualifications and prepared testimony?
A. Yes, it does.