



FILED

10/09/26

11:19 AM

A2603030

Attachment A

Questions for SCE Second Supplemental Testimony

Background

As noted in its application and supporting testimony, SCE states that it considered four different implementation approaches for replacing the original Advanced Metering Infrastructure (AMI) generation of meters,¹ including:

- A baseline replacement of AMI 1.0 with AMI 2.0 hardware, an interoperable mesh communications network, and supporting back-office systems that would maintain only basic AMI functionality (Baseline Replacement);
- A limited upgrade adding increased wireless network capacity and software to use meters as intelligent devices (Limited Upgrade);
- A value upgrade adding dynamic load management software to deliver affordability and demand flexibility (Value Upgrade); and
- An approach that would add further wireless network enhancements and software to enable advanced capabilities such as targeted load shedding, and microgrid controller interfaces (Advanced AMI).

Of these options, SCE determined that the Value Upgrade approach was the “optimal choice” because it “provides the highest level of affordability benefits over the 20-year service life of the system.”²

Questions

In its September 11, 2026 Supplemental Testimony, preliminarily identified as Exhibit SCE-08 (Ex. SCE-08), SCE states that its proposed communications architecture has changed from a high-density mesh to primary cellular after the original cost-benefit analyses workpapers were prepared.³ SCE indicates the

¹ Application at 5-6; Ex. SCE-02, Volume 2.

² Application at 6.

³ Ex. SCE-08 at 12-13, 52-53.

Limited Upgrade and Value Upgrade approach would use primarily public cellular rather than high-density mesh,⁴ with an estimated \$177 million decrease in capital and \$37 million increase in O&M.⁵ Existing workpapers show costs associated with the high-density mesh design.⁶ Based on these statements, SCE is directed to address the following questions:

1. For the Limited and Value Upgrade alternatives, update all cost forecasts, workpapers, Net present value of revenue requirement (Net PVRR) calculations, benefits-cost ratio (BCR) calculations, and other economic analyses affected by the change from a high-density mesh network to a primarily public cellular network. Identify each affected table or workpaper and provide both the original and updated values.
2. Does the change to a primarily public cellular network affect any assumptions used to quantify AMI 2.0 benefits or performance, including communications availability, latency, Dynamic Load Management, outage detection, reliability, or other use cases? If so, provide the revised assumptions and resulting benefit estimates.

SCE says it considered Net PVRR and BCR in its selection of the Value Upgrade, but that neither was determinative and SCE did not apply weighting criteria to the affordability, reliability, and safety benefits included in the Net PVRR and BCR calculations (i.e., these values were quantified and monetized and used directly in both the PVRR and BCR calculations).⁷ SCE's narrative  states its preference for the Value Upgrade approach but does not show why

⁴ Ex. SCE-08 at 12-13.

⁵ Ex. SCE-08 at 53.

⁶ Ex. SCE-03, Chapter IV ("Communications Network") at 14-20. SCE notes that these workpapers "reflect Communications Network costs based on the mesh network approach discussed in Exhibit SCE-03, pp. 20-22." *See* Ex. SCE-08 at 52.

⁷ Ex. SCE-08 at 29.

⁸ *See, for example*, Ex. SCE-08 at 8-9, 31-32.

value is ranked the highest in its methodology.⁹ It is unclear which metric or metrics SCE used to make its selection; therefore, SCE is directed to address the following questions:

3. Provide SCE's methodology for selecting among the Baseline Replacement, Limited Upgrade, Value Upgrade, and Advanced Upgrade alternatives. Identify all quantitative and qualitative criteria considered.
4. Explain how SCE reconciled results where those criteria point to different alternatives, including why the Limited Upgrade's higher all-benefits incremental BCR does not result in selection of the Limited Upgrade approach.
5. Identify the incremental capital and O&M costs of the Value Upgrade relative to the Limited Upgrade and separately identify and quantify each incremental benefit attributable to that additional expenditure.

SCE states that it evaluated the California Energy Commission's 2025 Integrated Energy Policy Report (IEPR) forecast and concluded that, despite slower system load growth, the distribution-deferral value attributable to Dynamic Load Management increases.¹⁰ SCE is directed to address the following questions:

6. Provide the analysis supporting SCE's conclusion that use of the 2025 IEPR forecast increases distribution-deferral benefits attributable to Dynamic Load Management.

⁹ For example, the Limited Upgrade approach has an all-benefits incremental BCR of 10.24, compared with 7.56 for Value, while the Value Upgrade approach has the better customer-bill-benefit BCR and substantially lower Net PVRR. SCE explains that the all-benefits result is driven by the same \$7.946 billion in societal benefits appearing in both alternatives. *See* Ex. SCE-08 at 19-20, fn. 13.

¹⁰ Ex. SCE-08 at 34-36.

7. Explain why slower forecast load growth results in greater distribution-deferral benefits.
8. Identify the distribution investments assumed to be avoided or deferred and the amount of Dynamic Load Management assumed to produce those deferrals.
9. Provide the resulting updated Net PVRR and BCR calculations.
10. For each benefit attributed to Dynamic Load Management, identify:
 - a. High and low estimates of customer participation;
 - b. Estimated participating load;
 - c. Any adoption trajectory, dispatch, utilization, and/or other material assumptions used to calculate the benefit.
11. Calculate the resulting Net PVRR and BCR under the high and low estimates for customer participation identified in response to question 10.a. Identify the minimum participation level at which the incremental benefits of the Value Upgrade approach exceed its incremental costs relative to the Limited Upgrade approach.

SCE provides a high-level capital estimate of approximately \$3.46 billion for the Advanced Upgrade approach, approximately \$379 million above the Value Upgrade approach.¹¹ Based on this information, SCE is directed to address the following questions:

12. Please provide the basis and supporting assumptions for the approximately \$3.46 billion capital-cost estimate for the Advanced Upgrade approach, including the components responsible for the incremental cost relative to Value Upgrade approach.
13. Identify the capabilities included in Advanced Upgrade approach but excluded from Value Upgrade approach. For each capability, explain whether the proposed Value Upgrade architecture would permit the capability to be added in the future through incremental

¹¹ Ex. SCE-08 at 24.

software, communications, or other upgrades, or whether additional or replacement meter or network hardware would be required.

In response to Questions 9–11 of the Supplemental Testimony Questions, SCE says it interpreted the questions to respond only to questions about Communications Network costs.¹² We clarify that the original request applies to the entire AMI 2.0 proposal rather than only to Communications Network costs. With this clarification in mind, SCE is directed to address the following questions:

14. Please provide line-item accounting for all the following costs included in the AMI 2.0 request, not limited to costs categorized under Communications Network. For each item, identify the associated AMI 2.0 component or capability and the applicable annual cost. For recurring costs, identify the assumed duration and escalation.
 - a. Hardware capital costs;
 - b. Software capital costs;
 - c. Subscription O&M costs.

¹² Ex. SCE-08 at 52.