Questions on Nexant’s PEV Submetering Pilot Phase 2 Evaluation Report for Party Comment

1. Decision 13-11-002, and subsequent meetings with ED Staff, identified nine customer experience evaluation metrics that must, at a minimum, be included in the evaluation report. Does the evaluation report sufficiently address each metric? If not, what metrics need further discussion?

2. Does Nexant’s third-party evaluation report provide an adequate assessment of submetering’s economic costs and benefits? Why or why not?
   a. Are there other existing submetering pilots and related evaluations, outside of the CPUC’s jurisdiction, that could provide additional information on the economic costs and benefits of submetering?

3. Decision 13-11-002 outlined several potential benefits of submetering. Are there any additional benefits to submetering that are not recognized in D.13-11-002? If yes, please identify other potential benefits for submetering that the decision and Nexant’s evaluation did not list.

4. The CPUC authorized the IOUs accuracy thresholds for the pilot’s approved submetering equipment, which in Phase 2, required the submetering equipment to meet an accuracy of ±2% in the field and ±1% during laboratory testing. Were the pilot’s approved accuracy standards appropriate? If not, what accuracy threshold is necessary for submeters?
   a. Does the current state of submeter technology available today meet this accuracy threshold?
      i. If so, please provide specific data and testing sources beyond Nexant’s evaluation.
      ii. If not, what steps must be taken to have submeters reach the necessary accuracy threshold? What are the estimated associated costs?

5. Nexant’s testing and evaluation found low accuracy of the submeters. Do you agree with Nexant’s findings?
   a. If so, how should those accuracy issues be addressed moving forward?
   b. If not, why do you disagree with Nexant’s accuracy findings?

6. For both the field testing with the data loggers and the bench testing in the lab, did the evaluator, utilities, and lab appropriately set up and communicate the testing conditions and procedures?
   a. If not, how could this have impacted the results discussed in the evaluation report?
   b. Is there any additional data needed to better understand the testing conditions and procedures?

7. If the Commission were to adopt a submetering protocol, should it establish a minimum functionality and communication requirement for any submeter used to measure PEV load? Why or why not?

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1 Pg. 36-38 of D.13-11-002 identifies the following customer experience evaluation metrics: (1) Comparison of the total cost of metering services; (2) Access to PEV tariffs; (3) Multiple Submeter MDMAs and PEVs operating behind a primary meter; (4) Utility disconnection capability; (5) Customer satisfaction; (6) Reliability of Data, Technology, and Service; (7) Service an Technology Innovations; (8) Technology Standardization; (9) Cost minimization.

2 D.13-11-002 cites the following as potential benefits of submetering: (1) reduce metering infrastructure and billing costs for customers; (2) access to PEV tariffs while maintaining other non-PEV loads on tiered rates; (3) allow multiple meter data management agents for submeters and PEVs to operate under a single primary meter; (4) maintain utility disconnection capabilities over all Customers of Record.
a. If so, what existing functionality and communication requirement(s) can ensure submetering accuracy and reliability at a larger scale of PEV submetering?
b. If not, how should the Commission ensure the reliability of submeters?
c. What technical performance requirements, if any, should be established for submeters?\(^3\)

8. What are the unique barriers to submetering PEVs at multi-unit dwellings and other Multiple COR customers? Which of these barriers can the IOUs and CPUC address? How?\(^4\)

9. Nexant’s report discussed some of the pilot’s challenges with transferring customer data from the MDMA to the IOUs. If the Commission is to authorize a submetering protocol how should the IOUs and/or MDMAs handle any instances of inaccurate customer data?
   a. Whose responsibility is it to track and address data inaccuracies?
   b. How should billing errors be addressed if/when submetering data inaccuracies arise?

10. Nexant’s evaluation cites unreliable Wi-Fi connections as contributing to data transfer issues from the submeters. Whose responsibility is it to ensure connection reliability?
    a. Are there options other than Wi-Fi connections that can improve data transfer from submeters?

11. What, if any, outstanding issues or questions related to submetering and Nexant’s evaluation of the IOUs’ pilot should be addressed prior to evaluating the future of a submetering protocol?

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\(^3\) D.11-07-029

\(^4\) Nexant evaluation report at page 12: “Due to the timelines of the pilot, and the complexities of signing up MCOR customers (which requires multiple customers and the property owner and/or manager to sign the CEA), the MDMAs were unable to recruit any MCOR customers and only SCOR customers were evaluated”