



November 12, 2019

California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

RE: Energy Storage and Distributed Energy Resources Phase 4 Revised Straw Proposal and Meeting

Electrify America, LLC (“Electrify America”) appreciates this opportunity to comment on the California Independent System Operator (“CAISO”) Energy Storage and Distributed Energy Resources (“ESDER”) Phase 4 Revised Straw Proposal and respective meeting held October 28, 2019 (collectively, the “Revised Proposal”). Electrify America commends CAISO on its continued efforts to enhance the abilities of these resources to participate in CAISO markets and concurs that such resources will serve an important role in the future grid.

Electrify America is investing \$2 billion over the course of a decade in zero emission vehicle (“ZEV”) infrastructure, education and awareness, and access efforts to support the increased adoption of ZEV technology in the United States. \$800 million of that investment will be spent in the State of California. Our first cycle of investment has focused on construction of a national network of ultra-fast, DC fast chargers across 42 states, with over 600 dispensers deployed across California by the end of this year. Our state-of-the-art 350kW-capable dispensers will be at select locations nationwide. These systems can provide roughly 20 miles of range per minute to capable cars, allowing for a charging experience approaching gas station refueling speeds. Electrify America will also offer to install “no-money-down” residential Level 2 chargers as part of its Cycle 2 California ZEV investment. The option will also provide drivers with a home charger a chance to earn financial rewards for plugging in and supporting a demand response (“DR”) platform.

Demand charges have a significant impact on the economics on the business of high-powered electric vehicle (“EV”) charging. A single charging session can result in a massive demand charge for a high-power, customer-friendly charging experience. This problem can be exacerbated when more than one high-powered charging session occurs at the same time at a multi-dispenser station. To help mitigate this risk, Electrify America is planning to install energy storage systems at over 100 of its stations over the next year, totaling over 25 MW of anticipated behind-the-meter storage across the United States.

In addition to mitigating demand charges, Electrify America holds that these behind-the-meter storage investments can also serve a role in wholesale markets via enhanced multiple-use application (“MUA”) provisions under ESDER Phase 4 for Non-Generator Resources (“NGR”). Electrify America appreciates that CAISO has considered non-24x7 settlement of behind-the-meter NGRs throughout the ESDER Phase 4 stakeholder process, but is disappointed that CAISO has expressed that it will not continue development of a proposal on this topic in its Revised Proposal.

Electrify America appreciates that CAISO needs jurisdictional clarity from the Local Regulatory Authority (“LRA”) for non-24x7 settlement for Distributed Energy Resources (“DERs”) to be fully implemented as a market participation model. As communicated in the Revised Proposal, the issue of clarity extends to metering and visibility requirements to account for retail versus wholesale activity in line with the “sale for resale” provisions of the Federal Power Act.

However, that should not preclude CAISO from drafting a participation model as part of ESDER Phase 4, as has been actively discussed throughout the stakeholder process. CAISO has the ability to define a market



participation model with clear metering and visibility requirements that would accurately account for wholesale market activity – as it does today with 24x7 settlement. As provided in Electrify America’s previous comment letters, there are multiple options for such a participation model, including an extension of the demand response model. CAISO’s leadership via such a proposal could spur jurisdictional clarity from the LRA and solve the current “chicken-and-egg” dilemma.

CAISO’s decision to discontinue the development of the non 24x7 settlement proposal also stems from concerns related to distribution system impacts, as well as forecasting, operational, and planning issues. In previous ESDER Phase 4 comment letters, Electrify America has provided examples of previous newly introduced participation models, such as demand response, where exceptions to these issues were granted until the market materialized. Access to actual data – rather than reliance on hypotheticals – would also make it easier to address these concerns. It is unclear why export of an NGR would have different distribution system impacts than other forms of behind-the-meter generation already active with high penetration levels, such as solar photovoltaic.

Electrify America encourages CAISO to reconsider its decision and adopt a proposal that removes the 24x7 settlement requirement in ESDER Phase 4. Such an action would be consistent with CAISO’s mission to maintain reliability while promoting an accessible, cost-effective wholesale energy market. It would also follow established precedent from FERC Order 745 regarding dual participation in the retail and wholesale markets when conditions merit, unlocking the ability for behind-the-meter storage resources to provide ratepayer and market value. The deployment of energy storage, and its corresponding benefits to the State of California, will be inhibited should CAISO not reconsider its decision.

In addition, the Revised Proposal has not addressed the issue of multiple resource identifications (“IDs”) under a single service account. As stated previously, multiple DR assets currently cannot participate independently in DR programs from behind the same retail meter/location. Electrify America reiterates its request for CAISO to facilitate assignment of multiple resource IDs under a single service account in ESDER Phase 4 to allow participation of electric vehicle supply equipment (“EVSE”) embedded sub-meter in DR programs independent from the retail meter. The implementation of this proposal under ESDER Phase 4 by CAISO would encourage other parties to allow the registration of multiple resource IDs and thus facilitate greater participation in CAISO DR markets.

Electrify America thanks CAISO again for this opportunity to comment regarding the ESDER Phase 4 Revised Straw Proposal and would be happy to further discuss any of the points raised in this letter.

Respectfully submitted,

/s/ Robert Barrosa

Robert Barrosa
Director, Utility Strategy and Operations
Electrify America, LLC

/s/ Jigar J. Shah

Jigar J. Shah
Manager, Distributed Energy and Grid Services
Electrify America, LLC