#### UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation

Docket No. ER16-1085

#### ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO COMMENTS

### I. INTRODUCTION

The California Independent System Operator Corporation (CAISO) files this answer to comments submitted in response to its tariff amendment to allow aggregations of distributed energy resources to participate in its markets.<sup>1</sup> Several parties filed comments in response to the CAISO's filing.<sup>2</sup> No party protested the CAISO's tariff amendment. The comments raise various concerns and recommend additional tariff changes. In this answer, the CAISO addresses issues raised in parties' comments and explains the further tariff changes the CAISO is willing to make on compliance. The CAISO opposes efforts to delay the effective date of its tariff revisions. The CAISO is willing, however, to provide an informational report to the Commission on the status of its implementation of this initiative within six (6) months of the effective date of the proposed tariff revisions.

<sup>&</sup>lt;sup>1</sup> The ISO submits this answer pursuant to Rules 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213.

<sup>&</sup>lt;sup>2</sup> Pacific Gas and Electric Company (PG&E); Southern California Edison Company (SCE); San Diego Gas & Electric Company (SDG&E); Edison Electric Institute (EEI) and Microgrid Resources Coalition filed comments. In addition, the following entities filed motions to intervene: Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California (Six Cities); the City of Santa Clara; the California Department of Water Resources; City of Los Angeles Department of Water & Power; the Northern California Power Agency; Modesto Irrigation District; Golden State Water Company; Alliance for Retail Energy Markets; the California Public Utilities Commission; as well as NRG Power Marketing LLC and GenOn Energy Management, LLC.

#### II. ANSWER

# A. Distributed energy resource providers will need to comply with applicable utility distribution company or metered subsystem interconnection rules

In its comments, SCE asks the Commission to clarify whether distributed energy resources participating in a distributed energy resource aggregation must interconnect or convert to interconnection service under the wholesale distribution access tariff (WDAT).<sup>3</sup> SCE argues that the CAISO's tariff language presents an ambiguity and that the Commission should resolve that ambiguity to clarify that WDAT interconnection services will apply to distributed energy resources seeking to aggregate for purposes of participation in the CAISO's markets. SCE argues that guidance on this matter is critical to ensure SCE continues to adhere to Commission precedent and interconnection rules.

The CAISO's proposed tariff rules recognize that distributed energy resources participating in an aggregation must adhere to applicable utility distribution company interconnection tariffs.<sup>4</sup> This condition is important because it allows a utility distribution company and local regulatory authority to consider what kind of interconnection process may be necessary and appropriate and to examine whether the distribution system can support the operation of such a resource in a safe and reliable manner. The CAISO tariff does not specify that the utility distribution company WDAT applies because if the WDAT rules apply, they do so of their own force and effect. The CAISO opposes incorporating into its tariff a rule that all distributed energy resources seeking to participate in the CAISO's market through an aggregation must use WDAT

<sup>&</sup>lt;sup>3</sup> Comments of SCE at 2 -8.

<sup>&</sup>lt;sup>4</sup> CAISO proposed tariff section 14.17.2 (b).

interconnection service because the WDAT may not apply to all resources. For example, a distributed energy resource participating in an aggregation could be a dispatchable demand response resource, *i.e.* the resource either consumes more or less power based on dispatch instructions issued to a distributed energy resource aggregation. Demand response resources do not need a WDAT interconnection agreement. For this reason, including more general language referring to applicable interconnection requirements of a utility distribution company or metered subsystem in the CAISO tariff is the appropriate approach.

In its comments, SCE also asserts that the CAISO's reference in tariff section 4.17.2(b) to applicable requirements of local regulatory authorities may create confusion in the context of what interconnection service may apply. SCE proposes alternative language to section 4.17.2(b) to specify that distributed energy resources seeking to participate in the CAISO's markets through an aggregation must comply with "applicable tariffs and operating procedures incorporated therein pertaining to interconnection to any wholesale usage of the Distribution System of the Utility Distribution Company."<sup>5</sup> The CAISO objects to SCE's proposed language because it attempts to characterize that *all* distributed energy resources necessarily require interconnection service under the WDAT. As discussed above, some resources may not need WDAT interconnection agreements. Again, including more general language referring to applicable interconnection requirements of a utility distribution company or metered subsystem in the CAISO tariff is the appropriate approach.

<sup>&</sup>lt;sup>5</sup> Comments of SCE at 6, fn 10. SCE also comments that conforming changes should also be made to 4.17.4(4) of the proposed CAISO tariff and 4.1.1 of the proposed pro forma Distributed Energy Resource Provider Agreement (Appendix B.21).

The CAISO also believes it is important to retain language that distributed energy resource providers must adhere to requirements of local regulatory authorities and proposes to retain this language in section 4.17.2. PG&E's comments illustrate why this language is important. PG&E expresses concern that the CAISO's proposal may allow a behind-the-meter energy storage resource to charge at a wholesale rate and discharge to serve retail load in contravention of CPUC rules.<sup>6</sup> The CAISO's proposed tariff provisions do not alter any rules or requirements of local regulatory authorities and importantly require distributed energy resource providers to operate consistent with any such requirements that apply. Moreover, to the extent those requirements change, the CAISO's tariff should be flexible enough to permit the aggregation of behind the meter resources to participate in the CAISO's markets. Accordingly, the CAISO tariff is written in a manner that allows CPUC rules to evolve, without requiring the CAISO to modify its tariff every time the CPUC rules change.<sup>7</sup>

# B. The CAISO is working with utility distribution companies to develop procedures to implement the distributed energy resource provider initiative

In its comments, SCE also raises concerns that more discussion is needed regarding how coordination between the CAISO and utility distribution companies is going to occur from forward planning through day-ahead scheduling and real-time operations.<sup>8</sup> PG&E and EEI raise similar concerns regarding implementation details in

<sup>&</sup>lt;sup>6</sup> Comment of PG&E at 7.

<sup>&</sup>lt;sup>7</sup> At this time, wholesale charging is only available under the CAISO tariff for resources that solely participate in the CAISO markets because this charging is entirely used for later resale into the wholesale market.

<sup>&</sup>lt;sup>8</sup> Comments of SCE at 8-12.

their comments.<sup>9</sup> SCE asks that the Commission "require the CAISO to provide additional detail on coordination between the CAISO and the utility distribution company before approving the proposal."<sup>10</sup> SCE also asks that, if questions arise after the CAISO presents this additional information, the Commission schedule a technical conference.<sup>11</sup>

As discussed above, the CAISO acknowledges that utility distribution company tariffs subject to applicable Commission or local regulatory authority jurisdiction may apply. The CAISO's tariff revisions reflect an initial step toward allowing small distributed energy resources to aggregate for purposes of participating in the CAISO's market. For many distributed energy resources, the process will likely begin with obtaining interconnection service from the utility distribution company. For those resources exporting power, the utility must assess how distributed energy resources may operate as part of an aggregation and whether the utility distribution company's system is sufficiently robust to accommodate that operation in response to a range of CAISO dispatch instructions. The scope of this effort largely involves the business rules of the affected utility distribution company, not the CAISO. The CAISO fully recognizes that utility distribution companies and local regulatory authorities may need to consider what rules and program changes are appropriate.

It is worth noting, however, that today the CAISO has many distribution connected resources that have WDAT interconnection agreements and participate in the wholesale market. The CAISO and the utilities also have experience with

<sup>&</sup>lt;sup>9</sup> Comments of PG&E at 10-12; comments of EEI at 4-5.

<sup>&</sup>lt;sup>10</sup> Comments of SCE at 11.

<sup>&</sup>lt;sup>11</sup> Comments of SCE at 12. SDG&E also suggests a technical conference on implementation details may be appropriate. Comments of SDG&E at 2.

aggregations of resources, such as aggregations of small Qualifying Facilities that operate with CPUC Rule 21 interconnections. The CAISO also has demand response resources that participate in the market that do not have WDAT interconnection agreements. The CAISO's tariff amendment to facilitate distributed energy resource aggregations presents the next step in developing additional mechanisms to allow small distributed energy resources to participate in the CAISO's markets.

In connection with any proposed aggregation of distributed energy resource to participate in the CAISO's markets, the CAISO will confer with the applicable utility distribution company prior to commencing its new resource implementation process. After a distributed energy resource provider executes a distributed energy resource provider agreement and identifies the distributed energy resources that will comprise its aggregation(s), the CAISO will provide the applicable utility distribution company or metered subsystem 30 days to raise concerns regarding the accuracy of the information about distributed energy resources in a proposed aggregation or raise one of several enumerated concerns, including any concern that the distributed energy resource *may* pose a threat to the safe and reliable operation of the distribution system, if operated as part of a distributed energy resource aggregation.<sup>12</sup> This process allows the utility distribution company an opportunity to conduct additional analysis or assessments that the distribution utility believes is needed before the CAISO initiates its new resource implementation.

As part of its business processes, the CAISO will require a prospective distributed energy resource provider to obtain from the applicable utility distribution written confirmation of any concerns the utility distribution company may have or written

<sup>12</sup> CAISO proposed tariff section 4.17.4.

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confirmation that it does not have any concerns. Once the utility distribution company provides written confirmation that it does not have concerns with the aggregation based on criteria identified in the CAISO tariff, the CAISO will commence its new resource implementation process. This process generally takes between six and seven months.<sup>13</sup> Even if a distributed energy resource provider initiated a process to aggregate distributed energy resources on the effective date of the CAISO's tariff revisions, the aggregation would not begin participating in the CAISO's markets until sometime during the first quarter of 2017, at the earliest. Moreover, under the proposed tariff provisions, this will only occur if the applicable utility distribution company or metered subsystems confirms in writing that it does not have concerns with the aggregation's operation based on criteria identified in the CAISO tariff.

In its comments, PG&E also recommends that the Commission condition the ability of an aggregation of distributed energy resources to participate in the CAISO markets on the relevant utility distribution company or metered subsystem's certification that the aggregation meets the relevant requirements for participation, and does not pose a threat to the safe and reliable operation of the distribution system or adversely affect the transmission system.<sup>14</sup> As proposed, the CAISO's tariff rules effectively allow for this condition. As explained, the CAISO will ask a prospective distributed energy resource provider to obtain written confirmation from a utility distribution company or metered subsystem that it does not have concerns with a distributed energy resource

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<sup>&</sup>lt;sup>13</sup> More information about the CAISO's new resource implementation process is available in the following presentation made to stakeholders at tis February 24, 2016 resource interconnection fair. <u>http://www.caiso.com/Documents/NewResourceImplementation-MarketModeling\_Feb24\_2016.pdf</u> The process applies to both resources interconnecting to the CAISO grid as well as distraction connected resources.

<sup>&</sup>lt;sup>14</sup> See comments of PG&E at 9-10.

aggregation participating in the CAISO's markets based on criteria identified in the CAISO tariff.

With respect to day-ahead and real-time operations, the CAISO has initiated efforts to incorporate input from utility distribution companies on the extent of this coordination. The CAISO is conducting outreach to better understand the roles and responsibilities that exist between transmission system operators and distribution system operators. Among the topics the CAISO is exploring with the utility distribution companies is how to manage the market rules it has proposed that (1) require distributed energy resource providers to operate distributed energy resource aggregation(s) in a manner consistent with limitations established by or operating orders of the utility distribution company or metered subsystem; and (2) require the CAISO to coordinate with the applicable utility distribution company or metered subsystem to avoid conflicting operational directives, which may include but is not limited to sharing dispatch instructions.<sup>15</sup>

The CAISO has asked utility distribution companies how they can convey realtime conditions on their systems such as outages or equipment failures that may impact operation of distributed energy resource aggregations in the CAISO's markets. These discussions continue to be extremely productive and the CAISO anticipates incorporating the outcomes of these discussions into its operating procedures. However, this work should not delay acceptance of the CAISO's tariff revisions by the Commission. To the contrary, acceptance of the CAISO's tariff revision will facilitate affected parties' work to implement, and not unduly delay, the CAISO's distributed energy resource provider framework through appropriate operating procedures. These

<sup>&</sup>lt;sup>15</sup> CAISO proposed tariff section 4.17.2 (f).

procedures will not be a static set of rules. Instead, the CAISO anticipates an iterative process of working with affected utility distribution companies and metered subsystems to operationalize best practices to integrate aggregations of distributed energy resources into the CAISO's markets.

PG&E points to other topics that the CAISO will address in its business practice manuals as grounds to delay the effectiveness of the CAISO's tariff revisions. These include default requirements for metering, which the CAISO has already proposed through a business practice manual change management process.<sup>16</sup> These default requirements are similar to other technical specifications that the CAISO includes in its metering business practice manual. For instance, they include specifications for measurement, accuracy, and safety. The CAISO includes these types of specifications in its business practice manual.<sup>17</sup>

PG&E also raises concerns with the need to develop business practice manual rules for onboarding distributed energy resource aggregations. As discussed, the CAISO plans to leverage its new resource implementation process and is in the process of developing additional business practice rules to explain the format for information that distributed energy resource providers must provide to the CAISO concerning their aggregation and how the CAISO will document the process to confer with the applicable utility distribution company or metered subsystem in advance of starting the new resource implementation process for a proposed aggregation of distributed energy resources. These rules are comparable to the information demand response providers

<sup>&</sup>lt;sup>16</sup> Proposed Revision Request 892 to change the CAISO's Business Practice Manual for Metering. <u>http://bpmcmint.caiso.com/pages/ViewPrr.aspx?IsDlg=1&PRRID=892</u>.

<sup>&</sup>lt;sup>17</sup> See CAISO Business Practice Manual for Metering, Attachment A.

must provide regarding the accounts that make up their proxy demand resource or reliability demand response resource.<sup>18</sup> The CAISO is planning to have these business practices in effect as of the requested effective date of its proposed tariff revisions.

Nevertheless, to address concerns raised in parties' comments, the CAISO is willing to submit an informational report on implementation efforts six (6) months after the effective date of the tariff revisions in this proceeding. The CAISO anticipates such a report would include information regarding the number of distributed energy resource aggregations that have requested to participate in the CAISO's markets, the status of those requests and issues identified by utility distribution companies or metered subsystems, the progress of aggregations through the CAISO's new resource implementation process, the status of changes to business practice manuals and operating procedures to implement the CAISO's proposed framework, and a discussion of any additional issues involving coordination between transmission and distribution service providers arising from coordinated efforts to implement the CAISO's proposed framework. The Commission could solicit comments on that report and, to the extent parties believe implementation gaps remain, the CAISO would support convening a technical conference at that time. Moreover, at any time, to the extent parties believe that the CAISO's business practices or operating procedures do not adequately conform to the market rules set forth in the CAISO tariff, they may initiate a section 206 proceeding to seek appropriate relief.

# C. The Commission should not require a certification from the applicable local regulatory authority prior to an aggregation's participation in the CAISO market.

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See generally CAISO Business Practice Manual for Metering, Section 12.

In its comments, PG&E recommends that the Commission condition the ability of an aggregation of distributed energy resources to participate in the CAISO markets on the relevant local regulatory authority's (LRA) prior certification to the CAISO that the LRA's rules and tariffs have been modified as necessary to address all relevant jurisdictional issues and afford appropriate protections to the LRA-regulated distribution systems to enable aggregations of distributed energy resources to participate in the CAISO markets, and that the LRA's jurisdictional utility distribution companies have made the necessary changes to implement the CAISO's distributed energy resource aggregation program. The Commission should reject PG&E's recommendation because it is vague, unclear, and unnecessary. The recommendation does not adequately define what constitutes "relevant jurisdictional issue" or "appropriate protections" and would effectively impede efforts to integrate aggregations of distributed energy resources into the CAISO's markets. Moreover, the CAISO has already proposed mechanisms to ensure that aggregations of distributed energy resources seeking to participate in the CAISO's markets adhere to requirements of applicable utility distribution company tariffs and requirements of local regulatory authorities. PG&E's comments do not adequately explain why the CAISO's proposed mechanisms are not just and reasonable and why an additional certification from a local regulatory authority is necessary beyond the tariff rules the CAISO has proposed.<sup>19</sup> Moreover,

<sup>&</sup>lt;sup>19</sup> The Commission should consider whether CAISO's proposed tariff revisions are just and reasonable, not whether there may be some alternative approach that might be better. *See, Calpine Corp. v Cal. Indep. Sys. Operator Corp.*, 128 FERC ¶ 61,271, at P 41 (2009) (citations omitted). *See also New England Power Co.*, 52 FERC ¶ 61,090 at 61,336 (1990) *aff'd, Town of Norwood v. FERC*, 962 F.2d 20 (D.C. Cir. 1992) (rate design proposed need not be perfect, it merely needs to be just and reasonable) (citing *Cities of Bethany, et al. v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) (utility needs to establish that its proposed rate design is reasonable, not that it is superior to all alternatives)).

PG&E seeks to place a requirement on local regulatory authorities that no local regulatory authority has sought or supported.

PG&E argues that certain issues, such as concerns with behind the meter storage resources participating in a distributed energy resource aggregation, merit obtaining a certification from a local regulatory authority prior to participation of such resources. PG&E asserts that CPUC rules prevent a behind the meter storage resource to receive wholesale power supply from the CAISO. If PG&E is correct, the CAISO's proposed tariff provisions already address this concern. The proposed tariff requires a distributed energy resource provider to comply with applicable utility distribution company or metered subsystem tariffs and operating procedures incorporated therein as well as applicable requirements of the local regulatory authority.<sup>20</sup>

PG&E also argues that retail metering infrastructure is not in place with respect to any behind the meter resources that would participate in a distributed energy resource aggregation. Again, the CAISO's proposed tariff addresses this concern by requiring a distributed energy resource provider to comply with applicable utility distribution company or metered subsystem tariffs and operating procedures incorporated therein as well as applicable requirements of the local regulatory authority.

### D. The CAISO has proposed measurement and verification mechanisms and will monitor the performance of distributed energy resource aggregations in response to CAISO dispatch instructions.

In its comments, EEI states that the CAISO needs to have robust measurement and verification processes in place to ensure that the individual distributed energy resources follow dispatch procedures and providing the energy and services requested

<sup>&</sup>lt;sup>20</sup> CAISO proposed tariff section 4.17.2.

by the CAISO.<sup>21</sup> The CAISO agrees with EEI that measurement and verification processes are essential since the CAISO is responsible for financially settling the transactions from these resources. The CAISO has proposed a number of reasonable and robust measurement and verification mechanisms and EEI does not attempt to demonstrate why these measures are insufficient. These mechanisms include the following:

- Distributed energy resource providers will identify each and every distributed energy resource that comprises its aggregation(s).<sup>22</sup>
- Distributed energy resource providers must also provide generator distribution factors for each of its aggregations.<sup>23</sup>
- Individual distributed energy resources will be directly metered.<sup>24</sup>
- Scheduling coordinators for distributed energy resource aggregations will submit meter data for the aggregation for each and every operating interval.<sup>25</sup>
- Under existing tariff rules, the scheduling coordinators will complete a self-audit that metering infrastructure meets required standards.<sup>26</sup>

EEI identifies no specific deficiencies regarding the CAISO's measurement and

verification processes or specific enhancements to what the CAISO has proposed.

The CAISO has committed to sample meter data from an aggregation to validate

whether the aggregation is responding to CAISO dispatch instructions consistent with its

<sup>&</sup>lt;sup>21</sup> Comment of EEI at 5-7.

<sup>&</sup>lt;sup>22</sup> CAISO proposed tariff section 4.17.4.

<sup>&</sup>lt;sup>23</sup> *Id.* at section 4.17.3 (f).

<sup>&</sup>lt;sup>24</sup> Id. at section 4.7.5.2

<sup>&</sup>lt;sup>25</sup> *Id.* at section 10.3.2.1.2

<sup>&</sup>lt;sup>26</sup> CAISO tariff section 10.3.10.

generator distribution factors. The CAISO will make its findings concerning how aggregations respond to dispatch instructions available to the market. Based on the data and findings the CAISO makes, the CAISO may propose enhancements or refinements to its market rules for distributed energy resource providers. These rules might include telemetry requirements or other rules.

In its comments, PG&E asks that the Commission direct the CAISO to include mechanisms to ensure that individual distributed energy resources within an aggregation are responding consistent with the generator distribution factors provided in the market bids.<sup>27</sup> FERC should reject PG&E's request for at least two reasons. First, under the CAISO proposal, it is the aggregation -- not the distributed energy resources comprising an aggregation -- that must respond consistent with generator distribution factors. Second, PG&E asks the Commission to impose penalties on aggregations for failing to respond consistent with generator distribution factors is not new. Proxy demand resources and reliability demand response resources use distribution factors, and physical scheduling plants use them as well. The CAISO does not currently apply a deviation penalty to these market resources for failing to follow dispatch instructions consistent with their distribution factors. The CAISO, accordingly, recommends that the Commission reject PG&E's request that would result in the unduly discriminatory treatment of distributed energy resource aggregations.

PG&E also asks that the CAISO file quarterly compliance filings for three years documenting its monitoring efforts. The Commission should also reject this request. PG&E's offers no support for the frequency of such a reporting requirement, and the Commission should reject it as overly burdensome.

<sup>&</sup>lt;sup>27</sup> Comments of PG&E at 13-14.

However, in response to PG&E's comments, the CAISO is willing to affirm its commitment to report on market performance of distributed energy resource aggregations. PG&E asks that the CAISO specify the trigger mechanism for this review and also the frequency of the review as well as the scope of the review. The CAISO is willing to agree to a Commission order that directs the CAISO to conduct a market performance review of distributed energy resources at least once a year for three years from the date the Commission makes the tariff revisions in this filing effective. In this review, the CAISO would sample the performance of multiple distributed energy resources comprising the aggregation, and operation of the aggregation across multiple pricing nodes. The CAISO proposes to make the findings of this performance review and any recommendations available to market participants by publishing it on the CAISO website.

### E. The CAISO will settle distributed energy resource aggregations at the weighted average of the aggregation's applicable pricing nodes

In its comments, PG&E asks that the Commission direct the CAISO to explicitly state that the prices the CAISO will apply to distributed energy resource aggregations will reflect the pricing node for aggregations whose individual distributed energy resources are located at one node or at the weighted average of the applicable pricing nodes where the distributed energy resource aggregation operates across multiple pricing nodes at which the distributed energy resource aggregation operates.<sup>28</sup> Consistent with PG&E's comments, the CAISO is willing on compliance to clarify in its tariff it will settle distributed energy resource aggregations at the applicable pricing node

<sup>&</sup>lt;sup>28</sup> Comment of PG&E at 14.

level, if the Commission so directs. This is consistent with existing tariff provisions that explain the CAISO settles resources at the applicable pricing node.

# F. Demand response resources that are not participating as proxy demand resources or reliability demand response resources may participate in a distributed energy resource aggregation

In its comments, Microgrid Resources Coalition asks the CAISO to clarify the distinction between a distributed energy resource and a demand response resource under the CAISO proposed framework. Demand response resources may participate in the CAISO market as reliability demand response resources and proxy demand resources. Alternatively, they may also elect to participation in a distributed energy resource aggregation. The CAISO's framework will support participation by dispatchable load in a distributed energy resource aggregation, such as for example a pump load that is capable of increasing or decreasing its consumption, but distributed energy resources in an aggregation must provide meter data for each settlement period to demonstrate performance and may not use a baseline methodology.<sup>29</sup> To be clear, the CAISO is not proposing to use a calculated baseline or other predictive measurement to evaluate performance of distributed energy resource aggregations or individual resources comprising an aggregation. As explained in the CAISO's March 4, 2016 transmittal letter, demand response resources that elect to participate in the CAISO's market as reliability demand response resources and proxy demand resources would not be eligible to participate in a distributed energy resource aggregation.<sup>30</sup> Allowing these resources to participate in multiple resource configurations could create risks of double counting their capability to provide services to the transmission system.

<sup>&</sup>lt;sup>29</sup> CAISO proposed tariff section 4.17.5.2.

<sup>&</sup>lt;sup>30</sup> CAISO proposed changes to tariff section 4.13.1.

## G. The CAISO's proposed framework does not address multiple use applications for distributed energy resources

In its comments, Microgrid Resources Coalition asks the CAISO to clarify what constitutes a "resource" for purposes of participating in the CAISO's market and whether individual distributed energy resources participating in an aggregation may provide multiple services or engage in multiple uses. Under the CAISO's initial framework, the aggregation itself would constitute the market resource, but individual distributed energy resources that comprise the aggregation would need to submit meter data for every settlement period.<sup>31</sup> The aggregation may participate in all of the CAISO energy and ancillary service markets so long as it meets the minimum requirements for doing so. Similar to other resources participating in the CAISO market, the aggregation must fully participate in all operating intervals rather than providing multiple services to multiple entities in addition to the CAISO market. The subject of multiple uses is an emerging issue separate from the CAISO's proposed framework. Policies and regulatory rules clarifying how distributed energy resources may potentially provide and be compensated for many services from more than one entity are only just beginning to be addressed by the CAISO, the CPUC, and others. For example, the CAISO is exploring multiple use applications by distributed energy resources through its energy storage and distributed energy resource stakeholder initiative.<sup>32</sup> That initiative may lead to refinements to the tariff revisions proposed in this proceeding.

<sup>&</sup>lt;sup>31</sup> CAISO proposed tariff section 10.3.2.1.2.

<sup>&</sup>lt;sup>32</sup> More information about this CAISO initiative is available at the following website: <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyStorage\_DistributedEnergyResource</u> <u>sPhase2.aspx</u>

#### III. CONCLUSION

The CAISO's proposed tariff revisions establish an initial framework for distributed energy resources to aggregate and participate in the CAISO's wholesale markets. This framework will serve as the foundation to explore how aggregations of small distributed energy resources connected to distribution systems within the CAISO's balancing authority area can participate in the CAISO's energy and ancillary services markets should they opt to do so. The Commission should approve the CAISO's tariff amendment with the changes the ISO agrees to make in this answer. The Commission should reject comments seeking to delay the effective date of the CAISO's tariff revisions. The Commission can monitor the implementation of business rules and practices under the tariff revisions through a reporting process and affected parties can raise concerns as appropriate through that process or, if necessary, under section 206 of the Federal Power Act.

Respectfully submitted,

#### By: /s/ Andrew Ulmer\_

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Dated: April 11, 2016

### **CERTIFICATE OF SERVICE**

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 11th day of April 2016.

*[s] Anna Pascuzzo* Anna Pascuzzo