

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Consider Smart Grid Technologies Pursuant to Federal Legislation and on the Commission's own Motion to Actively Guide Policy in California's Development of a Smart Grid System.

Rulemaking 08-12-009  
Filed December 18, 2008

**Comments of the California Independent System Operator Corporation on the Proposed Decision Adopting Smart Grid Deployment Plan Metrics**

**I. INTRODUCTION**

The California Independent System Operator Corporation (ISO) submits these comments in response to the Assigned Commissioner's proposed "Decision Adopting Metrics to Measure the Smart Grid Deployments of Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company," published on March 20, 2012 in the above-referenced docket. The proposed decision offers 19 metrics to use in evaluating the smart grid deployment efforts of California's IOUs. The proposed decision additionally proposes the creation of four separate technical working groups responsible for developing: (1) ongoing revisions to the metrics; (2) cyber-security metrics; (3) environmental metrics; and (4) broad smart grid goals and a common smart grid vision.

The ISO finds that the proposed metrics are largely appropriate and provide a reasonable fit between smart grid progress and factors that rest within the IOUs' control. However, several of the metrics may be defined too broadly so that strong performance may overstate the degree of smart grid progress. Additionally, the ISO encourages the Commission to be clear that to the extent a particular issue is tracked in the metrics, the

Commission's ongoing engagement with that issue will not be limited to the context of smart grid metrics.

The ISO also believes that the four proposed technical working groups may provide a beneficial method of continuing progress on metrics development, particularly in the case of the environmental and cyber-security working groups, which are two areas where no consensus has been forged as of yet. The proposed decision, however, would benefit from Commission clarification on several issues relating to the working groups, including their lifespan, decision-making process, and mandate.

## **II. CONSIDERING THE APPROPRIATENESS OF THE METRICS**

In prior comments on smart grid metrics,<sup>1</sup> the ISO suggested four principles to guide further development of the metrics: (1) limit number of metrics to ensure focus on goals; (2) provide direct "line of sight" for each metric to smart grid objectives; (3) ensure metrics measure factors that are within the control of the IOUs; and (4) consider how the metric will be quantified. The ISO is encouraged to see that the 19 proposed metrics fit comfortably within these four principles. At one point the Commission proposed having more than 80 metrics. Limiting the number of metrics to 19 should help allow the IOUs to provide appropriate attention to each item. The proposed decision provides a statement of the specific policy goal to which each metric relates. The metrics all measure factors that are largely within the IOUs' control. Finally, the proposed decision offers reasonably clear definitions of how each metric will be measured.

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<sup>1</sup> Comments of the California Independent System Operator Corporation on the Proposed Smart Grid Deployment Plan Metrics, CPUC Docket No. R.08-12-009 (Aug. 17, 2010).

While the proposed decision represents clear progress, the ISO nevertheless has several points of concern regarding the metrics. Some of the metrics are defined too broadly, which could result in the reporting of figures that potentially could overstate the degree of progress. An example is customer/AMI metric no. 5, which measures the “number and percentage of customers that are on a time-variant or dynamic pricing tariff.” The proposed decision notes that several different types of dynamic prices would be included within the definition of dynamic pricing. The ISO views dynamic pricing as related to smart grid because it can utilize technology to provide signals to end-use customers that can facilitate a tailored response to wholesale grid conditions. For example, critical peak pricing is certainly a helpful form of demand response, but it does not completely provide the type of tailored response that is key to connecting device response with wholesale grid conditions. A utility that expands the scale of its critical peak pricing should be commended, but largely not for reasons related to implementing dynamic pricing. Accordingly, the ISO recommends that the Commission require customer/AMI metric no. 5 be reported by type of time-variant or dynamic pricing tariff so that the Commission and other interested parties can gain a better understanding of how progress towards this metric is being achieved.

Another example of this concern is grid operations metric no. 7, which would measure “the total annual electricity deliveries from customer-owned or operated, grid-connected distributed generation facilities.” Increased penetration of distributed generation is an important goal that is worthy of measurement and tracking. With regard to distributed generation, the ISO views the greatest smart grid benefit as being the ability to provide additional power during periods of grid scarcity, particularly local

scarcity. By reporting a single number for the whole IOU service territory during an entire year, grid operations metric no. 7 does not provide sufficient insight to smart grid progress in the area of distributed generation. To provide needed granularity to the data, the ISO requests that grid metric no. 7 be amended to require reporting by month and ISO sub-Load Aggregation Point.

The ISO's secondary concern with the metrics portion of the proposed decision is that it does not provide clarity as to what the Commission's role will be in spurring continued progress in the areas measured by the metrics. The ISO requests the Commission to clarify that the Commission's engagement with these issues going forward will not be limited to evaluating the IOUs' annual smart grid reports. For example, electric vehicle metric no. 1 seeks to measure the "number of customers enrolled in time-variant electric vehicles tariffs." Significant issues remain to be resolved in fostering expanded adoption of electric vehicles. Resolution of those issues will require continued leadership from the Commission. For example, the Commission should clarify that this metric involves more than merely reviewing the IOU's annual smart grid reports and that the Commission's response to limited progress in fostering adoption of electric vehicles will not be limited to some unspecified consequence. Similarly, in referencing dynamic pricing in customer metric no. 5, the ISO seeks clarity that the Commission does not intend that an IOU's failure to expand dynamic pricing will simply be treated as a matter of reviewing the IOU smart grid annual reports. Continuing the evolution of rate design that will be needed to take full advantage of smart grid is too important of a goal to leave to it to that process alone.

### III. TECHNICAL WORKING GROUPS

In prior comments, the ISO suggested “that the Commission establish an annual review process to ensure that the metrics remain tailored to the state’s highest smart grid priorities.”<sup>2</sup> The ISO’s concern was that the metrics not grow stale as smart grid priorities evolve over time. Additionally, because the consensus metrics that formed the basis of the proposed decision did not address cyber-security or environmental goals, it is obvious that significant additional work is required to formulate metrics in those areas. The proposed decision correctly acknowledges that significant work remains in metrics development. In theory, the Commission’s proposal for accomplishing that work – instituting the four technical working groups – could be an appropriate mechanism. To allow for a more complete understanding of this mechanism, the proposed decision would benefit from additional detail on several issues, including the intended lifespan of the technical working groups, the decision-making process that the working groups will utilize, and (at least in the case of the goals and vision working group) the working group’s mandate.

The proposed decision mentions that each working group is to file a report by September 1, 2012. It does not explain, however, what happens after that point. The working groups committed to ongoing updates and revisions could conceivably meet for as long as the IOUs are required to file annual smart grid reports. The ISO thus requests that the final decision explicitly address the question of how long the Commission intends for the update/revisions working group to remain active. As to the

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<sup>2</sup> Comments of the California Independent System Operator Corporation on the Administrative Law Judge’s Ruling Seeking Comments On Proposed Interim Metrics to Measure Progress by Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company In Implementing a Smart Grid, CPUC Docket No. R.08-12-009 (Jan. 24, 2011).

cyber-security and environmental working groups, once they settle on metrics, it is unclear whether those working groups would dissolve, leaving the ongoing revisions to the updates and revisions working group. The ISO suggests that the Commission streamline the working group approach and merge the work of the cyber-security and environmental metrics working groups into the revisions/updates working group once initial metrics are developed in the areas of cyber-security and the environment.

The proposed decision suggests, but does not say directly, that revisions to the metrics must be made based on consensus. If that is the case, then the ISO has concerns about the potential for gridlock in a process of indefinite duration in which each participant in the working group effectively has a veto over revisions to the metrics. While the ISO intends to participate fully in all four of the working groups, it is concerned that under these parameters, such participation may grow to represent a burden for all parties involved. To alleviate such concerns, the ISO requests that the final decision make clear that consensus does not necessarily mean unanimity and that where warranted, Commission staff is empowered to bring proposed revisions to the Commission's attention even in the absence of consensus.

Finally, the ISO is unclear about the mandate of the goals and vision working group. In titling the heading of section seven, "Goals to Complement Metrics," the proposed decision suggests that the notion of goals refers narrowly to setting targets for the metrics. If that is the case, then the ISO welcomes the notion that the metrics will not merely involve reporting data but will also involve expectations of meeting certain benchmarks. If the proposed decision intends for the working group to have a broader

mandate, then the proposed decision would benefit from additional explanation as to the parameters of that mandate.

#### **IV. CONCLUSION**

The ISO appreciates the opportunity to offer its views on the proposed decision to adopt smart grid metrics. The ISO is encouraged to see the improvements the proposed decision represents over earlier Commission proposals. By addressing the issues raised above, the ISO is optimistic that the Commission, the IOUs, and interested stakeholders will have a solid basis upon which to evaluate the IOUs' future smart grid progress.

Respectfully submitted,

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Dated: April 9, 2012