UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

RTO/ISO Performance Metrics **Docket No. AD10-5-000**

INITIAL COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

On February 3, 2010, the Federal Energy Regulatory Commission (Commission) issued a Notice Requesting Comments on RTO/ISO Performance Metrics (Notice). The Commission states that its staff worked with a team comprised of all the jurisdictional ISOs and RTOs to develop a set of metrics that all ISOs and RTOs will use to report annually to the Commission. The Commission has divided the metrics into three categories -- Performance Metrics, Additional Information and ISO/RTO Specific Key Initiatives. The Performance Metrics are comprised of 14 common "performance" metrics on which all ISOs and RTOs will report. They include six reliability metrics, five market metrics, and three organizational effectiveness metrics. The Additional Information metrics include eight additional topics on which all ISO's and RTOs will report, if applicable, and constitute "information that might be useful in understanding ISO/RTO operations but not as indicative of measuring ISO/RTO performance." [1] The ISO/RTO Specific Initiatives allow each ISO and RTO to highlight any organization-specific initiatives from the previous year and/or key focus areas from the upcoming year. The Commission has requested comments on whether the proposed metrics will effectively track the performance of ISO/RTO operations and markets.

The California Independent System Operator Corporation (CAISO) appreciates the opportunity to comment on the proposed ISO/RTO performance metrics. The CAISO supports the development of metrics that constitute meaningful measures of actual ISO/RTO performance and enable an "apples-to-apples" comparison, and does not oppose any of the individual metrics. The CAISO believes, however, that the metrics, as currently categorized and written, do not fully achieve these objectives. Specifically, the ISO has three concerns with the proposed metrics. First, several of the proposed metrics do not actually measure ISO/RTO performance and should be moved from the ISO/RTO Performance Metric category to the Additional Information category. Second, there are certain metrics that, although they measure ISO/RTO performance, are not appropriate for purposes of making an "apples-to-apples" comparison among

[1] Proposed Performance Metrics at 3.

ISOs/RTOs. Third, it is not yet clear how many of the metrics will actually be "calculated" because a lot of details and specifications still need to be worked-out in order to finalize a set of workable and meaningful metrics. The CAISO believes that although the proposed metrics would rate the CAISO favorably, that does not change the fact that many of the metrics as currently constituted do not meaningfully measure ISO and RTO performance. Accordingly, the ISO requests that the Commission adopt the recommendations herein in establishing metrics to be reported by ISO's/RTOs.

I. COMMENTS

A. Several Metrics Should Be Re-Categorized From the ISO/RTO Performance Metric Category to the Additional Information Category

Several of the proposed ISO/RTO Performance Metrics do not measure ISO/RTO performance or the actions of an ISO or RTO. Rather, they measure the performance of other entities and market participants or otherwise reflect matters over which ISOs and RTOs have no control. Accordingly, these metrics do not belong in the ISO/RTO Performance Metrics category; they belong in the Additional Information category. The CAISO recommends that the following metrics be moved from the ISO/RTO Performance Metrics category to the Additional Information category:

Reliability

B.2. Number of transmission load reliefs or unscheduled flows per a defined time period

D.2. Percentage of approved construction on schedule and completed

F.1. Percentage of >200 kV planned outages of 5 days or more that are submitted to the ISO/RTO at least 1 month prior to the outage commencement date

F.4. Percentage of >200 kV outages (both planned and unplanned) with less than 2 days notice

Markets

B.1. RTO forced outage rate

D.1 Demand response megawatts as a percentage of total capacity

D.2. Demand response megawatt hours as a percentage of ancillary services

E.1. Renewable megawatts as a percentage of total energy

The aforementioned reliability metrics are either entirely or in large part based on the actions of entities other than an ISO or RTO. For example, with respect to proposed Reliability Performance Metric B.2, transmission loading relief and unscheduled flows on an ISO/RTO system generally result from the actions of generators and interconnected Balancing Authority Areas ("BAA"); so, it is not a measure of ISO/RTO performance. In addition, these measures are not necessarily applied uniformly across all the ISOs and RTOs. For example, the CAISO does not utilize the transmission loading relief methodology to mange flows on its interties and, instead, employs unscheduled flow mitigation only on qualified paths. Also, the extent of unscheduled flows is in part related to the configuration and nature of the ISO's/RTO's footprint and is largely impacted by the configuration and nature of the contiguous BAAs, over which the ISO/RTO has no control. In the CAISO's case, there are several BAAs embedded in or closely integrated with its system which can contribute substantially to unscheduled flow. Thus, even if B.2 were retained as an ISO/RTO Performance Metric, it would be unlikely to provide meaningful data to assess an ISO's/RTO's own performance.

Reliability Standard D.2. is beyond the control of the ISO or RTO. Although the ISO or RTO can determine the need for new transmission and approve projects to meet such needs, ISOs and RTOs do not site transmission or issue certificates of public convenience and necessity ("CFCN") for new transmission, and they are not the entities responsible for actually building transmission and adhering to any construction schedule.[2] Because this metric measures activity

[2] The timeline for completing transmission projects can be affected by numerous external factors all of which are beyond the control of an ISO or RTO. They include the level of opposition to the project, environmental concerns, vendor timelines, and the time it takes to obtain the necessary approvals through the state regulatory agency's siting and CFCN process. These factors can vary dramatically by region.

that it beyond an ISO's or RTO's control, it is neither an appropriate nor a meaningful measure of ISO or RTO performance. Thus, it should not be included in the Performance Metrics category.

Reliability Metrics F.2 and F.4, which pertain to transmission outage coordination, similarly do not measure activities that the ISO or RTO are undertaking. Rather, they merely measure the timing of when a transmission submitted an outage request to the ISO/RTO. The timely reporting of outages is under the exclusive control of the transmission owner, not the ISO/RTO.

Markets Metric B.1, measures generator forced outage rates. Generator forced outage rates are generally unrelated to the actions that an ISO/RTO takes. Rather, they depend primarily on the type, age and condition of the generating unit and/or a unit operator's decision whether to make a unit available. Accordingly, this metric should not be used to measure the performance of an ISO or RTO.

Markets Metrics D.1, D.2 and E.1, track the participation of demand response and renewable resources in ISO/RTO markets. The extent of these resources' participation in the market is the product of numerous factors, including state resource adequacy programs, demand response and renewable portfolio standards initiatives, the results of economic dispatch based on resources' submitted bids, the types of resources being built by developers in a given region, and the penetration of demand response providers. The CAISO has substantial amounts of renewable resources, and the state has adopted a 33% renewable portfolio standards. Even though these metrics would rate the CAISO favorably, the CAISO does not believe that they measure ISO/RTO performance or actions. As such, these metrics should be moved to the Additional Information category.

Because the aforementioned metrics track activities that are beyond the control of an ISO/RTO and do not otherwise measure ISO/RTO actions or performance, they should be moved from the ISO/RTO Performance Metric category to the Additional Information Category. That would still allow them to be tracked for informational purposes, but would make it clear that they are not being used to measure a particular ISO's or RTO's performance or compare the performance of different ISOs/RTOs.

B. Certain Metrics That Measure ISO/RTO Performance Are Not Appropriate For Comparing Different ISOs and RTOs

The CAISO also submits that several of the metrics do not enable a pure "apples-to-apples" comparison among ISOs and RTOs either because they do not provide sufficient information to allow one to adequately evaluate the ISO's/RTO's performance, the metric for each ISO and RTO is affected by factors beyond its control, or there are regional differences such that each ISO and RTO are not facing the same circumstances or measuring the exact same thing.

For example, the CAISO believes that three of the proposed ISO/RTO Performance Metrics -- Reliability Performance Metric D.1 which tracks the number of facilities approved to be constructed for reliability purposes, Reliability Metric D.3 which tracks the completion of reliability and economic studies, and Reliability Performance Metric F.3 which tracks the percentage of >200kV outages cancelled by the ISO/RTO after having been previously approved -- are not appropriate purposes of comparing ISOs and RTOs. They should be moved to the Additional Information category. Standing alone, these metrics do not contain all of the information that is necessary to fully and fairly assess the number that is reported. As such, merely providing the requested number may not completely and/or accurately reflect a particular ISO's or RTO's performance.

With respect to metric D.1, a low number of approved projects may be a function of the fact that the ISO or RTO did not have many reliability needs to be resolved, the failure of a transmission owner to submit a specific project to satisfy the need, or that the reliability needs were in the distant future and the ISO/RTO did not need to approve projects at this time to (as opposed to the ISO/RTO not approving projects in a timely manner to meet identified needs).

Similarly, with respect to Performance Metric D.3, the number of economic and reliability studies that an ISO/RTO completes are largely a function of the number of projects and study requests that that are submitted to the ISO/RTO. Because ISOs/RTOs have little or no control over number or transmission projects or economic study requests that parties submit, or the timely submission of information by these parties during the study process, it is unclear how the reported numbers would serve as a meaningful basis for comparing ISOs and RTOs.

With respect to metric F.3, previously approved outages can be cancelled for a host of reasons, most of which are beyond the control of the ISO/RTO. For example a particular ISO/RTO may face a 1/100 year heat wave conditions or face a greater number of unplanned facility outages or system emergencies (all beyond its control) that require the cancellation of previously approved outages. Under these circumstances, merely reporting the number of outages that were cancelled would not adequately reflect the quality of the ISO'/RTO's performance.

For the forgoing reasons, the CAISO requests that the Commission move the aforementioned three metrics to the Additional Information category.

Even tracking compliance with mandatory reliability standards may not permit a pure "apples-to-apples" comparison between ISOs and RTOs. In that regard, there are regional reliability standards that only apply to certain ISOs/RTOs but not others. Also, each of the ISOs and RTOs are subject to different Regional Entities that may have different enforcement

priorities or approaches. Non-uniform enforcement efforts across regions could result in differences in the number of violations that are reported by each ISO and RTO. Another example is the customer satisfaction metric under the Organizational Effectiveness category which would require each ISO and RTO to ask the same question to the same groups of stakeholders. Presently, this is not the case. The CAISO suggests that for these types of metrics, it may be appropriate to include some sort of footnote indicating that there are regional or other differences that might affect the numbers being reported.

C. Many Details and Specifications Still Need to Be Worked-Out in Order to Finalize a Set of Meaningful Metrics

It is imperative that any adopted metrics be clearly and meaningfully defined in order to provide value and permit fair assessment of an ISO's or RTO's performance. However, the detailed specifications with respect to how each proposed metric will be calculated are not yet fully understood, and the ISOs and RTOs have not had an opportunity to finalize how each of these metrics will be calculated. These details need to be unambiguously resolved in order to ensure clear and meaningful metrics.

It is not clear how some metrics, as currently written, are measured and, as such, they may not permit meaningful comparison or even provide valuable information. For example, Reliability Metric D.1 asks ISOs and RTOs to provide the number of facilities approved to be constructed for reliability purposes. It is not clear what is meant by the word "facilities" and how "facilities" should be counted. Are "facilities" complete transmission project(s) approved by an ISO/RTO to meet a reliability need or are they every individual piece of equipment (*e.g.,* transmission line, capacitor, sub-station, or transformer) that comprises the project? The CAISO submits that if it is the latter, that is not a meaningful metric or data point. The important matter that needs to be assessed is whether ISOs and RTOs are approving transmission projects to meet

identified reliability needs, not the number of individual facilities that are subsumed within each such transmission project. There are other proposed metrics where the methodology for measuring them is not clear at this time and needs to be developed, including for example which types of interconnection requests should be included in Reliability Metric E.1.

Even in instances where it is clear what the general components of a calculation should be, each of the ISOs and RTOs may calculate the metric differently. For example, the elements taken into consideration in determining actual and planned reserve margins (Reliability Metric E.2) are generally known, but each ISO and RTO may use a different methodology for determining the qualifying capacity levels of certain resource types in its markets. For example, the ISO is aware that the methodology for determining the qualifying capacity values of intermittent resources is not uniform among ISOs and RTOs (or under applicable state resource adequacy programs). That diversity of methodologies will affect the reserve margin calculations and result in non-uniform reporting. The CAISO notes, however, that even if a methodology can be developed to ensure an "apples-to-apples" comparison between ISOs and RTOs, the value of this metric as a comparative tool would be questionable because ISOs and RTOs cannot compel the construction of excess generation, and regions may have different reserve margin requirements.

There are other proposed performance metrics that make a fair comparison between ISOs and RTOs difficult if not impossible. For example, under Markets Performance Metric A-3, ISOs and RTOs would provide Load-Weighted Fuel-Adjusted Locational Marginal Prices. Different ISOs/RTOs calculate this number in a different manner, and the CAISO is not certain it could calculate this number in the exact manner that some other ISOs/RTOs do. Requiring ISOs/RTOs to apply additional calculation methodologies to those they already undertake would require significant additional work and, even then, may only result in an approximation that is not

meaningful. Even if a common methodology among all ISOs and RTOs were achievable, different results in different regions would not necessarily reflect any meaningful differences in the performance of ISOs/RTOs because the economic factors that affect fixed and variable costs of supply resources are almost entirely beyond the influence of an ISO or RTO.

Finally, Organizational Effectiveness Performance Metric A.1. which measures the actual annual ISO/RTO administrative charges to members compared with budgeted administrative charges needs to be clarified. The CAISO recommends that this metric measure actual annual expenses and capital costs charged to customers compared to budgeted expenses and capital costs. Organizational Effectiveness metric A.2 already measures the administrative charge to members as cents per MWh of load served. Thus, it would be appropriate and meaningful to have a complimentary metric that measures actual total costs compared to budgeted costs (as opposed to MWh rates based on load).

Standardizing metric calculations across ISOs and RTOs will take time. In some instances, it might not even be possible given differences between the regions and the rules and regulations under which each ISO and RTO operates. In such cases it is not certain how fundamental differences can be overcome or that individual ISOs and RTOs should be required to change their existing methodologies for calculating certain of the metrics.

The CAISO is committed to working with the other ISOs and RTOs and the Commission to develop an appropriate and detailed methodology for calculating each metric. However, the CAISO requests that the Commission recognize the fact that differences in the way some of the metrics are calculated exist and indeed are expected. Where differences cannot be overcome, the Commission must ensure that the respective metric(s) notes that there are differences in how each ISO and RTO calculates the metric. This is necessary to ensure that the public does not assume that a particular metric reflects an “apples-to-apples” comparison among ISOs/RTOs.

One alternative would be for the Commission simply to establish three categories of metrics applicable to all ISOs/RTOs -- Reliability, Markets, and Organizational Effectiveness -- and require each ISO and RTO to develop meaningful metrics that measure their performance and value in each of these categories. Such an approach would (1) recognize the difficulty in standardizing metrics across ISOs and RTOs, (2) account for the regional differences that exist among ISOs/RTOs, and (3) create metrics that measure the specific types of performance that are most valued in each ISO/RTO.

II. CONCLUSION

The CAISO appreciates this opportunity to submit comments regarding the appropriate metrics for ISOs and RTOs and urges the Commission to adopt a metrics reporting framework consistent with the discussion herein.

Respectfully submitted,

Anthony Ivancovich

Anthony Ivancovich
Assistant General Counsel-Regulatory

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
151 Blue Ravine Road
Folsom California 95630
Tel. (916) 351-4400
Fax. (916) 608-7296
Email: aivancovich@caiso.com

Date: March 5, 2010