ORDER NO: 18-0321-1a

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

ORDER ISSUING ADMINISTRATIVE SUBPOENA March 21, 2018

I. Introduction

The California Energy Commission (Energy Commission) is responsible for preparing biennial Integrated Energy Policy Reports (IEPRs), with additional IEPR updates prepared for the off-years, and develops both a five-year and ten-year electricity supply and demand outlook. The Energy Commission is also analyzing the replacement infrastructure needed to accommodate the shutdown of the San Onofre Nuclear Generating Station, retirement of aging facilities, including those that utilize oncethrough cooling, as well as future infrastructure and emission reduction credit needs in the Los Angeles basin. In addition, the Energy Commission provides information and analysis to the California Public Utilities Commission (CPUC) pertaining to Resource Adequacy program design and implementation, and planning reserve margin-related proceedings. As part of these ongoing efforts, the Energy Commission is evaluating several aspects of statewide and local electricity supply adequacy, including an annual assessment of expected reliability during summer peak demand periods.

The California Independent System Operator (CA ISO) has provided the Energy Commission with resource information pursuant to Administrative Subpoenas issued in 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013, 2015, and 2016. Those subpoenas directed the CA ISO to provide certain information concerning characteristics of individual supply resources and daily operating procedures employed by the CA ISO within the CA ISO Balancing Authority Area. This subpoena renews that data request, and modifies several of the descriptions in order to more accurately identify data that are necessary to complete future Energy Commission studies.

II. Information Needed

In order to conduct the tasks identified in the previous section, the Energy Commission needs information held by the CA ISO concerning individual supply resources, transmission characteristics, and the procedures employed by the CA ISO relating to the daily operation of the grid within the CA ISO Balancing Authority Area. The data needed by the Energy Commission consists of the following, provided on a monthly

basis for the previous month (unless a less frequent time is identified), except that final settlement quality (energy supply) meter data requested in #3 and #8 below will be provided for the month two months previous to the submission to the Energy Commission:

- 1. Information identifying:
 - (a) the addition or expected addition of new generation resources. The information provided for new resources shall include the resource ID(s), any latitude and longitude information about facilities/unit(s) that is provided by the CA ISO customer, with expected commercial online dates within the next 12 months, the (expected) commercial online date(s); and
 - (b) the physical retirement or potential retirement of any resource located within the CA ISO balancing authority. For retiring resources, the resource ID(s) and the (expected) retirement date(s) are to be provided;
- Master File Data by resource: monthly updates of data entered by resource owners and/or operators into the Master File database. For each resource, the Scheduling Coordinator ID and all CA ISO-implemented data from each field contained in the latest participant submitted Resource Data Template;
- 3. The following resource output by 10-minute interval by Resource ID, including any demand response, storage, other specific devices, or aggregations of resources (including behind the meter) participating in the CA ISO market:
 - (a) preliminary settlement-quality meter data, per T+12B; and
 - (b) final settlement-quality meter data, per T+55B;
- 4. The list of resource IDs whose output is aggregated in compiling the output by renewable technology posted to the *Renewables Watch* on the CA ISO website and, for each resource ID provided, the resource technology or technologies for the associated resource;
- 5. By queue position number, the project name and owner for all projects in the CA ISO Generator Interconnection Queue, updating this data quarterly to incorporate any changes to the Generator Interconnection Queue;
- 6. (a) A copy of the master file of scheduling coordinator and import resource IDs; and
 - (b) for each intertie with an external balancing authority, settlementmetered flows at the interval at which the CA ISO schedules the interties;

- 7. Actual hourly EMS load data for the subareas used in the CA ISO internal load forecast process, including PG&E- Bay Area, PG&E-Non-Bay Area without Pump Load, PG&E-Non-Bay Area Pump Load, SCE without Pump Load, SCE Pump Load, SDG&E, and VEA TAC;
- 8. Final metered load used for settlement purposes, for each Utility Distribution Company on a 10-minute interval basis;
- 9. Online access to transmission and resource outage information;
- 10. ISO-validated data related to load-serving entity compliance with the requirements of the CA ISO's resource adequacy tariff. This includes expected peak loads and the generation and contract resources (identified by resource ID) and capacity encumbered (for each resource, in MW) by each load-serving entity. This information shall be provided for the following compliance showings:
 - (a) Final year-ahead system, local, and flexible resource adequacy compliance showings;
 - (b) Final month-ahead system, local, and flexible resource adequacy compliance showings for all months; and
 - (c) At such time that the CA ISO modifies its resource adequacy tariff to reflect 2- and 3-year-ahead procurement requirements for system, local, and flexible resource adequacy, data that indicates the resource procured in satisfaction of the requirement(s), the load-serving entity, and the contribution of each generation and demand-side resource procured towards meeting the requirement(s);
 - 11. All non-public operating procedures for supply resources, market operations, scheduling and transmission developed by the CA ISO. This information need not be provided on a monthly basis, but any updates shall be provided in the next month's submittal, or by request;
 - 12. Current versions of the SCIT Spreadsheet and future updates, including seasonal updates reflecting changes to relevant path ratings pursuant to WECC protocols. The file shall be provided in both of the following manners: 1) an unmodified copy of the currently deployed version of the Microsoft Excel file, 2) a modified copy of the currently deployed version of the Microsoft Excel file with the modification consisting of a sequence of operations whereby each and every worksheet has its entire contents fixed by performing a "Select All" operation upon the entire cell range, followed by a "Copy" operation upon the entire cell range, and concluded with a "Paste Special, Paste Values" operation performed prior to saving the file;
 - 13. All power flow base cases and dynamic stability data files developed for power flow and stability modeling studies identified in each annual cycle of

the Transmission Planning Process (TPP); base cases including starting cases and final cases; (intermediate cases and similar studies performed outside the TPP shall be provided on written request); and all contingency files used to test base cases for single and multiple contingencies as required in satisfying NERC and WECC standards;

- 14. 5-minute snapshots of raw PMU synchrophasor data from CAISO production servers in the form of COMTRADE format, or flat-file CSV format as an alternative, along with the associated configuration file that contains a list of the PMUs in the data file. The raw synchrophasor data shall be "positive sequence" only and consist of voltage magnitude/angle, current magnitude/angle and frequency measured and time stamped at 10 samples/second minimum. The data files shall consist of the 5-minute snapshot containing the quarterly SP26 peak load instant and the 5minute snapshots immediately preceding and following the 5-minute snapshot containing the quarterly SP26 peak load instant, as well as the 5-minute snapshot containing the quarterly SP26 minimum load instant and the 5-minute snapshots immediately preceding and following the 5minute snapshot containing the quarterly SP26 minimum load instant. This information shall be provided on the 25th of the month following the close of the quarter; and
- 15. Hourly wind profiles by generator and region developed by the CAISO for use in its hourly production cost model dataset developed for the Transmission Planning Process economic analysis.

III. Authority

Public Resources Code section 25216 states that the Energy Commission shall assess trends in electricity consumption and assess the social, economic, and environmental consequences of these trends, and collect and analyze forecasts of supply and consumption in terms of the availability of energy resources, costs to consumers and other factors. In addition, Public Resources Code sections 25301 and 25302 provide a broad mandate for the Energy Commission to assess all aspects of energy supply, production, transportation, delivery and distribution, demand, and prices, and to develop policies that conserve resources, protect the environment, ensure reliability, enhance the economy, and protect public health and safety.

In order to meet its responsibilities, Public Resources Code section 25210 grants the Energy Commission the authority to conduct investigations and to exercise the same power conferred on the heads of departments of the State pursuant to Government Code section 11180 et seq., which includes the power of subpoena. These sections, which are implemented in Cal. Code Regs., tit. 20, section 1203, give the Energy Commission broad authority to subpoena the information specifically identified in Section II above.

IV. Conclusion and Order

The information identified in this subpoena has been determined by the Energy Commission to be necessary and appropriate under its mandates to assess all aspects of energy demand and supply, and to develop policies that conserve resources, protect

the environment, ensure reliability, enhance the economy, and protect public health and safety. Therefore, the Energy Commission hereby adopts this Order Issuing Administrative Subpoena directing the California Independent System Operator to provide the information specified in this subpoena no later than the twenty-fifth day of each month, beginning April, 2018, unless another filing date is identified above.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on March 21, 2018.

| AYE: | | |
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| NAY: | | |
| ABSENT: | | |
| ABSTAIN: | | |
| | | |
| | Cody Goldthrite | |
| | Secretariat | |