March 3, 2025

Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Reply Comments of Southern Power on Proposed GO-167-B Revisions

Southern Power Company (Southern Power) appreciates the opportunity to provide feedback to the California Public Utilities Commission (CPUC) on proposed revisions to General Order No. 167 (GO-167). Southern Power appreciates the CPUC's incorporation of clarifying changes that more clearly define the applicability of GO-167 requirements to assets in Active Service prior to the effective date of the revised standard. However, Southern Power continues to have concerns with other parts of the proposal and offers the following comments for the CPUC's consideration:

- **Section 9.4, Safety-Related Incidents** - Southern Power is concerned with accessing and providing the proposed reportable information within a constrained timeframe. Southern Power believes ensuring the safety of personnel and proper operation of equipment should be prioritized and thereby recommends a 24-hour reporting requirement for any OSHA (Occupational Safety & Health Administration) recordable events and a 72-hour reporting requirement instead of the proposed 24-hour requirement for all other events such as damage to plant or negative media stories, as the requested level of information may not be available within 24 hours. Additionally, Southern Power recommends (1) aligning the scope of reportable injuries / illnesses with OSHA reportable requirements by requiring admission to a hospital for medical treatment and (2) increasing the threshold for property damages from $50,000 to $500,000, which is a more reasonable value for GA and ESS facilities. If the CPUC has concerns with these proposed changes, Southern Power believes a 48-hour reporting timeline for non-OSHA related events and a property damage threshold of $150,000 to $300,000 strikes a more reasonable balance than the current proposal.
- **Section 10.5, Third-Party Audits, Tests, or Technical Evaluations** - Power Purchase Agreements may have operational testing requirements and Southern Power requests consideration of using such contractual tests, if applicable to the type of test or technical evaluation sought by the CPUC, to satisfy the test and technical evaluation requirement described in Section 10.3. The Safety and Enforcement Division would have discretion to determine whether any such contractual test was sufficient for the purposes of Section 10 of GO-167.
- **Appendix A Section B Logbook Standards for Renewable and ESS Facilities** – Southern Power requests clarification of multiple points within the logbook standard and is concerned that multiple requirements are overly burdensome or duplicative with other processes. For the events that are logged chronologically:
    - a. Southern Power is concerned that tracking and reporting any facility output changes would be infeasible for renewable and ESS facilities for which electrical output changes continuously due to varying solar and wind conditions and charge/discharge instructions. We therefore recommend changing the scope of reportable MW output changes to focus on forced outages/derates and deviations instructed by the scheduling coordinator or CAISO.

        - Southern Power recommends removing deviations from the day ahead schedule and instead focusing on deviations set forth by the scheduling coordinator or CAISO.
        - Southern Power recommends reductions to minimum load should only be reported in the Control Operator Log if due to abnormal operating conditions (i.e., forced outage or manual plant isolations). A facility being reduced to minimum load due to energy source availability (i.e., low solar irradiance or wind speed) or curtailment instructions due to market conditions should not be entered into the Control Operator Log.
- d. Future scheduled electrical output of a facility may change continuously for certain generation or ESS facilities. For example, on what time granularity (e.g., every 2 hours, every hour, every minute) should a wind or solar facility refresh expected future electrical output, which changes continuously based on future expected wind speeds and solar irradiance? Would an ESS Owner need to log changes to future expected discharge or charge output values based on constantly changing market conditions? Southern Power is concerned that the current proposal is infeasible because it proposes **any changes** to future scheduled facility output. Southern Power believes it would be more appropriate to communicate the future scheduled capability of the facility. However, a facility's capability is already communicated via Outage Management System (OMS) tickets to CAISO and Southern Power questions the value of duplicating such information in the operator logbooks. Therefore, we suggest removing the language surrounding changes to the future scheduled facility output.
    - To the extent that CPUC Staff believes it is necessary to retain the concept of changes to future scheduled facility output in the Control Operator Log, Southern Power recommends that the proposal clarify the frequency and time granularity of submitting such information (e.g., a daily / bi-daily / hourly entry showing the planned hourly facility output for the next X days). This would set a feasible and more clearly defined framework.
- e. GA and ESS owners may not know suspected causes of significant equipment trips nor have identified remedial actions to address such equipment trips at the time of an initial entry to the Control Operator Log. Southern Power recommends new language to allow a GA or ESS owner that does not know the causes or remedial actions for a significant equipment trip at the time of initial event entry to specify that the causes or remedial actions are unknown and to update the entry as soon as practicable to reflect causes or remedial actions identified at a later time.
- f. Southern Power recommends that reductions to minimum load should only be reported if due to abnormal operating conditions (see comments above on paragraph a).
- h. Southern Power proposes a new OMS exception log that would allow generation asset owners to utilize the OMS to track outage related activities, rather than logging changes to the MW capability of a facility in the Control Operator Log.
- l. Southern Power continues to have concerns with the practicality of reporting potential energy source problems, such as the delivery of electricity from the grid or co-located or hybrid generation facilities, for ESS facilities. It would be impractical for ESS owners to report cloud cover or low wind speeds impacting the delivery of solar or wind-generated electricity to a co-located or hybrid ESS facility. Additionally, ESS owners already continuously telemeter state of charge and discharge statuses to CAISO who has operational awareness of the availability and capability of ESS facilities. Thus, Southern

Power recommends removal of such information from the Control Operator Log to avoid unnecessary duplication.
    - p. Southern Power recommends updating the scope of recordable communications with internal and external entities to only telephone conversations.
- **Operating Standard 25, Transfer of Ownership** – Southern Power recommends that the Transfer of Ownership reporting requirement is not applicable to a change in minority ownership, which would not impact facility operations.

Southern Power respectfully submits these comments and appreciates CPUC Staff's consideration of our proposed changes to the language in GO-167.

Respectfully,

Chase Smith

Chase Smith
Market Compliance & Policy Manager
Southern Power Company

9.4 SAFETY-RELATED INCIDENTS

Within 24 hours of its occurrence, a GAO or ESSO shall report to the Commission's emergency reporting website any safety-related incident involving a GA or ESS. If internet access is unavailable, the GAO or ESSO may report using the backup telephone system. Such reporting shall include any incident that has resulted in death to a person; an injury or illness to a person requiring ~~overnight~~admission to a hospital~~ization~~ for additional medical treatment; a report to Cal/OSHA, OSHA, or other regulatory agency.~~; or damage to the property of the GAO or ESSO or another person of more than $50,000; or involves a GA or ESS malfunction or failure resulting in fires, explosions, hazardous emissions, or safety related reports to other agencies.~~ Within 72 hours of its occurrence, ~~T~~the GAO or ESSO shall also report any other incident involving a GA or ESS that has resulted in significant negative media coverage (resulting in a news story or editorial from one media outlet with a circulation or audience of 50,000 or more persons) when the GAO or ESSO has actual knowledge of the media coverage; or damage to the property of the GAO or ESSO or another person of more than $500,000; or involves a GA or ESS malfunction or failure resulting in fires, explosions, hazardous emissions, or safety related reports to other agencies. If not initially provided, a written report also will be submitted within five business days of the incident. The report will include copies of any reports concerning the incident that have been submitted to other governmental agencies.

10.5 CONTRACTUAL OR THIRD-PARTY AUDITS, TESTS, OR TECHNICAL EVALUATIONS

During an audit, test, or technical evaluation conducted under this Section 10.0, a GA or ESS Owner may submit, or authorize access to, audits, tests, inspections, or technical evaluations previously performed under contractual agreements with California Load Serving Entities or by government agencies, insurance companies, or other persons or entities. While this contractual or third-party information may be relevant to the inquiry, the information may not be sufficient, in and of itself, to demonstrate compliance with the standards. SED will determine whether a contractual or third-party audit, test, inspection, or technical evaluation is sufficient for the purposes of this Section 10.0.

I. PURPOSE

The intent of this document is to define the requirements for facility logs for plants generating electricity by the use of thermal, solar, wind, geothermal energy, and energy storage systems.

II. GENERAL REQUIREMENTS

Each generating or energy storage facility shall maintain a Control Operator Log that contains the chronological history of the facility including detailed entries regarding the operations and maintenance of the facility. Where information is unit specific, information for each unit must be recorded and so identified.

The Control Operator Log is a formal record of real time operating events as well as the overall status of the GAs, ESSs, and auxiliary equipment under the purview of the Control Room Operator. The log shall also contain an accurate and concise record of important and/or unusual events involving operations, maintenance, water chemistry, safety, accidents affecting personnel, fires, contractor activities, environmental matters, and any other pertinent information concerning the operation of the facility. The log shall also record communications between the facility and outside entities including but not limited to the Independent System Operator (ISO), scheduling coordinators or headquarters facilities, regulators, environmental agencies, Cal OSHA, emergency responders or other agencies. The log shall be maintained notwithstanding and in addition to any other similar requirements that mandate that events be recorded. The Generating Asset Owner (GAO) or Energy Storage System Owner (ESSO) must collect and record all information specified in these standards. All such information must be readily available to operators, California Public Utilities Commission staff, and other authorized personnel at all times.

Notwithstanding the above, generators and energy storage resources may elect to record certain kinds of information in separate logs, as authorized by Exception 1, Exception 2, ~~and~~ Exception 3, and Exception 4 below. The information specified in Exception 1 may be recorded in an Equipment Out of Service Log. Similarly, the information specified in Exception 2 may be recorded in a Work Authorization log. The information specified in Exception 3 may be recorded in the Work Order Management system or electronic database system for maintenance activities including corrective, preventive, and predictive maintenance. Information recorded in these separate logs need not be recorded in the Control Operator log.

All required logs entries shall be retained in hard copy, electronic format, or both for a minimum period of five (5) years from the date of the log entry. Each log entry shall start by recording the time of the event. The GAO or ESSO is responsible for maintaining the integrity of the generating asset or Energy Storage System facility logs.

r) Equipment outages of environmentally sensitive equipment or environmental monitoring devices.
s) All out-of-limit water chemistry conditions including duration and remedial actions, as well as all boiler chemical feeds and boiler drum blowdowns where applicable.
t) Changes in equipment/systems' normal operating status such as, but not limited to, a suspected boiler tube leak, fouled condensers, a feedwater heater tube leak, excessive vibration, or overheating.
u) Detailed information regarding environmental limitations exceeded, including the date, time, duration, amount, and any known or suspected cause.
v) Detailed reports of observations related to transmission system or facility trouble involving frequency or voltage deviations.
w) Report of any industrial accident including all details of the incident and the names of all parties involved.
x) All other pertinent information concerning the operation of the facility including names of all individuals involved.

B. Renewable Generating Assets and Energy Storage Systems

Each GAO or ESSO must establish written protocols of logbook requirements for each facility (or "site"), which may be controlled by remote operating centers. A facility may be comprised of multiple units. An energy storage unit is one or more devices assembled together to store electrical energy and supply electrical energy selected loads at a future time. The GAO or ESSO logbook protocols should define logbook content and how frequently information should be recorded for safe and reliable operation. The protocol must specify all requirements in Appendix A, Section II: General Requirements.

1) Renewable Generating Assets and Energy Storage Systems Control Operator Log Requirements

The Control Operator Log can be recorded by the facility operator and/or the remote operation center operator. The facility operator monitors and controls the operation of each GA and/or ESS facility. The remote operating center operator may monitor and control multiple facilities of renewable GAs and ESSs.

Each control operator must record a Facility Status Entry at least once each calendar day. The Facility Status must be made at the same time each day, except when emergency conditions require postponement. In the case of such emergency conditions, the entry for that day shall be made as soon as it is safe to do so.

The first entry in the Control Operator Log at the start of a shift shall identify each operator on that shift and by some regular means distinguish

his/her responsibilities (list in a regular order the identity of the Shift Supervisor(s), Control Operator(s), Assistant Control Operator(s), and any other operation staff. This initial entry shall indicate that the crew has ascertained the plant or facility status through the shift turnover, review of the log, and a check of the indication and alarms in the control room.

Information in the Facility Status Entry shall include as applicable:

a) Facility status, if on-line, including:

- Current MW and/or MWH load;
- Available capacity of the facility;
- GA or ESS Voltage (V) and VAR readings;
- Dispatch instruction records;
- For facilities equipped with AGC or ADS, the status of AGC or ADS equipment, including the availability of AGC or ADS, its operational status (on or off), and the normal range of output possible when the facility is operating under AGC or ADS; and
- Status of environmental monitoring equipment.

b) Any facility (or site) MW output outages or restrictions (derates) including, but not limited to, reasons for and expected time/date of release (including the ISO outage ID number) (*See* Exception 4);
c) status of any environmental constraints such as, but not limited to, weather information or conditions, temperature, ambient derates, etc.;
d) Equipment out of service, including any equipment that has been isolated and prepared for an upcoming work authorization with particular emphasis on redundant equipment that if the primary equipment fails, will result in a load restriction or outage a facility trip (*See* Exception 1);
e) Any abnormal operating conditions affecting efficient, safe, or reliable operation;
f) Changes in equipment/systems' normal operating status such as, but not limited to, HVAC malfunction, leaks, equipment faults, connection/disconnection of equipment, loss of communications, triggered alarms, high equipment temperature alarms, equipment reset, etc.;
g) Outstanding work authorization which may be commonly referred to as clearances (*See* Exception 2); and
h) Any other pertinent information regarding the status and reliability of the facility.

Events shall be logged chronologically as they occur. Significant entries will include the control operators' name at the end of the entry preceded by the name(s) of others involved in the activity.

The events recorded in the Control Operator Log shall include, but are not limited to, the following:

a) ~~Any c~~Changes to the facilities MW output (except when on AGC and ADS)~~.~~ and ~~T~~the current load of the facility (or sites) shall be recorded as well as the new target load and the reason for the load change including:
   ~~i. As directed by the day ahead schedule;~~
   ~~ii.~~i. Deviations from the schedule as directed by a scheduling coordinator;
   ~~iii.~~ii. Load reduction for scheduled equipment outages;
   ~~iv.~~iii. ISO directions;
   ~~v.~~iv. Unplanned facility equipment problems (forced derates) including load restrictions for environmental causes;
   ~~vi.~~v. Reducing to minimum load due to abnormal operating conditions.~~; and~~
   ~~vii. Any other reason.~~

b) Significant operations and milestones in the process of major operations such as start-ups, shutdowns, and derates;

c) Each instance where a facility is placed on or removed from AGC, including a notation if the AGC, limits are set for a different value than the normal AGC, and the normal AGC range for those facilities;

~~d) Any changes to the future schedule for facility output;~~

~~e)~~d) Detailed accounts of significant equipment trips including any known or suspected causes and remedial actions taken. If such information is unknown at the time of the initial event entry, the GA or ESS owner may specify that the causes or remedial actions are unknown and update the entry as soon as practicable to reflect causes or remedial actions identified at a later time;

~~f)~~e) Load limit position any time it is placed at any value less than full load due to abnormal operating conditions and reason for such actions;

~~g)~~f) Abnormal operating issues on parameters affecting efficient, safe, and reliable operation;

~~h)~~g) All information related to forced outages or derates, including but not limited to, communications with scheduling coordinators, headquarters, or the ISO regarding such outages, the nature of the problem; progress reports on further diagnosis of the problem or on

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ongoing repairs; estimated and revised return-to-service dates, the nature of any extended work to be completed during the outages; completion of milestones in such work; and the completion of such outages. All entries shall include the date, time, duration, reason or explanation and the identities of all involved;

~~i)~~h) All work authorizations issued and the reason for such work;

~~j)~~i) Equipment placed in a not normal status;

~~k)~~j) Equipment declared OOS including date and time of the initial OOS declaration;

~~l) Any current or potential energy source problems for ESS, an energy source may be electricity from the grid or a co-located or hybrid photovoltaic (PV), wind or other electric generator;~~

~~m)~~k) Equipment outages of environmentally sensitive equipment or environmentally monitoring devices;

~~n)~~l) The functional status of communication systems and supervisory Control Data Acquisition (SCADA) systems;

~~o)~~m) Recorded telephone communication with internal and external entities;

~~p)~~n) Detailed information regarding environmental limitations exceeded, including the date, time, duration, amount, and any known or suspected cause;

~~q)~~o) Detailed reports of observations related to transmission system or facility trouble involving frequency or voltage deviations;

~~r)~~p) Report of any industrial accident including all details of the incident and the names of all parties involved; and

~~s)~~q) All other pertinent information concerning the operation of the facility including names of all individuals involved.

C. Exceptions

1) In lieu of logging equipment out of service (OOS) information in the facility status entry, an Equipment OOS Log may be utilized, at the discretion of the GAO or ESSO, to track equipment declared out of service. The work authorization program is intended to provide a safe work environment for current maintenance activities. If a delay is encountered in the repair process, the work authorization should be released, and the equipment declared OOS. If the OOS designation is expected to be of short duration (five days or less), the OOS entry should be carried forward in the facility status Control Operator Log entry. If a longer period is anticipated, the OOS entry can be recorded in the OOS log to avoid carrying it forward repeatedly in the Control Operator Log. Information in the Equipment OOS Log shall include the following:

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- Equipment description;
- Date declared OOS;
- Reason for being declared OOS;
- Estimated time for equipment to return to service;
- Name of person declaring equipment OOS;
- Maintenance order number or similar tracking mechanism;
- Contact person(s); and
- Date equipment returned to service.

2) In lieu of logging outstanding work authorizations in the plant status entry, a Work Authorization Logbook may be utilized, at the discretion of the GAO or ESSO, during periods of construction, overhauls, or major work; and contains work authorizations, commonly referred to as clearances issued, released, and associated with the special activity. All other entries pertaining to the special activity shall be entered in the Control Operator Log. Work authorization log entries do not need to be carried forward for each facility status but may remain for the duration of the special activity. Information in the Work Authorization Log shall include the following:

   - Date and time the clearance was issued;
   - Name of the Control Operator or Assistant Control Operator issuing the clearance;
   - Identification of clearance; and
   - Name of person the clearance is issued to.

3) In lieu of logging outstanding maintenance activities, a work order management system or electronic database system may be utilized at the discretion of the GAO or ESSO to track maintenance activities and status. This method of recordkeeping is intended to keep track of maintenance records according to maintenance requirements of original equipment manufacturers or industry best practices. Information in the work order management shall include the following but is not limited to:

   - Equipment issue;
   - Work order tracking number;
   - Date and time the work order was issued and completed;
   - Names of persons who created, approved work orders and performed the work;
   - Maintenance requirement (e.g., OEM recommendation, Non-Destructive Examination, Post heat treatment, etc.,);
   - Maintenance activities performed;

- Parts and tools information;
- Job safety and environmental analysis information; and
- Permit information such as hot work, confined space entry, etc.

4) In lieu of logging changes in the MW capability of a facility, the OMS or any future equivalent outage management reporting system may be utilized at the discretion of the GAO or ESSO to track outage and derate related activities and status. This method of recordkeeping is intended to keep track of GA and ESS facility outages and derates reported to the California Independent System Operator. Information in the OMS shall include but not be limited to the following:

- Ticket ID number;
- Date and time of outage or derate;
- Name of person who entered the ticket;
- Description of outage or derate;
- MW availability;
- Load maximum (charging capability);
- Energy maximum (maximum state of charge); and
- Planned return to service if known.

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IV. GENERATING ASSETS AND ENERGY STORAGE SYSTEMS TO WHICH THESE STANDARDS ARE APPLICABLE

Generating Asset and Energy Storage System Logbook Standards are applicable to each facility that generates electric energy by the use of thermal, wind, solar, or other resources or stored energy owned by an electrical corporation or is located in California that is 50 MW or larger. GA and ESS Logbook Standards are not applicable in the following cases (*see* California Pub. Util. Code §§ 761.3 (c)(1)(A)761.3 (c)(2)(A).

1) Nuclear-powered generating facilities that are federally regulated and subject to standards developed by the Nuclear Regulatory Commission, and that participate as members of the Institute of Nuclear Power Operations.

2) Qualifying small power production facilities or qualifying cogeneration facilities within the meaning of §§ 201 and 210 of Title 11 of the federal Pub. Util. Regulatory Policies Act of 1978 (16 U.S.C. Secs. 796(17), 796(18), and 824a-3), and the regulations adopted pursuant to those sections by the Federal Energy Regulatory Commission (18 C.F.R. Secs. 292.101 to 292.602, inclusive).

3) Generation units installed, operated, and maintained at a customer site, exclusively to serve that customer's load. For the purposes of this General

25. OS 25 - Transfer of Ownership

The GAO or ESSO notifies the Commission and the Control Area Operator in writing at least 90 days prior to any change in ownership of the majority voting interest of the Generating Asset and Energy Storage System.

26. OS 26 - Planning for Long-Term Unit Storage

At least 90 days before a change in the long-term status of an electric generation or ESS unit, other than permanent shutdown and/or decommissioning, the GAO or ESSO shall submit to the Commission plans and procedures for storage, reliable restart, and operation of the unit.

27. OS 27 - Corrosion Control

Where circumstances require it, the GAO or ESSO shall prepare and follow a comprehensive corrosion mitigation and control programs for all types of corrosions to identify vulnerable systems, implement appropriate corrective actions, and preventive measures to maintain facilities with designed performance condition.

28. OS 28 - Equipment and Systems

GAO or ESSO complies with these Operation Standards (1-28) considering the design bases (as defined in the Appendix) of facility equipment and critical systems. The GAO or ESSO considers the design basis of facility equipment when as required by other standards it, among other things:

a) Establishes procedures for the operation of critical systems at each unit (OS 7);
b) For each system, identifies critical parameters that require monitoring (OS 8 and 13);
c) For each critical parameter, establishes value at which to increase observation of the system or take actions to protect it (OS 8 and 13);
d) Assures that systems are monitored, and actions are taken (OS 8 and 13);
e) Establishes parameters for operation during periods of stress or shortage on the state's electric grid (OS 9 and 19); and
f) Assures that personnel operating critical systems are trained and qualified (OS 6).

(END OF APPENDIX D)