

April 16, 2024

California Public Utilities Commissions
Electric Safety and Reliability Branch (ESRB)
Safety and Enforcement Division (SED)
505 Van Ness Avenue
San Francisco, CA 94102

Transmitted Via Email: GO167@cpuc.ca.gov

RE: Comments - SB 1383 ESS Operation and Maintenance Standards

The California Energy Storage Alliance (“CESA”) appreciates the opportunity to provide comments on the revisions to General Order (“GO”) 167-B to implement the requirement enacted by SB 1383 (Chapters 725, 2022) to include energy storage systems in GO 167-B operation and maintenance standards.

CESA is a 501(c)6 membership-based organization committed to advancing the role of energy storage in the electric power sector. We strive to advance a more affordable, efficient, reliable, safe, and sustainable electric power system for all Californians. Our membership includes technology manufacturers, project developers, systems integrators, electrical contractors, software developers, professional services firms, and other clean tech industry leaders.

CESA supports implementation of SB 1383 that both ensures the safe and efficient operation of energy storage systems in California with reasonable and consistent requirements for storage owners and operators. To this end, CESA offers the following comments on proposed revisions to GO 167-B.

General Comments

Implementation Timeline

The guiding questions provided by the Electric Safety and Reliability Branch (“ESRB”) request feedback on the appropriate timeframe for implementation. CESA recommends a twelve-month implementation timeline. Operators of Energy Storage Systems (“ESS”) need enough time to implement the proposed standards and new requirements. The proposal has the potential to impact contracts with Remote Operation Centers (“ROCs”) and other contractors and will require training associated with new rules and regulations.

This extended period would allow for more thorough planning, coordination, and implementation of necessary changes while minimizing disruptions to ongoing operations. Owners can use the additional time to develop comprehensive implementation plans, assess resource requirements, and coordinate activities with relevant stakeholders, including manufacturers and subcontractors. Furthermore, site owners will need to update their systems and documentation to ensure compliance, including conducting thorough reviews of equipment specifications, maintenance procedures and contracts, and reporting protocols. Additional time is also needed to conduct the necessary testing, validation, and quality assurance to verify that systems are functioning as intended to meet the new requirements. Lastly, owners will need the

twelve-month implementation timeline to property invest in training programs and capacity-building initiatives to ensure that staff are adequately prepared. A timeline of twelve months would provide site owners with a more realistic timeframe to adapt to the new requirements effectively.

Duplicative Requirements

Several proposed requirements specific to logbook standards and incident reporting standards are duplications of existing practices that either require reporting or are tracked with other methods. For example, the California Office of Emergency Services currently requires specific incident reporting requirements for ESS incidents as proposed to be required in section 9.4.2 of GO 167-B. The majority of the proposed new logbook recording requirements are captured in the system's Supervisory Control and Data Acquisition ("SCADA") systems, making these new proposed standards duplicative. As described below, CESA recommends streamlining and cross-referencing other requirements as appropriate.

Clarify and Consistency

There are several proposed regulations that require clarification and appear focused more on general information gathering than safety and reliability. As described in more detail in the following sections, several terms need clearer definition to ensure consistent interpretation amongst auditors and plant owners and operators.

9.3 Generating Assets and ESS Information

9.3.1 Daily Report to ISO

CESA opposes changing the reporting requirement from a monthly report to a daily report. This would result in a substantial workload increase. We believe this is also duplicative of what is required in logbook standards as well as the requirement of a generating asset ("GA") to submit real time outage tickets with the CAISO for any change in a unit's availability of 1MW or greater.

9.4 Incident Reporting

9.4

CESA opposes the deletion of the "Safety-Related" descriptor from reportable incidents, as reporting under GO 167-B should be focused on safety-related events.

CESA recommends a 72-hour requirement for reporting of incidents instead of a 24-hour requirement as included in the proposal. In the immediate aftermath of an incident, the focus will be on containing the situation, ensuring the safety of first responders, coordinating with critical stakeholders, and mitigating any potential hazards. Depending on the severity and complexity, site personnel may not be able to approach the ESS immediately. Smaller ESS incidents can take several days to identify if they meet the qualifications of a reportable incident. If the incident involves thermal runaway, there is often a need for a cooling period to reduce temperatures to a

safe level before personnel can safely access the site for assessment and investigation. 72 hours is a more appropriate timeframe that will allow for more accurate reporting.

1.a.1 *Reportable Incidents*

CESA recommends the proposal be amended with the following:

- a. Follow the California Occupational Safety and Health (“Cal-OSHA”) standards for reporting employee/contractor accidents or injuries. Assigning causation in cases of personal injury or illness can be complex. CESA recommends following existing state standards.
- c. Include a higher threshold for the reporting of “damage.” The proposed \$200,000 threshold is extremely low for these types of facilities. CESA recommends a threshold of \$1,000,000 and eliminating the cost calculation clauses. Furthermore, it is not sufficiently clear whether the reporting trigger should factor in both the property damage itself, as well as the estimated cost to repair. For example, it's possible that \$100,000 worth of property damage could occur, but the cost to repair, including labor, could well exceed \$200,000. In that sense, it's not clear whether a GA or ESS operator should report based off that \$100,000 property damage cost or the \$200,000 cost to repair. We recommend that the cost calculation clauses, including labor, be removed. This information is already required in the 20-day report and is therefore redundant. CESA also recommends that ESRB establish a clear and comprehensive framework for defining “damage” so there is consistency with auditing and compliance measures. Damage should be assessed based on criteria that results in physical or structural damage such as cracks, fractures, or leaks, functional impairment that compromises the operational capacity of the GA or ESS, or damage that poses risks to human health and safety.
- d. Delete the proposal to lower the threshold for reporting of negative media attention to outlets servicing populations of 25,000. CESA recommends both maintaining the existing threshold of 50,000 and clarifying that the information reported is tied to a safety-related event. We also recommend that the information reported is limited to professional news media.
- e. Add a threshold for incident reporting related to fires or thermal runaway. With millions of battery cells online, any single cell going into a thermal runaway could trigger three of these identified clauses – fires, thermal runaway or explosions. Adding a requirement for reporting of each individual incident would create a significant amount of reporting with questionable value.

9.4.2 *Initial Report*

CESA recommends that the proposal allow for storage owners and operators to submit the California Office of Emergency Services incident report in lieu of the Initial Report as proposed by 9.4.2, to both eliminate duplicative reporting requirements and create consistency with data sharing.

9.4.3 *20-Day Report*

CESA questions the need for a root cause analysis (“RCA”) for every incident. Conducting an RCA for a small cell or unit failure is disproportional to the event's severity and

the cost of the RCA. CESA recommends including a clear threshold to trigger an RCA. Furthermore, CESA recommends that “evidence” collected by the GA or ESS be more clearly defined. Incidents can vary widely in their nature, scope, and complexity. As a result, the types of evidence relevant to each incident may differ significantly. A standardized definition of evidence will help ensure that owners collect and provide pertinent information and help streamline the collection process.

14. Miscellaneous Provisions

Confidentiality Requirements of Section 14.4.3

CESA opposes the proposed requirement in Subsection 14.4.3.2 to identify the time period in which information is confidential. If an owner specifies that the information is confidential, the confidentiality of this data will not decline over time. This section should either be stricken entirely or limited to the discretion of the owner.

CESA recommends striking Subsection 14.4.3.7. This subsection would require owners to explain in detail how information is kept confidential and may in turn require the disclosure of information that may be confidential.

Appendix A: Generating Assets and ESS Logbook Standards

Several of the new logbook standards are overly burdensome and will not generally result in better outcomes. The information that would be required by these standards is not inherently germane to safety, and we question the need for much of this data to be accessible to regulators. Additional detail is needed to specify how these requirements apply to ROCs that are managing large, diverse fleets of renewable energy assets which include: ESS, Photo Voltaic (“PV”) sites, PV+ESS, and Wind.

A-2 – General comments

For ROCs operating a fleet of assets the terms “Facility” and “Unit” do not make sense in the context in which they are used in Appendix A. CESA suggests using “Fleet” instead of facility and using the term “Site” in lieu of unit.

A-2 (1.)

- a. CESA questions the need for ROCs to provide Facility Status. CESA suggests that this requirement to be an exception, much like the Equipment Log and Work Authorization log where a separate daily report can be produced with all of the required information in lieu of a logbook entry.
- b. Weather Information – CESA recommends deleting this requirement as telemetry data, which includes the relevant weather information from a weather station is already being continuously being fed to the system and CAISO.
- c. CESA recommends deleting “dispatch instructions” from the status report as any verbal dispatch instructions requested of the control room are already logged in a logbook in per NERC per Com-002 requirements.

A-3 (3.)

CESA recommends deleting the requirement to log the status of any environmental constraints as this as the information is covered in Items 1 and 5.

A-5 (1.)

CESA recommends eliminating this requirement. Logging changes due to any changes in facility output does not make sense for renewables whose output changes constantly with weather conditions (irradiance, wind, rain, etc.).

A-5 (2.)

CESA recommends clarifying the proposal to more clearly define the threshold for what equipment and conditions warrant documenting for the starting and stopping of equipment.

A-6 (9. &10.)

These sections place an undue burden on operators to log hundreds or possibly thousands of data points to little practical purpose, including State of Charge, State of Health and Ambient temperature. Appendix A notes that each item should be logged at the start of an Operator shift, but much of this information can be retrieved easily from plant data records and has little value to log manually in addition to the digital tracking. CESA recommends including an exemption from these sections for ESS systems that record this data through their SCADA function. Furthermore, this places a specific burden on ESS that is not being imposed on a Generating Assets, as section 9 is specific to ESS.

A-6 (17.)

The term “roundtrip efficiencies” (RTE) needs further definition. CESA recommends defining RTE as “AC-AC including auxiliary load losses.”

A-6 (18.)

CESA recommends defining “environmentally sensitive equipment” as this is not an industry term.

A-8 (1.)

More clarity is needed around the definition of “equipment”. Where is the line drawn when it comes to what equipment needs to be logged as Out of Service (OSS). For example, on a PV site there are hundreds of thousands of panels, do these need to be reported when they are OOS?

Appendix C: Maintenance Standards for Generating Assets and ESS Owners

MS-4

CESA questions the proposed requirement to apply emerging technologies for the safety and reliability of both the GA and ESS. CESA notes that energy storage technologies are

evolving rapidly and that there may not be consensus about what types of emerging technologies are applicable, appropriate, and proven for a specific application. There should be more specificity and guardrails around what types of technologies warrant this type of standard (e.g. Emerging ESS technologies), and under what set of circumstances an ESS would be required to incorporate new technologies.

MS-13 Equipment Performance and Material Condition

CESA recommends updating this section to include corrosion as an issue that is to be considered when developing strategies and/or methods to anticipate, prevent, identify, and resolve equipment issues.

Appendix D: Operation Standards for Generating Assets and ESS Owners

D-4 (d-e)

CESA supports the inclusion of SB 38 (Chapters 377, 2023) required Emergency Response and Action plans into Operating standards.

D-9 (27.) – Flow Assisted Corrosion

CESA recommends entitling this section “Corrosion Control” and simplifying the language to state: “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.

CESA appreciates the opportunity to provide these comments and looks forward to continued work with the CPUC on this critical issue.

Sincerely,

Rachel McMahon

Rachel McMahon
VP, Policy
California Energy Storage Alliance