

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



June 13, 2024

Enrique Murillo
Operations and Maintenance Manager
Slate Solar
98 San Jacinto Blvd, Ste 750
Austin, TX 78701

SUBJECT: Generation Audit of Slate Solar- Audit Number GA2024-05SS

Dear Mr. Murillo:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Stephen Lee, Evan Coughran, and Christopher Vilalobos of ESRB staff conducted a generation audit of Slate Solar from April 15 through April 18, 2024.

During the audit, ESRB observed plant operations, inspected equipment, reviewed data, interviewed plant staff, and identified potential violations of General Order (GO) 167-B. A copy of the audit findings itemizing the violations is attached. Please advise me by email no later than July 12, 2024 by providing an electronic copy of all corrective actions and preventive measures taken and/or planned to be taken to resolve the violations.

Your response should include a Corrective Action Plan with a description and completion date of each action and measure completed. For any violations not corrected, please provide the projected completion dates to correct the violations and to achieve full compliance with GO 167-B.

Please submit your response to Stephen Lee at Stephen.Lee@cpuc.ca.gov. Please note that although Slate Solar has been given 30 days to respond, it has a continuing obligation to comply with all applicable GO 167-B requirements; therefore, the response period does not alter this continuing duty.

The CPUC intends to publish the audit report of Slate Solar on the CPUC website. If you wish to make a claim of confidentiality covering any of the information in the report, you may submit a confidentiality request pursuant to Section 15.4 of GO 167-B, using the heading "General Order 167-B Confidentiality Claim" along with such redactions. Per GO 167-B Rule 15.4, the confidentiality claim should be for specific items and provide its corresponding justification, as opposed to a blanket confidentiality claim on the entire audit report. The request and redacted version of the audit report should be sent to Stephen Lee with a copy to me and the GO 167 inbox GO167@cpuc.ca.gov by July 12, 2024.

Please note that ESRB will also post Slate Solar's audit report response on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you provide us with a redacted version of your audit response that can be posted on the CPUC website.

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Thank you for your courtesy and cooperation throughout the audit process. If you have any questions concerning this audit, please contact Stephen Lee at Stephen.Lee@cpuc.ca.gov or (916) 661-2353.

Sincerely,

A handwritten signature in blue ink that reads "Banu Acimis".

Banu Acimis, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Attachment: CPUC Generation Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Rickey Tse, Program and Project Supervisor, ESRB, SED, CPUC
Stephen Lee, Senior Utilities Engineer (Specialist), ESRB, SED, CPUC
Evan Coughran, Utilities Engineer, ESRB, SED, CPUC
Christopher Vilalobos, Utilities Engineer, ESRB, SED, CPUC

**CPUC AUDIT FINDINGS OF
SLATE SOLAR
APRIL 15 – APRIL 18, 2024**

I. Findings Requiring Corrective Action

Finding 1: The Plant is not inspecting its portable fire extinguishers.

General Order (GO) 167-B, Appendix D, Maintenance Standard (MS) 1: Safety states:

“The protection of life and limb for the work force is paramount. The company behavior ensures that individuals at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment, and the policies and procedures foster such a safety culture, and the attitudes and behaviors of individuals are consistent with the policies and procedures.”

GO 167-B, Appendix D, MS 9: Conduct of Maintenance states:

“Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable plant operation.”

GO 167-B, Appendix E, Operation Standard (OS) 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 8: Plant Status and Configuration states:

“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

GO 167-B Appendix E, OS 13: Routine Inspections states in part:

“Routine inspections by plant personnel ensure that all areas and critical parameters of plant operations are continually monitored, equipment is operating normally, and that routine maintenance is being performed.”

National Fire Protection Agency (NFPA) 10 (2022), Section 7.2.1.2.1 states:

“Fire extinguishers and Class D extinguishing agents shall be inspected at least once per calendar month.”

NFPA 10 (2022), Section 7.3.2.1, Physical Condition states:

“An annual external visual examination of all fire extinguishers shall be made to detect obvious physical damage, corrosion, or nozzle blockage to verify that the operating instructions are present, legible, and facing forward, and that the HMIS

information is present and legible, and to determine if a 6-year interval examination or hydrostatic test is due.”

Slate Solar (the Plant) is not inspecting its portable fire extinguishers. These extinguishers are in the Operations and Maintenance (O&M) trailer, in the substation control room, near the Battery Energy Storage System (BESS) inverters, and near transformers. Additionally, the last time the Plant or a Fire Marshal performed annual maintenance on the fire extinguishers was in October 2021. Annual maintenance and monthly inspections are required for fire extinguishers to ensure they are in proper working condition in the event of a fire.

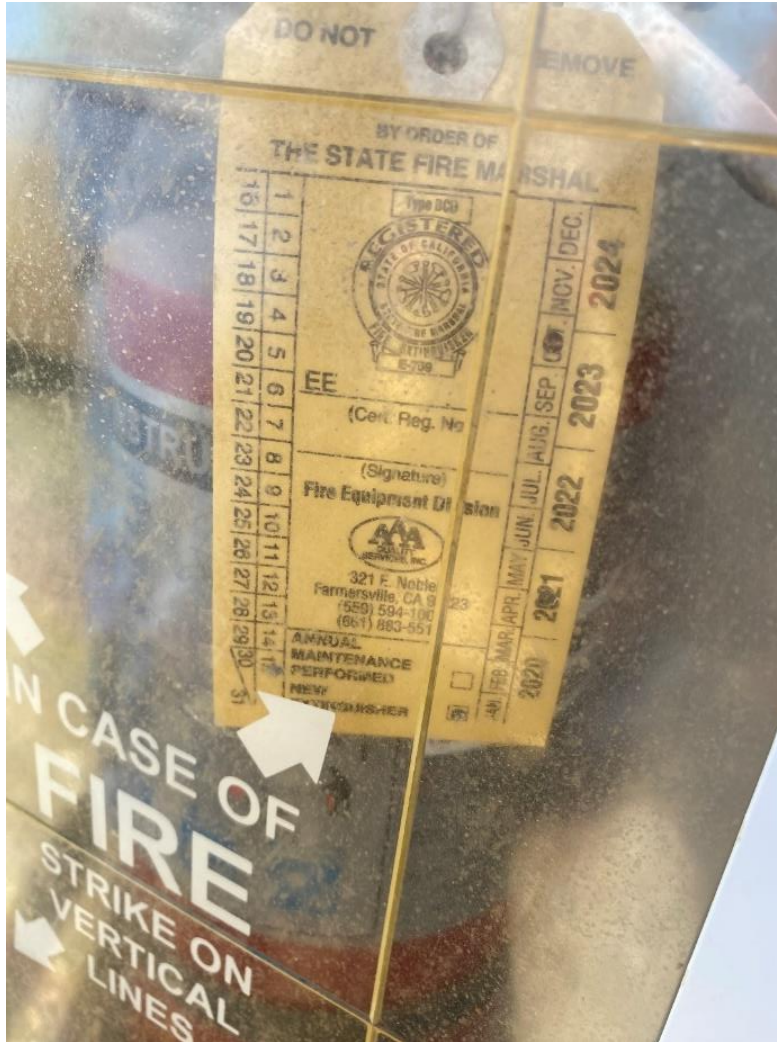


Figure 1: The fire extinguisher was last certified on October 15, 2021.

Furthermore, the fire extinguishers that are stationed near the Plant’s equipment are contained in protective boxes which are covered by a glass window. The glass window instructs personnel to “strike on vertical lines” in case of a fire, but there are no readily available tools or equipment that workers can use to strike the glass and access the fire extinguishers. The Plant must develop a solution that can allow personnel to access the fire extinguishers readily and safely in the event of a fire.



Figure 2: The fire extinguisher enclosure near one of the BESS inverters lacks a way to safely break the glass open.

Finding 2: The Plant requires improvements to its monthly facility inspections.

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority.”

GO 167-B, Appendix D, MS 9: Conduct of Maintenance states:

“Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable plant operation.”

GO 167-B, Appendix E, OS 13: Routine Inspection states in part:

“Routine inspections by plant personnel ensure that all areas and critical parameters of plant operations are continually monitored, equipment is operating normally, and that routine maintenance is being performed. Results of data collection and monitoring of parameters during routine inspections are utilized to identify and resolve problems, to improve plant operations, and to identify the need for maintenance. All personnel are trained in the routine inspections procedures relevant to their responsibilities. Among other things, the GAO creates, maintains, and implements routine inspections by:

B. Establishing procedures for routine inspections that define critical parameters of these systems, describe how those parameters are monitored, and delineate what action is taken when parameters meet alert or action levels.”

ESRB identified expired eyewash in the substation control room and an expired first aid kit in the O&M trailer. Additionally, the Plant was not inspecting the automated external defibrillator (AED). The Plant must add the eyewash station, first aid kits, and AED to its monthly facility inspection list, in addition to conducting monthly fire extinguisher inspections described in the Finding above.



Figure 3: The eyewash bottle expired in May 2022.



Figure 4: The First aid kit in the O&M trailer expired on December 25, 2022.

Finding 3: The Plant requires improvements to its storage practices of flammable and hazardous chemicals.

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 4: Problem Resolution and Continuing Improvement states:

“The GAO values and fosters an environment of continuous improvement and timely and effective problem resolution.”

The Plant currently stores its flammable chemicals on an open shelf in one of the Plant Staff’s offices. According to the Safety Data Sheet (SDS) for some of these chemicals, such as “Startex IPA 70/30”, the flammability rating of the chemicals is as high as a severity rating 3 out of 4. The Plant must store these flammable chemicals in a flammable storage container/cabinet to prevent the risk of uncontained combustion. Additionally, an NFPA diamond on or near the flammable storage area is required.

Furthermore, Section 6.12 of the Plant’s California Health and Safety Plan does not provide any guidance on hazardous chemical storage required by Cal/OSHA Article 109, §5164 Storage of Hazardous Substances. The Plant must improve the section in its Health and Safety Plan to include guidance on hazardous chemical storage. Or, if the Plant already has an existing hazardous chemical storage procedure, it must provide a copy of this procedure.

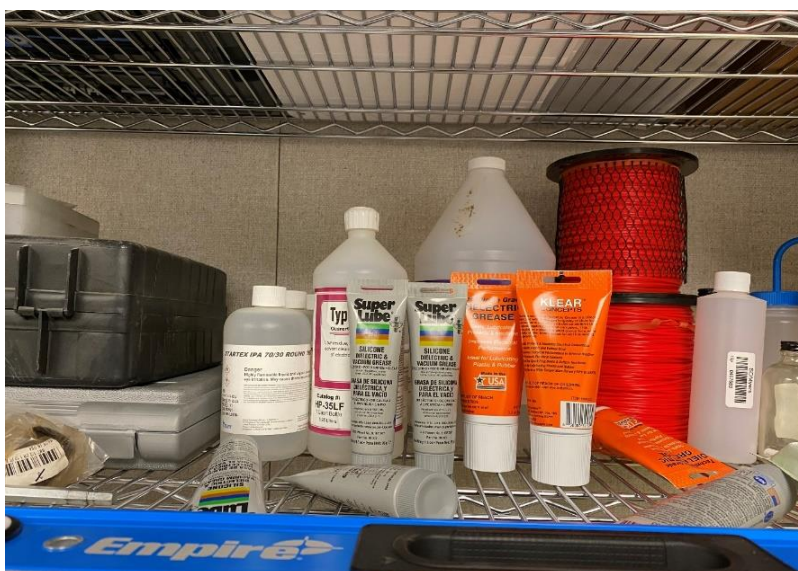


Figure 5: Flammable chemicals are openly stored on a shelf in an office.

Finding 4: The Plant must address issues identified in its substation.

GO 167-B, Appendix D, MS 9: Conduct of Maintenance states:

“Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable plant operation.”

GO 167-B, Appendix D, MS 11: Plant Status and Configuration states:

“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

GO 167-B, Appendix E, OS 8: Plant Status and Configuration states:

“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

During the audit, ESRB inspected the Plant’s substation and identified the following conditions that require remediation:

1. The SF6 pressure for the center phase on the high voltage breaker 52U1 is low.

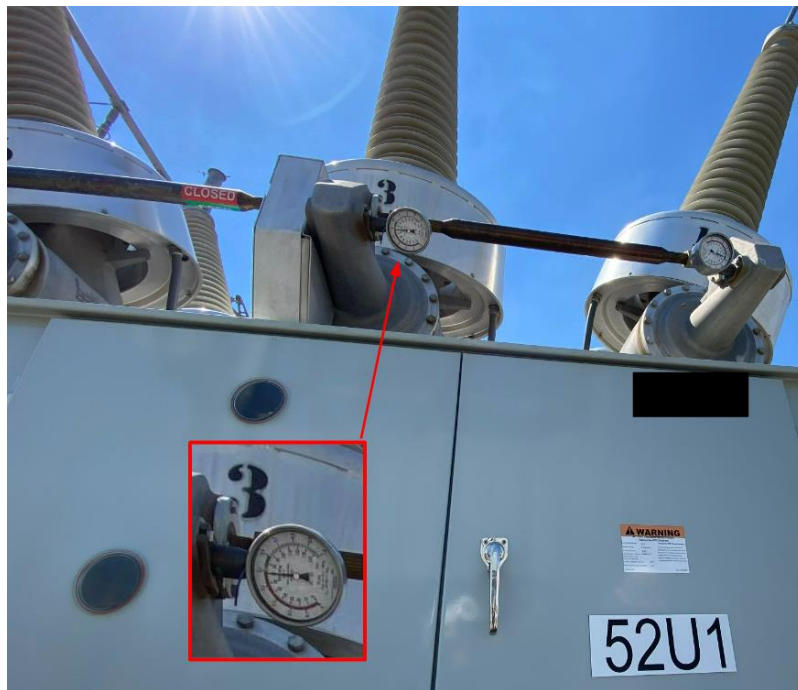


Figure 6: Low SF6 pressure.

2. The Plant must consider locking its manual disconnect switch crank handles as a best practice. Locking these disconnect handles prevents tampering with equipment. Additionally, it serves as an additional safety precaution for workers to verify they are at the correct switch during switching operations. In ESRB’s experience, electric utilities, such as PG&E, lock their disconnect switches as best practice. This practice is also seen on one of PG&E’s disconnect switches in the same substation yard.



Figure 7: Two examples of unlocked disconnect switch cranks.



Figure 8: PG&E's disconnect switch is locked in the same substation yard.

3. According to Section 2.6 – Spill Response Equipment in the Plant’s Emergency Response Plan, each spill kit contains a pair of goggles. The spill kit in the substation control room did not have goggles. Goggles or eye protection is necessary in the substation control room when refilling the liquid solution in the lead-acid batteries.



Figure 9: The spill kit in the substation control room is missing goggles.

4. Within the perimeter of the substation, there are several bird nests, both active and inactive, near the fans on the transformer. Items like a bird nest near equipment used for cooling can affect the operation and efficiency of the equipment. The Plant should address each bird nest as deemed appropriate by the staff based on the status of the bird nest. Bird nests are hazardous, as they introduce debris that has the possibility of being flammable or conductive to the switchyard. Additionally, active bird nests result in the other risks associated with birds flying near high-voltage equipment which can result in bridging between phase-to-ground or phase-to-phase caused by the wingspan of the bird when flying. The possible effects of bridging due to animal presence can range from brief occurrences to extensive power interruptions.



Figure 10: Bird Nest under Transformer Radiator Fins

Finding 5: The Plant must perform infrared inspections of its substation equipment.

GO 167-B, Appendix D, MS 4: Problem Resolution and Continuing Improvement states:

“The company values and fosters an environment of continuous improvement and timely and effective problem resolution.”

GO 167-B, Appendix D, MS 11: Plant Status and Configuration states:

“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

ESRB did not find evidence that the Plant is performing infrared inspections on its substation equipment. Annual infrared inspections on substation equipment are essential to help identify issues such as hot spots, loose or improper connections, and other thermal abnormalities. The Plant must schedule a preventative task in its work management system to perform annual infrared inspections.

Finding 6: The Plant is not addressing recommendations and corrective actions from its reports.

GO 167-B, Appendix D, MS 4: Problem Resolution and Continuing Improvement states:

“The company values and fosters an environment of continuous improvement and timely and effective problem resolution.”

GO 167-B, Appendix D, MS 11: Plant Status and Configuration states:

“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

GO 167-B, Appendix E, OS 4: Problem Resolution and Continuing Improvement states:

“The GAO values and fosters an environment of continuous improvement and timely and effective problem resolution.”

On December 20, 2023, the Plant had an internal Health, Safety, and Environment (HSE) audit that identified many of the same findings that ESRB identified. For example, the HSE audit notes that copies of the Health and Safety Plan and Emergency Response Plan are not available on site, the fire extinguishers are out of date, and Job Safety Analysis are not being filled out properly. About four months later, during ESRB’s audit, none of these findings from the HSE audit were corrected.

Additionally, ESRB reviewed the Plant’s substation generator step-up transformer oil analysis test results for November 2022 and December 2023. Some test results recommended to retest the oil in six months due to identifying high moisture content and some results identified the need to retest the oil in three months due to identifying high dissolved gases. ESRB did not find evidence that the Plant conducted these follow up retests.

Moving forward, the Plant must promptly evaluate all findings and recommendations from internal and external audits, test records, and other reports that can affect the safety, operations, and maintenance of the Plant.

Finding 7: The Plant’s Spill Prevention, Control, and Countermeasure (SPCC) Plan requires updates.

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 4: Problem Resolution and Continuing Improvement states:

“The GAO values and fosters an environment of continuous improvement and timely and effective problem resolution.”

GO 167-B, Appendix E, OS 7: Operation Procedures and Documentation states in part:

“Procedures are current to the actual methods being employed to accomplish the task.”

The current SPCC plan states there are several double-walled tanks containing thousands of gallons of diesel and gasoline fuel storage on site. During the audit, the Plant indicated there is no longer fuel stored on site and suspected the fuel was originally used during the construction of the Plant. Section 1.2.1 in the SPCC provides instructions for reviewing and amending the SPCC. Moving forward, the Plant must follow these instructions and update its SPCC when applicable.

Additionally, within the contents of the SPCC, monthly inspections should be completed and maintained for three years. At the time of ESRB's Audit, there was no evidence the monthly inspections have been completed. The personnel conducting such inspections need SPCC training (see Finding 18). The Plant must provide the proper training and conduct inspections in accordance with its SPCC.

Finding 8: The CPUC must be added to the list of Government Agencies requiring notification following an applicable incident.

GO 167-B, Section 10.4, Safety-related Incidents states:

“Within 24 hours of its occurrence, a Generating Asset Owner shall report to the Commission's emergency reporting web site any safety-related incident involving a Generating Asset. If internet access is unavailable, the Generating Asset Owner 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 hospitalization; a report to Cal/OSHA, OSHA, or other regulatory agency; or damage to the property of the Generating Asset Owner or another person of more than \$50,000. The Generating Asset Owner shall also report any other incident involving a Generating Asset 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 Generating Asset Owner has actual knowledge of the media coverage. 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.”

The Plant's current Emergency Response Plan includes a list of Government Agencies to contact to report an incident, but the CPUC is not on that list. The CPUC must be added to the list of emergency contacts for incidents that meet the incident reporting criteria in GO 167-B, Section 10.4. Additional information can be found on the CPUC's Emergency Reporting website¹.

¹ <https://www.cpuc.ca.gov/regulatory-services/safety/emergency-reporting>

Finding 9: The Plant is missing safety information in the substation E-House and on its Safety Bulletin Board.

GO 167-B, Appendix E, OS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site.”

GO 167-B, Appendix E, OS 12: Operations Conduct states in part:

“The GAO takes responsibility for personnel actions, assigns personnel to tasks for which they are trained, and requires personnel to follow plant and operation procedures and instructions while taking responsibility for safety. Among other things:

- A. All personnel follow approved policies and procedures. Procedures are current, and include a course of action to be employed when an adopted procedure is found to be deficient.”*

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. The company behavior ensures that individuals at all levels of the organization consider safety as the overriding priority.”

Section 2 in the Plant’s California Health and Safety Plan requires a copy of the plan and contractor safety manuals to be posted in the substation E-House. Furthermore, Section 5.6 in the same document includes a list of materials that need to be posted on its safety bulletin board, such as emergency phone numbers, safety and health protections, whistleblower protections, labor information, etc. Lastly, Section 11.5 requires a site emergency evacuation map to be posted in the safety bulletin or in the E-House. ESRB did not find any of these documents posted on the safety bulletin or in the substation E-House.

During the audit, the Plant immediately printed and posted a list of emergency phone numbers, emergency evacuation maps, maps to the nearest hospital, and the prior year’s OSHA 300 log. The Plant must review its Health and Safety Plan to ensure all required documents and materials are posted in their respective areas.

Finding 10: The Plant requires improved safety signage.

GO 167-B, Appendix E, OS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site.”

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. The company behavior ensures that individuals at all levels of the organization consider safety as the overriding priority.”

GO 167-B, Appendix D, MS 4: Problem Resolution and Continuing Improvement states:
“The company values and fosters an environment of continuous improvement and timely and effective problem resolution.”

GO 167-B, Appendix D, MS 11: Plant Status and Configuration states:
“Station activities are effectively managed so plant status and configuration are maintained to support safe, reliable and efficient operation.”

The entry gate into the facility requires additional safety signage. At a minimum, the Plant must have signs listing all prohibited items (i.e., no weapons, drugs, alcohol, etc.), an NFPA hazard diamond listing the highest hazard category for the chemicals on site, and a vehicle speed limit sign near the entry gate. ESRB acknowledges that all this information is disclosed during the site orientation, but having this information presented at the front gate immediately informs visitors, employees, contractors of the facility’s safety expectations and on-site hazards.

Additionally, there is an emergency contact sign that is currently posted on the swinging entry gate into the Plant’s facility. Because the gate swings open and becomes parallel to the entry road, the sign becomes out of sight and is easy to overlook. The Plant must consider placing signage on a stationary part of the perimeter fence near the entry gate, so the information is always readable to visitors and personnel.



Figure 11: The current emergency contact sign is difficult to see upon entry.

Finding 11: Work vehicles are not adequately equipped with safety and emergency equipment.

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority.”

GO 167-B, Appendix E, OS 1: Safety states:

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ESRB inspected one of the Plant’s work vehicles and found that the vehicle was not equipped with a fire extinguisher and a spill kit. According to Section 2.6 of the Plant’s Emergency Response Plan and Plant’s Spill Response Plan, Document Number BMWI-023-005, field technicians must always carry spill kits in their vehicles. The Plant indicated it also keeps fire portable fire extinguishers in its work vehicles, but the extinguishers were recently used to fight a small fire and have not been replaced since then. The Plant must ensure all its work vehicles are always equipped with proper safety equipment.

Finding 12: The Plant must improve its Lock Out Tag Out (LOTO) documentation and review.

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority.”

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a

safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 3: Operations Management and Leadership states:

“Operations management establishes high standards of performance and aligns the operations organization to effectively implement and control operations activities.”

According to the Plant’s LOTO procedure, audits of the written LOTOs are required. ESRB did not find evidence these audits were being performed. Additionally, the procedure requires a LOTO log. These logs were not being maintained prior to April 2024. Moving forward, the Plant must maintain proper accounts for each of its issued LOTOs by keeping the LOTO log up to date. Additionally, the Plant must perform audits of the LOTOs to ensure personnel are issuing and performing LOTO in accordance with the LOTO procedures.

Finding 13: The Plant is not following its Job Hazard Analysis / Job Safety Analysis procedures.

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority.”

GO 167-B, Appendix D, MS 3: Maintenance Management and Leadership states:

“Maintenance managers establish high standards of performance and align the maintenance organization to effectively implement and control maintenance activities.”

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 3: Operations Management and Leadership states:

“Operations management establishes high standards of performance and aligns the operations organization to effectively implement and control operations activities.”

The Plant is not following proper Job Hazard Analysis (JHA) and/or Job Safety Analysis (JSA) per its Health and Safety Plan. JHA/JSA requires all hazards to be systematically identified and assessed for all jobs that expose workers, contractors, and subcontractors to hazards. ESRB identified that the Plant conducted an inverter isolation on Inverter 94 on April 13, 2024, but there was no associated JHA/JSA for the work even though this work exposes workers to high voltage electrical hazards. For all applicable jobs, the Plant must follow the guidance in its Health and Safety Plan to identify all hazards and risks and ensure the safety of its workers and other personnel.

Finding 14: The Plant must improve the organization of its Safety Data Sheet binder.

GO 167-B, Appendix D, MS 1: Safety states in part:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority.”

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

The Plant’s SDS binder is currently unorganized. During the audit, ESRB reviewed the chemicals on site to verify there were corresponding SDS for the chemicals, but navigating through the binder was difficult. In the event of an emergency, such as a spill or exposure to a chemical, the disorganization of the SDS makes it difficult to quickly find information. Adding tabs to separate each different chemical or organizing the chemicals in alphabetical order will improve the organization of the binder and make it easier for personnel to readily access information about specific chemicals in the event of an emergency.

Finding 15: The Plant requires improved tracking of its inventory.

GO 167-B, Appendix D, MS 12: Spare Parts, Material and Services states:

“Correct parts and materials in good condition, are available for maintenance activities to support both forced and planned outages. Procurement of services and materials for outages are performed in time to ensure materials will be available without impact to the schedule. Storage of parts and materials support maintaining quality and shelf life of parts and materials.”

ESRB did not identify that the Plant is tracking the inventory of its spare solar modules. ESRB observed that spare modules are stored in the storage containers, but the quantity of these modules was not on the list of spare parts provided in the pre-audit data request. Knowing the quantity of available spare solar modules on site is essential for maintaining the availability of the site by minimizing downtime due to procurement delays.

Finding 16: The Plant requires improved physical security of its assets.

GO 167-B, Appendix E, OS 21: Plant Security states:

“To ensure safe and continued operations, each GAO provides a prudent level of security for the plant, its personnel, operating information and communications, stepping up security measures when necessary.”

The Plant does not lock its inventory storage containers. The storage containers contain equipment that is essential for maintaining the reliable operations of the Plant, so it is necessary for this equipment to be kept safe from potential theft. During the audit, the Plant immediately installed high-security locks on all its storage containers.

Finding 17: The Plant is not performing emergency training drills.

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

GO 167-B, Appendix E, OS 4: Problem Resolution and Continuing Improvement states:

“The GAO values and fosters an environment of continuous improvement and timely and effective problem resolution.”

GO 167-B, Appendix E, OS 6: Training Support states:

“A systematic approach to training is used to achieve, improve, and maintain a high level of personnel knowledge, skill, and performance. Each GAO provides a site-specific training program including on-the-job training, covering operations, including reasonably anticipated abnormal and emergency operations. Personnel are trained commensurate with their duties.”

GO 167-B, Appendix E, OS 20: Preparedness for On-Site and Off-Site Emergencies states:

“The GAO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect plant personnel and the

public, and secondarily to minimize damage to maintain the reliability and availability of the plant. Among other things, the GAO:

- A. Plans for the continuity of management and communications during emergencies, both within and outside the plant,*
- B. Trains personnel in the emergency plan periodically, and*
- C. Ensures provision of emergency information and materials to personnel.”*

During the audit, ESRB discovered that the Plant has experienced fires, a medical emergency event, and was a victim of larceny. Despite these events, the Plant has not conducted any follow up emergency drills. Fortunately, the Plant’s personnel were properly trained and appropriately responded to the situation during these events. Although the Plant’s California Health and Safety Plan states that routine Emergency Action Plan drills are only conducted as deemed necessary, the Plant must consider conducting routine emergency drills to ensure its personnel remain trained to respond to unpredictable emergencies or events that may occur at the facility.

Finding 18: Plant personnel are not receiving the required training.

GO 167-B, Appendix E, OS 1: Safety states:

“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures.”

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GO 167-B, Appendix E, OS 6: Training Support states:

“A systematic approach to training is used to achieve, improve, and maintain a high level of personnel knowledge, skill, and performance. Each GAO provides a site-specific training program including on-the-job training, covering operations, including reasonably anticipated abnormal and emergency operations. Personnel are trained commensurate with their duties.”

The Plant is not training its personnel per the Plant’s procedures. For example, the Plant’s Health and Safety Plan indicates there is an annual hearing conservation training and the Plant’s Emergency Response Plan indicates there is an annual refresher training. Additionally, Sections 4.2 in the SPCC and Section 2.3 in the Spill Contingency Plan require a spill-related training program, but ESRB did not find evidence this training existed. Lastly, the Plant requires initial training courses for new hires, such as Electrical Safety Training, Lockout Tagout Training, and

Hazard Awareness Training. ESRB identified that two Field Technicians had not received any of the required training courses prior to the audit. Following the audit, the Plant provided evidence that it trained its two Field Technicians with the required courses in early May 2024.

Also following the audit, the Plant shared its comprehensive training plan list to address the gap in its training program and ensure all employees receive the proper training. ESRB acknowledges this plan as a valid corrective action but notes that spill-related training is missing from this plan and must be added.

Finding 19: The torque wrench needs calibration.

GO 167-B, Appendix E, OS 10: Operations Facilities, Tools and Equipment states:

“Facilities and equipment are adequate to effectively support operations activities.”

The calibration certification for the Plant’s torque wrench has expired. The torque wrench must be recalibrated before it can be used to perform any work.

II. List of Documents Reviewed

Category	Reference #	CPUC-Requested Documents
Safety	1	Orientation Program for Visitors and Contractors
	2	Evacuation Procedure
	3	Evacuation Map and Plant Layout
	4	Evacuation Drill Report & Critique (last 3 years)
	5	Hazmat Handling Procedure
	6	SDS for All Hazardous Chemicals
	7	Injury & Illness Prevention Plan (IIPP)
	8	OSHA Form 300 (Injury Log)
	9	OSHA Form 301 (Incident Report)
	10	List of all CPUC Reportable Incidents
	11	Root Cause Analysis of all Reportable Incidents (if any)
	12	Fire Protection System Inspection Record (last 3 years)
	13	Insurance Report / Loss Prevention / Risk Survey (last 3 years)
	14	Lockout / Tagout Procedure
	15	Arc flash Analysis
	16	Confined Space Entry Procedure
	17	Plant Physical Security and Cyber Security Procedures and Records
Training	18	Safety Training Records
	19	Skill-related Training Records
	20	Certifications for Welders, Forklift & Crane Operators
	21	Hazmat Training and Record
Contractor	22	Latest list of Qualified Contractors
	23	Contractor Selection / Qualification Procedure

	24	Contractor Certification Records
	25	Contractor Safety Program Procedure and Training Records
Regulatory	26	Water Permit (if applicable)
	27	Air Permit (if applicable)
	28	Spill Prevention Control Plan (SPCC) (if applicable)
	29	CalARP Risk Management Plan (RMP)
O&M	30	Daily Round Sheets / Checklists
	31	Logbook
	32	List of Open/Backlogged Work Orders
	33	List of Closed/Retired Work Orders
O&M	34	Work Order Management Procedure
	35	Computerized Maintenance Management System (Demonstration On-site)
	36	All Root Cause Analyses (if any)
	37	Maintenance & Inspection Procedures, or Related Documents
	38	SCADA system (Demonstration On-site)
	39	Maintenance and Inspection Records for Solar Inverters
	40	Maintenance and Inspection Records for Solar Trackers
	41	Maintenance and Inspection Records for Solar Arrays/Collectors/Solar Field
	42	Maintenance and Inspection Records for Mounting System
	43	Maintenance and Inspection Records for Switchgear/breaker/relays
	44	Maintenance and Inspection Records for Electrical System
	45	Maintenance and Inspection Records for Main Transformer(s)
	46	Maintenance and Inspection Records for Switchyard & Transmission Equipment
	47	Maintenance and Inspection Records for other equipment

	48	Maintenance and Inspection Records for other equipment
Documents	49	P&IDs
	50	Vendor Manuals
	51	Solar Farm Equipment Design Data
	52	Procedure Compliance Policy
Spare Parts	53	Spare Parts Inventory List
	54	Shelf-life Assessment Report
Management	55	Organizational Chart
Instrumentation	56	Instrument Calibration Procedures and Records
Test Equipment	57	Measuring & Testing Equipment List
	58	Test Equipment Calibration Procedures and Records
Internal Audit	59	Internal Audit Procedures and all Records