STATE OF CALIFORNIA GAVIN C. NEWSOM, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

May 6, 2025

Justin Lehrer Senior Director, Renewable Energy Asset Operations CIM Group Los Angeles, CA 90010

SUBJECT: Generation Audit of Westland Solar Park facilities: Westland Solar Blue and Castanea Project, Audit Number GA2025-03WC

Dear Mr. Lehrer:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Christopher Villalobos, Ryan Hart, Naveed Paydar, and Ian Rawnsley of ESRB staff conducted a generation audit of Westland Solar Park facilities: Westland Solar Blue and Castanea Project, from February 10 through February 13, 2025.

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 June 3, 2025, 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-C.

Please submit your response to Christopher Villalobos at <u>Christopher.Villalobos@cpuc.ca.gov</u>. Please note that although Westland, Solar Blue and Castanea Project, have been given 30 days to respond, it has a continuing obligation to comply with all applicable GO 167-C requirements; therefore, the response period does not alter this continuing duty.

The CPUC intends to publish the audit report of Westland Solar Blue and Castanea Project 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 14.4 of GO 167-C, using the heading "General Order 167-C Confidentiality Claim" along with such redactions. The request and redacted version of the audit report should be sent to Christopher Villalobos with a copy to me and the GO 167 inbox GO167@cpuc.ca.gov by June 3, 2025.

Please note that ESRB will also post Westland Solar Blue and Castanea Project'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 Christopher Villalobos at Christopher.Villalobos@cpuc.ca.gov or (916) 268-7732.

Sincerely,

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 Eric Wu, Program Manager, Safety and Enforcement Division, CPUC Stephen Hur, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC Christopher Vilalobos, Utilities Engineer, ESRB, SED, CPUC Ryan Hart, Senior Utilities Engineer (Specialist), ESRB, SED, CPUC Ian Rawnsley, Utilities Engineer, ESRB, SED, CPUC

CPUC AUDIT FINDINGS OF

Westland Solar Park Facilities: Solar Blue & Castanea Project February 10 – February 13, 2025

I. Findings Requiring Corrective Action

Finding 1: Westland Solar Park (Westland) must report safety related incidents to the California Public Utilities Commission (CPUC).

General Order (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."

GO 167-B, Appendix D, Maintenance Standard (MS) 16: Regulatory Requirements states:

"Regulatory compliance is paramount in the operation of the generating asset. Each regulatory event is properly identified, reported and appropriate action taken to prevent recurrence."

Prior to the site visit portion of the audit, Westland Solar Park's (Westland) Solar Blue and Castanea Project, informed the Electric Safety and Reliability Branch (ESRB) of an incident that occurred Solar Blue which met the Safety-Related Incident criteria in General Order 167-B Section 10.4. The incident occurred on October 15, 2024, and was not reported to ESRB until Westland responded to ESRB's Pre-Audit Data Request in January 2025. During the audit process, Solar Blue provided the required information, and ESRB inspectors were able to discuss and review the Root Cause Analysis of the reported incident with Westland.

At the time the incident occurred, and the audit was conducted, GO 167-B was effective and the incident should have been reported according to Section 10.4. With the recent implementation of GO 167-C, Westland must report safety-related incidents that meet the criteria set in GO 167-C

¹ Throughout this audit report, "Westland" refers to both Solar Blue and Castanea Project. References to individual plants will refer to Solar Blue and Castanea Project by name.

Section 9.4, which includes Energy Storage Systems. As part of the corrective actions, Westland must submit to ESRB an approved incident reporting policy for various incidents that may occur at Westland, including reference to the California Public Utilities Commission (CPUC) and ESRB's incident reporting criteria in GO 167-C.

<u>Finding 2: Westland must improve the work management practices and use of the Computerized Maintenance Management System (CMMS).</u>

GO 167-B, Appendix D, MS 2: Organizational Structure and Responsibilities states:

"The organization with responsibility and accountability for establishing and implementing a maintenance strategy to support company objectives for reliable station operation is clearly defined, communicated, understood and is effectively implemented. Reporting relationships, control of resources, and individual authorities support and are clearly defined and commensurate with responsibilities."

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 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) 16: Participation by Operations Personnel in Work Orders states:

"Operations personnel identify potential system and equipment problems and initiate work orders necessary to correct system or equipment problems that may inhibit or prevent plant operations. Operations personnel monitor the progress of work orders affecting operations to ensure timely completion and closeout of the work orders, so that the components and systems are returned to service.

During the audit, ESRB inspectors reviewed Westland's work management practices, which utilize a computer-based maintenance management system, Maximo. During the review, ESRB inspectors observed over 1,397 open maintenance work orders for Solar Blue and 776 open for Castanea Project, resulting in more than 2,000 open work orders across the site. Westland is improving and increasing the use of Maximo, however, several areas for improvement were identified. Addressing the areas below would significantly enhance the management, tracking, and completion of work orders. Enhancing the work management practices and use of Maximo will foster a more reliable, efficient, and safer operational environment, benefiting both Westland and its workforce.

1. Completed work orders are not being closed.

Upon review of open work orders with Westland, Westland stated that some of the work activities had been completed but the associated work orders were not closed out. For

proper tracking of work, work orders must be updated and closed out upon the completion of work.

2. Work order descriptions do not properly identify the task.

Many work order descriptions do not sufficiently communicate the work that must be completed. Instead, the work order description was an asset identifier, stating what equipment required maintenance. For example, if Westland planned routine maintenance for a medium voltage (MV) transformer, the work order description for WO 2104-24-1886 stated "MV.XFR.11.08 MVT - 11.8" rather than a description of the work that must be completed. Work order descriptions must clearly describe the tasks to be completed to enhance tracking and improve communication of work orders to technicians.

3. Work orders are duplicated.

ESRB inspectors discovered multiple work orders that existed for the same task. Pairing duplicated work orders with Items 1 and 2 listed above make it increasingly difficult for Westland to track the work that has been completed, and the work that is still required. For instance, if a duplicated work order has a poor description or not properly closed, it is difficult to ascertain whether the duplicative work order is truly duplicated or was intended for a different task, or intentional recurrence of that task.

Westland must improve its work order management and completion to ensure all assets receive the required maintenance. As a part of Westland's corrective action plan, Westland must create a plan to conduct a thorough internal review of open work orders. The review must focus on closing work orders when the work has been completed, removing duplicated work orders, and updating work order descriptions with a clear description of the task. Additionally, Westland must develop a plan and schedule to address and reduce the extensive backlog of work orders. Westland must established and implement the plan to reduce the number of open work orders prior to summer. The plan must be submitted to ESRB as part of the corrective action plan.

Finding 3: Flame detectors are not adequately inspected, tested or maintained.

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 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 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 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 Association (NFPA) 72 National Fire Alarm and Signaling Code, Chapter 14, Inspection, Testing, and Maintenance, 14.3 Inspection states in part:

14.3.1 Unless otherwise permitted by 14.3.2, visual inspections shall be performed in accordance with the authority having jurisdiction or with the schedules provided in Table 14.3.1, whichever is more frequent.

NFPA 72 National Fire Alarm and Signaling Code, Chapter 14, Inspection, Testing, and Maintenance, 14.4 Testing states in part:

14.4.3 Test Methods

- 14.4.3.2 Systems and associated equipment shall be tested according to Table 14.4.3.2
- 14.4.4 Testing Frequency. Unless otherwise permitted by other sections of this Code, testing shall be performed in accordance with the authority having jurisdiction or with the schedules provided in Table 14.4.3.2, whichever is more frequent.
- 14.4.4.3.1 Sensitivity shall be checked within 1 year after installation
- 14.4.4.3.2 Sensitivity shall be checked every alternate year thereafter unless otherwise permitted by compliance with 14.4.4.3.3

NFPA 72 National Fire Alarm and Signaling Code, Chapter 14, Inspection, Testing, and Maintenance, 14.5 Maintenance states in part:

- 14.5.1 System Equipment shall be maintained in accordance with the manufacturer's published instructions
- 14.5.2 The frequency of maintenance of system equipment shall depend on the type of equipment and the local ambient conditions.
- 14.5.3 The frequency of cleaning system equipment shall depend on the type of equipment and the local ambient conditions.

The Battery Energy storage system (BESS) areas at Solar Blue and Castanea Project are equipped with an array of FL4000H Multi-spectrum Infrared Flame Detector used to detect flames that breeched the BESS containers. The FL4000H detectors were installed in 2023 and had not been maintained since installation. Although ESRB's audit was focused on the solar generating assets, Westland must ensure the BESS's fire detection equipment is adequately

inspected, maintained, and tested due to the systems co-location and affect fire-related incidents would have on Westland. The NFPA and manufacturer's inspection, testing and maintenance guidance described in this report are the minimum acceptable activities required. Westland must verify the frequency of these activities is in accordance with the frequency required by the local authority having jurisdiction. As a part of the corrective action plan submitted to ESRB, Westland must establish an inspection and testing plan and timeline.

Per NFPA 72 14.3 Inspection, initiating devices including detectors require quarterly inspections of the detectors field of view, verifying that no area requiring detection is obstructed or out of view.

Per NFPA 72, 14.4 Testing and the manufacturer maintenance guide, the detectors require routine testing. NPFA 72 Table 14.4.3.2 Item 17 Initiating devices require annual testing. Additionally, NPFA 72 and the manufacturer require sensitivity tests annually. The manufacturer's manual outlines Sensitivity Test instructions.

Per NFPA 72, 14.5 Maintenance, and the manufacturer maintenance guide, the detectors require routine cleaning. Due to the high levels of dust at Westland, the sapphire crystal window and reflector on each detector are required to be cleaned every 30 days, following the manufacturer's suggestion.



Figure 1: Optical Components requiring cleaning



Figure 2: Example of Flame detector at Castanea BESS

Finding 4: Fire Extinguishers in substation buildings are not appropriate for electrical equipment.

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."

NFPA 10, Standard for Portable Fire Extinguishers, Chapter 5 Selection of Portable Fire Extinguishers states in part:

"5.1 General Requirements. The selection of fire extinguishers for a given situation shall be determined by the applicable requirements of Section 5.2 through 5.5.5 and the following factors:

- (1) Type of fire most likely to occur
- (2) Size of fire most likely to occur
- (3) Hazards in the area where the fire is most likely to occur
- (4) Energized electrical equipment in the vicinity of the fire
- (5) Ambient temperature conditions
- (6) Other factors (See section H.2)
- 5.3.2.6 Use of halon agent fire extinguishers shall be limited to applications where a clean agent is necessary to extinguish fire efficiently without damaging the equipment or area being protected or where the use of alternative agents has the potential to cause a hazard to personnel in the area."

ESRB inspectors identified dry powder fire extinguishers in substation buildings. In the event of an emergency with an incipient stage fire, the dry powder type fire extinguisher would damage electrical equipment. Damaging electrical equipment may require equipment replacement and a prolonged forced outage affecting Westland's reliability. Westland must replace the dry power type fire extinguisher with an extinguisher better suited for the area it serves. The fire extinguishers must be replaced with carbon dioxide (CO₂) or other clean agent, gaseous fire extinguishers per NFPA 10.

Finding 5: Emergency response preparedness must be improved.

GO 167-B Appendix D, 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 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."

ESRB inspectors reviewed Westland's Emergency Response Plan and did not find approved and documented evacuation maps. Both Solar Blue and Castanea Project did not have maps identifying evacuation routes, muster points, or emergency equipment locations posted on doors

or walls in operations and maintenance (O&M) buildings or substation buildings. Both plants, Solar Blue and Castanea Project, must establish approved evacuation routes and muster points and communicate the updated emergency response protocol to Westland staff.

Westland has established a practice of conducting annual evacuation drills with the local fire department. Upon review, evacuation drills did not have sufficient details regarding who participated, the scope of the drills, and any critiques or feedback. Westland must have detailed documentation of periodic evacuation drills.

<u>Finding 6: Portable fire extinguisher inspection and maintenance practices and tracking</u> must be improved.

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."

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

"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."

NFPA 10, Standard for Portable Fire Extinguishers, Chapter 7 Inspection, Maintenance and Recharging states in part:

- "7.2.4.1 Manual Inspection Records
- 7.2.4.1.1 Where manual inspections are conducted, records for manual inspections shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file, or by an electronic method.
- 7.2.4.1.4 Personnel making manual inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action."

California Code of Regulations (CCR) Title 8: California Occupational Safety and Health Administration (Cal OSHA) Section 6151: Portable Fire Extinguishers states in part:

- "e) Inspection, Maintenance and Testing.
- (1) The employer shall be responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace.
- (2) Portable extinguishers or hose used in lieu thereof under Subsection (d)(3) of this Section shall be visually inspected monthly.
- (3) Portable fire extinguishers shall be subjected to an annual maintenance check. Stored pressure extinguishers do not require an internal examination. The employer shall record the annual maintenance date and retain this record for one year after the last entry or the life of the shell, whichever is less. The record shall be available to the Chief upon request."

ESRB inspectors identified portable fire extinguishers were missing monthly inspections for one or more months and had not received annual maintenance since 2023. Several of the fire extinguishers that require annual maintenance had up to date monthly inspections. During the monthly inspections, the missing annual maintenance should be identified so it can be corrected. The fire extinguishers requiring routine inspection and maintenance were in substation buildings and inside the gated perimeter of the BESS site. Westland must ensure completion of routine inspection and maintenance of all fire extinguishers and maintain proper recordkeeping to ensure the safety of personnel and equipment.



Figure 3: Fire Extinguisher missing monthly inspections



Figure 4: Fire extinguisher missing annual maintenance for 2024



Figure 5: Fire extinguisher missing annual maintenance for 2024



Figure 6: Fire extinguisher missing annual maintenance for 2024



Figure 7: Fire extinguisher missing annual maintenance for 2024

Finding 7: 55-gallon drums of BESS Heat Transfer Fluid are stored improperly. GO 167-B, Appendix D, 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 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."

GO 167-B, Appendix D, MS 13: Equipment Performance and Materiel Condition states:

"Equipment performance and material condition support reliable plant operation. This is achieved using a strategy that includes methods to anticipate, prevent, identify, and promptly resolve equipment performance problems and degradation."

Solar Blue operations and maintenance yard has a storage area designated for BESS parts and materials, maintained by the Long-Term Service Agreement (LTSA) provider for the BESS. In this storage area, Heat Transfer Fluid, or coolant, is stored in 55-gallon drums. The coolant was not stored properly, with some containers having open lids that were susceptible to contamination, such as water, dust, and debris. If allowed to contaminate the coolant, dust and debris can build up in the thermal management system's corrugated tubing and affecting the compressor, BESS's operating temperatures and capacity to remove heat from the system. As labeled on the drum, the coolant is pre-diluted, meaning water should not be added. Leaving the drum susceptible to atmospheric conditions, such as the heavy rain during ESRB's audit, allows water to enter the container and dilute the working fluid. Unintentional dilution affects the expected heat capacity of the fluid, compromising the thermal management system's effectiveness.

In addition to affecting the coolant's heat transfer properties, the condition of the drums is a safety hazard. The coolant drums have a Safety Data Sheet (SDS) attached, outlining the hazards associated with the fluid. The fluid was stored and dispensed improperly, leaving residual fluid across the top of the drum. The poor condition of the drum and residual fluid leaves workers exposed to hazards. The condition of the drums must be improved and routinely monitored. Drums must be stored properly and cleaned if any spills occur during dispensing.



Figure 8: 55-Gallon Drums without caps



Figure 9: 55-Gallon Drums in poor condition

Finding 8: Westland's SDS repository does not include all hazardous materials present at the facility.

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."

CCR Title 8: Cal OSHA Section 5194, Hazard Communication states in part:

- "(b) Scope and application
- (1) This section requires manufacturers or importers to classify the hazards of chemicals which they produce or import, and all employers to provide information to their employees about the hazardous chemicals to which they may be exposed, by means of a hazard communication program, labels and other forms of warning, safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers.

(2) This section applies to any hazardous chemical which is known to be present in the work place in such a manner that employees may be exposed under normal conditions of use or in a reasonably foreseeable emergency resulting from work place operations."

The SDS binder at Westland did not include all the hazardous materials present at the site. The SDS binder that ESRB inspectors reviewed did not include the hazardous materials used and stored in the BESS areas. Although the solar photovoltaic and BESS facilities are operated and maintained independently, the materials are stored on site where all workers, contractors, visitors, and emergency responders may be exposed to them. The BESS LTSA contractor and Westland must coordinate, establish, and communicate an SDS repository that includes all hazardous materials at Westland.

Finding 9: Routine hazardous waste inspections are not being completed.

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."

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

"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:

- A. Identifying systems and components critical to system operation (such as those identified in the guidelines to Standard 28).
- 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.
- C. Training personnel to conduct routine inspections.
- D. Monitoring routine inspections."

ESRB inspectors reviewed the Hazardous Waste Inspection records for Westland. The Hazardous Waste Inspection records ESRB inspectors reviewed were paper records taken in 2024. In late 2024, all routine inspections, including Hazardous Waste, were moved to Maximo, the CMMS as recurring work orders. When Westland transitioned to using Maximo for routine inspections, a recurring work order for Hazardous Waste Inspections was not created. The last evidence of a Hazardous Waste Inspection was a paper record from October 2024. Westland must conduct regular Hazardous Waste Inspections. As a part of the corrective action plan, Westland must submit the routine work order for Hazardous Wate Inspections in Maximo or other CMMS.

Finding 10: Substation buildings require an NFPA 704 placard.

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. 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."

NFPA 704 Standard System for the Identification of the Hazards of Materials for Emergency Response: 4.3 Location of Signs states:

- "Signs shall be in locations approved by the authority having jurisdiction and as a minimum shall be posted at the following locations:
- 1) Two exterior walls or enclosures containing a means of access to a building or facility.
- 2) Each access to a room or area.
- 3) Each principal means of access to an exterior storage area."

ESRB inspectors identified missing NFPA 704 signage at the substation buildings at Castanea Project and Solar Blue. Each substation buildings has wet-cell lead-acid batteries that require NFPA 704 signage to identify potential health, flammability and instability hazards. The NFPA signage is required to identify threats and safety hazards for staff, contractors, and emergency personnel for quick identification of the present hazards. Westland must install NFPA hazard identification placards for the substation buildings at Solar Blue and Castanea Project and monitor the condition of all signage at Westland and replace as needed.



Figure 10: Solar Blue Lead Acid Batteries



Figure 11: Castanea Project Substation Building with NFPA Placard Missing

Finding 11: Solar Blue HVAC drain line is tied, preventing proper condensate drainage. 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 11: Operations Facilities, Tools and Equipment states:

"Facilities and equipment are adequate to effectively support operations activities."

ESRB inspectors identified the HVAC system on Solar Blue's relay house has a condensate drain hose zip-tied back on itself shown in Figure 12. The installation of the drain line for an air conditioner is a critical component of the system's proper functioning and long-term reliability. If a loop is required, an appropriate drainage solution must be implemented. Solar Blue must verify that the drain line is installed per the California Mechanical Code and per manufacturers' instructions, and correct any deficiencies as necessary. Additionally, Westland must ensure facilities and equipment are adequate to effectively support operations activities and that maintenance is conducted in a manner to support reliable plant operation.



Figure 12: HVAC Drain zip tied

Finding 12: Westland must maintain and replace deteriorated signage. 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."

ESRB inspectors identified deteriorated signage around Westland. Signage appears to be damaged by sunlight and the heat of operating equipment. Safety related signage is required to identify threats and safety hazards for staff, contractors, and emergency personnel. Additionally, other signage such as "Do Not Step Here" protects the equipment and cables from being damaged. Westland must continue to monitor the condition of all signage and proactively replace as needed to aid in the efficient and effective identification of hazards. A few examples of the deteriorated and missing signage are depicted below in Figures 13 through 16.



Figure 13: Warning labels faded on low voltage equipment (Substation building MTS & AC Disconnects)



Figure 14: Tesla BESS "Do not step here" between BESS & Transformer



Figure 15: Warning labels on various electrical equipment throughout the site have been faded by sun.

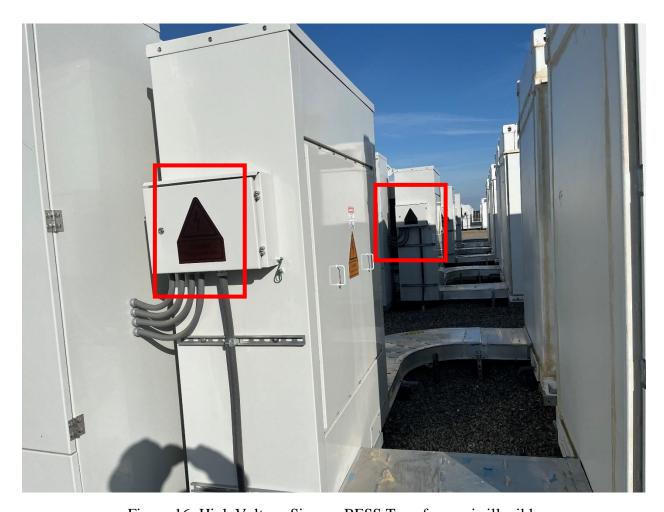


Figure 16: High Voltage Sign on BESS Transformer is illegible

<u>Finding 13: Electrical equipment cabinets labeled with an Arc flash hazard sign and other equipment storage must remain locked.</u>

GO 167-B, Appendix D, 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, OS 8: Plate Status and Configuration states:

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

ESRB inspectors observed several unlocked electrical equipment cabinets labeled with an Arc flash hazard sign, depicted below in Figures 17 and 18. Although only two examples are shown, more were observed and must be corrected. Unlocked electrical equipment cabinets pose a safety hazard to life and limb for staff, contractors, and emergency personnel. Westland must continuously monitor electrical equipment and ensure doors are properly locked. Additionally, ESRB inspectors observed storage containers unlocked in the BESS storage area, which must remain locked when not in use (see Figure 19). Inside the storage containers are the coolant, a hazardous material, and exposed battery modules which have been removed from the BESS. Both are safety hazards and should be locked to prevent incidental exposure.



Figure 17: Inverter 1.9.1 had unlocked and unsecured cabinet

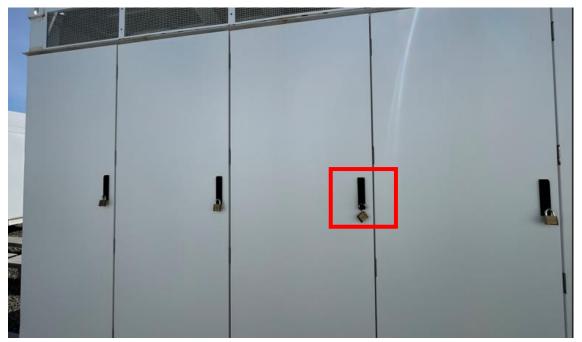


Figure 18: BESS megapack cabinets unlocked



Figure 19: Unsecured storage containers

Finding 14: Bird nests were present on various equipment throughout the site. 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 8 Plant Status and Configuration:

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

ESRB inspectors discovered several active bird nests throughout Westland. The nests were primarily located within the Nextracker control equipment at various inverter skids. Birds and their nests pose several risks to plant operations. Bird nests are composed of debris that could contain flammable, conductive, or sharp materials, all of which need to be mitigated near electrical equipment. Prior to removal, consult with federal and local authorities for guidance on Endangered Species Acts, as requirements may vary depending on the bird species. Ensure that all relevant laws are communicated to employees, visitors, and contractors through training sessions, procedures and visitor's orientation, and submit the corrective actions taken to ESRB.





Figure 20: Nest Behind Nextracker Control Enclosure (Left) and on DC bundle (Right)

Finding 15: Vegetation is encroaching on electrical equipment at various locations. 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 8 Plant Status and Configuration:

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

During the audit, ESRB inspectors observed instances of tall grass and tumbleweeds growing near electrical equipment. The accumulation of vegetation in proximity to electrical infrastructure poses several risks that could compromise the safety and functionality of the equipment. Allowing vegetation, such as tall grass and tumbleweeds to grow near electrical equipment is a safety concern. Additionally, in more extreme cases, vegetation can obstruct ventilation and access to equipment, hindering maintenance, inspections, and emergency responses. To ensure the safety of personnel and the proper operation of the electrical equipment, vegetation must be regularly managed and controlled around the equipment.



Figure 21: Vegetation Growing into Main DC Wire Run

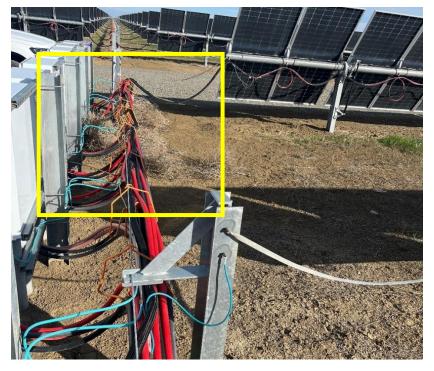




Figure 22: Tumble Weeds Adjacent to Combiner Boxes

Finding 16: Westland does not utilize Safe Work Permits (SWP). GO 167-B, Appendix D, MS 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 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, MS 8: Maintenance Procedures and Documentation states:

"Maintenance procedures and documents are clear and technically accurate, provide appropriate direction, and are used to support safe and reliable plant operation. Procedures must be current to the actual methods being employed to accomplish the task and are comprehensive to ensure reliable energy delivery to the transmission grid."

GO 167-B, Appendix E, MS 10: Work Management states:

"Work is identified and selected based on value to maintaining reliable plant operation. Work is planned, scheduled, coordinated, controlled, and supported with resources for safe, timely, and effective completion."

Westland must utilize the North American Energy Services (NAES), the O&M contractor's, established Safe Work Permit (SWP) procedures from their Safety Manual Program (SMP) including completing SWPs prior to doing work. Westland's SMP requires the use of the SWP checklist when conducting many kinds of work like elevated work, energized electrical work that requires lock-out tag-outs (LOTO), hot work, and several different kinds. ESRB inspectors discovered that Westland is conducting job hazard analyses with staff and contractors and is using LOTOs where necessary, however SWPs should be used in conjunction with these tools to further optimize safety and traceability of work. Use of the SWP checklist helps to ensure that staff and contractors performing work are aware of hazards and of the procedures put in place to help keep them safe.

Westland's SWP procedures also require monthly and annual audits of the SWP program. Westland must conduct those audits in accordance with their procedures to maintain their currency, accuracy and possible improvements to the process. Keeping those procedures up to date and comprehensive is necessary to ensure worker safety and reliable energy delivery to the transmission grid. Westland must address these two discrepancies all employees through training sessions or directives, and submit the records to ESRB.

<u>Finding 17: Westland does not maintain hardcopy procedures, policies, and programs in</u> reference binders on site.

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."

A hard copy of the Spill Prevention Control and Countermeasure (SPCC) Plan and Emergency Response Plan must be available on site. Both plants, Solar Blue and Castanea Project, must maintain updated hard copies of approved procedures, policies, and programs pertaining to safety and emergency response in a central location. Binders must be upkept and readily available at a central location like the SDS binder at the Castanea Project O&M building. Maintaining updated physical copies allows for immediate access during an emergency when the online repository may not be accessible or available. As a part of the corrective action plan submitted to ESRB, Westland must provide a list of hard copy of reference binders kept on site.

<u>Finding 18: Lock Out Tag Out (LOTO) Program implementation and periodic reviews</u> must be improved.

GO 167-B, Appendix D, MS 2: Organizational Structure and Responsibilities states:

"The organization with responsibility and accountability for establishing and implementing a maintenance strategy to support company objectives for reliable station operation is clearly defined, communicated, understood and is effectively implemented. Reporting relationships, control of resources, and individual authorities support and are clearly defined and commensurate with responsibilities."

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 14: Clearances states:

"Work is performed on equipment only when safe. When necessary, equipment is taken out of service, de-energized, controlled, and tagged in accordance with a clearance procedure. Personnel are trained in the clearance procedure and its use, and always verify that equipment is safe before any work proceeds. Among other things:

- A. The GAO prepares and maintains a clearance procedure. The clearance procedure contains requirements for removing a component from service and/or placing a component back into service.
- B. The GAO ensures that personnel are trained in and follow the clearance procedure."

CCR Title 8: Cal OSHA Section §3314. The Control of Hazardous Energy for the Cleaning, Repairing, Servicing, Setting-Up, and Adjusting Operations of Prime Movers, Machinery and Equipment, Including Lockout/Tagout states in part:

"(j) Periodic Inspection.

The employer shall conduct a periodic inspection of the energy control procedure(s) at least annually to evaluate their continued effectiveness and determine necessity for updating the written procedure(s).

- (1) The periodic inspection shall be performed by an authorized employee or person other than the one(s) utilizing the hazardous energy control procedures being inspected.
- (2) Where lockout and/or tagout is used for hazardous energy control, the periodic inspection shall include a review between the inspector and authorized employees of their responsibilities under the hazardous energy control procedure being inspected.
- (3) The employer shall certify that the periodic inspections have been performed. The certification shall identify the machine or equipment on which the hazardous energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

Westland maintains multiple LOTO systems for each plant, Solar Blue and Castanea Project. Each plant also has multiple binders, for open and closed LOTOs. The LOTO Binders were disorganized with closed LOTOs in the open LOTO binder. The binders must be organized to follow the established protocol. The LOTO index should be maintained and promptly updated for sufficient tracking and reviews, and the affected employees should be trained on the site's Open and Closed Binder system to prevent the binders from becoming disorganized.

The LOTO issues listed above should be identified internally through routine audits and inspections of the LOTO Program. Per Westland's Lockout Tagout Program, SMP-03 Section 10, *Audits and Inspections*, the each plant, Solar Blue and Castanea Project, must conduct Monthly and Annual audits of the program. To complete the periodic audits, the both plants must utilize Appendix J, LOTO Monthly Audit Form, and Appendix K, LOTO Annual Audit Form. During the audit ESRB inspectors requested to review completed LOTO audit forms, and Westland was unable to provide completed forms and stated periodic audits are not completed. By conducting periodic LOTO audits at the required intervals, Westland will be able to ensure that the LOTOs are being administered, closed out and tracked correctly. Additionally, these audits ensure training completion, identify trends and program improvements, and ensure employee compliance with both the program and Cal/OSHA regulations. Westland must complete periodic audits of the LOTO Program. As part of the corrective action plan, Westland must complete 2024 annual audits for both plants and submit the records to ESRB.

Finding 19: Permit-Required confined spaces are not properly identified.

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. 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."

CCR Title 8, Section 5157(c)(2): Permit-Required Confined Spaces states in part:

"If the workplace contains permit spaces, the employer shall inform exposed employees and other employees performing work in the area, by posting danger signs or by any other equally effective means, of the existence, location of and the danger posed by the permit spaces."

Permit-Required Confined Spaces at Westland are not identified with a confined space signage. Confined space signage is required for the operational safety of Westland, so staff and contractors are aware of the present safety hazards associated with confined spaces. Once signage is installed, Westland must continuously monitor the condition of the confined space signage and replace, or repair as needed. Confined space hazards on site must be identified so staff and contractors are aware of the hazards and do not attempt to enter a confined space without a permit. Per NAES SMP-07 Confined Entry Program, Westland must maintain a list of confined spaces. As a part of Westland's response to the audit report, Westland must provide a list of all confined spaces at Westland in SMP-07 Appendix D Confined Space Inventory, and proof of proper confined space signage.



Figure 23: Water Tank without Confined Space Label

Scope:

This SMP applies to all confined spaces and all entries whether by NAES employees, Contractors, or others

A complete analysis by trained and authorized personnel will be conducted to determine the level of controls needed for safe entry into any confined space. No employee will enter any confined space without following the requirements of this procedure.

A list of all confined spaces will be maintained at each plant. All entry points to confined spaces are to be clearly marked with a permanent sign reading "CONFINED SPACE - DO NOT ENTER". Appendix D, Confined Space Inventory, is provided to facilitate the management of the various confined spaces of the facility and the associated placement of Warning signs.

Figure 24: SMP-07 Confined Space Procedure: Scope

Finding 20: Confined Space Entry Program audits must be conducted periodically.

GO 167-B, Appendix D, MS 2: Organizational Structure and Responsibilities states:

"The organization with responsibility and accountability for establishing and implementing a maintenance strategy to support company objectives for reliable station operation is clearly defined, communicated, understood and is effectively implemented. Reporting relationships, control of resources, and individual authorities support and are clearly defined and commensurate with responsibilities."

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."

Per Westland's Confined Space Entry Program (CSEP), Section Audits, Westland must conduct monthly and annual audits of the program and permits issued. To complete the periodic audits, both plants must utilize Appendix F, CSEP Monthly Audit Form, and Appendix G, CSEP Annual Audit Form. The monthly audit must review the active, closed, cancelled, and reclassified confined space permits. The annual audit must review and assess all confined space permits for the previous 12 months, deficiencies noted, and training records. In the periodic audits, Westland must evaluate the effectiveness of the Confined Space entry program and identify improvements to the program based on the specific requirements. Per SMP-07 section, *Permit Required Confined Space Entry by a Contractor*, the CSEP applies to contractors and a permit must be issued for the work. These permits must be reviewed in the monthly and annual program audits. Westland must complete periodic audits of the Confined Space Entry Program. As part of the corrective action plan, Westland must complete 2024 annual audits for both Plants and submit the records to ESRB.

(3) PERMIT REQUIRED CONFINED SPACE ENTRY BY A CONTRACTOR

<u>WHEN</u> it is necessary to have a contractor or other outside agency perform work that involves permit required confined space entry, the Plant Manager will:

- 3.1. **INFORM** the contractor that the work requires Permit Required Confined Space entry.
- 3.2. **INFORM** the contractor of the hazards identified and previous experience which make the space in question a Permit Required Confined Space.
- 3.3. INFORM the contractor of any precautions or procedures that have been implemented for the protection of employees in or near the Permit Required Confined Space. Contractors will supply their employees with OSHA compliant confined space training (see SMP-26 Contractor Safety). Contractors will follow NAES Confined Space Procedures.
- 3.4. Debrief the contractor at the conclusion of the entry operations regarding the entry program followed and request information regarding any hazards confronted or created during entry operations.

Figure 25: SMP-07 Confined Space Procedure: Contractor

II. List of Documents Reviewed

Category	Reference #	CPUC-Requested Documents
	1	Orientation Program for Visitors and Contractors**
	2	Evacuation Procedure and or Emergency Response Plan
	3	Evacuation Map and Plant Layout
	4	Evacuation Drill Report & Critique (last 3 years)
	5	Hazmat Handling Procedure
	6	MSDS for All Hazardous Chemicals**
	7	Injury & Illness Prevention Plan (IIPP) (last 3 years)
Safety	8	OSHA Form 300 (Injury Log) in last 4 years
	9	OSHA Form 301 (Incident Report) in last 4 years
	10	List of all CPUC Reportable Incidents (last 5 years)
	11	Root Cause Analysis of all Reportable Incidents (if any)
	12	Fire Protection System Inspection Record and Fire Sprinklers Test Report (last 3 years)
	13	Insurance Report / Loss Prevention / Risk Survey (last 3 years)
	14	Lockout / Tagout Procedure (last 3 revisions, if applicable)
	15	Arc flash Analysis
	16	Confined Space Entry Procedure
	17	Plant Physical Security and Cyber Security Procedures and Records
	18	Safety Training Records*
Training	19	Skill-related Training Records*
C	20	Certifications for Welders, Forklift & Crane Operators*
	21	Hazmat Training and Record*
	22	Latest list of Qualified Contractors*
Contractor	23	Contractor Selection / Qualification Procedure
201111111111111111111111111111111111111	24	Contractor Certification Records
	25	Contractor Safety Program Procedure and Training Records
Regulatory	26	Water Permit (if applicable)
	27	Spill Prevention Control Plan (SPCC) (if applicable)
	28	CalARP Risk Management Plan (RMP)

	29	Daily Round Sheets / Checklists**
O&M	30	Logbook**
	31	List of Open/Backlogged Work Orders*
	32	List of Closed/Retired Work Orders (last 3 years)*
	33	Work Order Management Procedure (last 3 revisions, if applicable)
	34	Computerized Maintenance Management System (Demonstration On-site)**
	35	All Root Cause Analyses (if any)
	36	Maintenance & Inspection Procedures, or Related Documents (last 3 revisions, if applicable)
	37	SCADA system (Demonstration On-site)**
	38	Maintenance and Inspection Records for Solar Inverters
	39	Maintenance and Inspection Records for Solar Trackers
	40	Maintenance and Inspection Records for Solar Arrays/Collectors/Solar Field
	41	Maintenance and Inspection Records for Mounting System
	42	Maintenance and Inspection Records for Switchgear/breaker/relays
	43	Maintenance and Inspection Records for Electrical System
	44	Maintenance and Inspection Records for Main Transformer(s)
	45	Maintenance and Inspection Records for Switchyard & Transmission Equipment
	46	Maintenance and Inspection Records for other equipment
	47	Transformer Oil Analysis Records (last 3 years)
	48	Emergency Generator Test and Maintenance Records (last 3 years)
	49	Substation Battery Test and Maintenance Records (last 3 years)
	50	Vegetation Management Procedure and Policy
	51	Annual Maintenance Plan and Inspection Records
	52	Compliance Capacity Testing Records
Battery System	53	Original Equipment Manufacturer (OEM) Manual
	54	BESS Emergency Action Plan
	55	Operations Procedure
	56	P&IDs* (Electric Schematic Diagram of substation, solar arrays, BESS)

Documents	57	Vendor Manuals*
	58	Solar Farm Equipment Design Data
	59	Procedure Compliance Policy
Spare Parts	60	Spare Parts Inventory List
	61	Shelf-life Assessment Report
Management	62	Organizational Chart
Instrumentation	63	Instrument Calibration Procedures and Records
Test Equipment	64	Measuring & Testing Equipment List
	65	Test Equipment Calibration Procedures and Records
Internal Audit	66	Internal Audit Procedures and all Records

^{*} Provide data in a searchable format such as a searchable PDF, Word Document, Excel Spreadsheet, etc.

^{**} These items may be provided on-site by the first day of the audit.