PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 7, 2025

Ramiro Gonzalez
Plant Manager – Midway Peaking, LLC
46327 West Panoche Road
Firebaugh, CA 93622

SUBJECT: **Generation Audit of Midway Peaking, LLC- Audit Number GA2024-27MP**

Dear Mr. Gonzalez:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Christopher Villalobos and Naveed Paydar of ESRB staff conducted a generation audit of Midway Peaking, LLC from December 9, through December 12, 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 March 7, 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-B.

Please submit your response to Christopher Villalobos at Christopher.Villalobos@cpuc.ca.gov. Please note that although Midway Peaking 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 Midway Peaking, LLC 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. 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 March 7, 2025.

Please note that ESRB will also post Midway Peaking'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.

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.

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

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
Stephen Hur, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Christopher Vilalobos, Utilities Engineer, ESRB, SED, CPUC
Naveed Paydar, Public Utilities Regulatory Analyst V, ESRB, SED, CPUC

CPUC AUDIT FINDINGS OF
MIDWAY PEAKING, LLC
DECEMBER 9 – DECEMBER 12, 2024

I. Findings Requiring Corrective Action

Finding 1: The Plant failed to respond to California Public Utilities Commission (CPUC) Information Requests by the due date.

General Order (GO) 167-B, 10.0, Information Requirements states in part:

> *"10.1 Provision of Information. Upon Safety Enforcement Division's (SED) request, a Generating Asset Owner shall provide information in writing concerning (a) a Generating Asset; (b) the operation or maintenance of the Generating Asset; […] If SED has indicated when, where, and in what form the information is to be provided, the Generating Asset Owner will provide the information in that manner and will otherwise cooperate with SED in the provision of information.*

GO 167-B, 11.0, Audits, Inspections and Investigations states in part:

> *"11.1 General Requirement. A Generating Asset Owner shall cooperate with SED during any audit, inspection, or investigation (including but not limited to tests, technical evaluations, and physical access to facilities). An audit, inspection, or investigation may extend to any records pertaining to the specifications, warranties, logbooks, operations, or maintenance of the Generating Asset."*

GO 167-B, Appendix D, Maintenance Standard (MS) 14: Regulatory Requirements states in part:

> *"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, Midway Peaking, LLC (the Plant, or Midway) did not initially submit several documents even though they were requested in the pre-audit data request that was submitted on October 31, 2024. Electric Safety and Reliability (ESRB) requested 69 items from the Plant and marked the items that could be provided to ESRB staff on-site if not submitted electronically (see Audit Report Section *III. List of Reviewed Documents*). After review, 3 of these items were not applicable to the site.

ESRB provided a due date of November 22, 2024, for the initial data request. The Plant requested an extension to provide all documents by November 29, 2024, which was approved by ESRB. After November 29, 2024, the Plant did not submit 40 of the applicable documents requested. ESRB sent a follow up data request on December 2, 2024, requesting the documents be submitted no later than December 4, 2024.

The Plant staff had to pull each document up on the conference room screen for review while auditors were onsite since the Plant provided those records late. Reviewing documents during the audit compromises the ability of ESRB staff to fully analyze the documents with the time and depth needed and limits the time staff can inspect equipment. In the future, all pre-audit documentation must be submitted before the deadline to ensure a smoother audit process. ESRB staff may use enforcement actions such as a Notice of Violation or staff citations or both if the Plant continues to file late documents.

Finding 2: The Plant must report planned and forced outages to the Electric Safety and Reliability Branch's Power Plant Outage Report (PPOR).

GO 167-B, 10.0, Information Requirements states in part:

> *"10.1 Provision of Information. Upon Safety Enforcement Division's (SED) request, a Generating Asset Owner shall provide information in writing concerning (a) a Generating Asset; (b) the operation or maintenance of the Generating Asset; […] If SED has indicated when, where, and in what form the information is to be provided, the Generating Asset Owner will provide the information in that manner and will otherwise cooperate with SED in the provision of information."*

Power Plant Outage Reporting (PPOR) Web Reporting Instructions[1] states in part:

> *"The PPOR replaces Form SED-11-110 to report to the Safety and Enforcement Division (SED) forced and planned outages at fossil fuel and renewable generating assets:*
>
> 1. *Full and partial (derate) forced outages, that are 50 MWs or greater, which are 24 hours or longer in duration;*
> 2. *Planned outages, that are 50 MWs or greater, which are 72 hours or longer in duration.*
>
> *For each outage of 50 MWs or greater, submit an Initial Report and, if applicable, Updated Reports and/or a Final Report based on the requirements as described below."*

GO 167-B, Appendix D, MS: 14 Regulatory Requirements states in part:

> *"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."*

During the audit, ESRB staff became aware of two power plant outages that the Plant did not report to the CPUC's PPOR. The two outages met the criteria set by the CPUC's PPOR instructions. Prior to being informed by ESRB staff, the Plant was unaware of the non-summer reporting requirements which are effective annually from November 1 – May 31[2]. During the course of the audit, ESRB staff discovered two outages that had not been reported previously.

[1] PPOR_reporting-instructions_november15_21-updated.pdf
[2] Non-Summer Power Plant Outage Reporting Requirements

The first occurred from April 24 through April 30, 2024. The outage was discovered by reviewing the Plant's Continuous Emissions Monitoring System (CEMS) calibration data. The Plant is required to calibrate the CEMS daily, unless the Plant is in an outage. Upon review of the calibration data, records were missing from April 24-30, 2024, and it was determined that the Plant was in an outage. ESRB reviewed the Plant's PPOR Outage history and discovered that the Plant did not report the outage.

The second outage not initially reported to ESRB occurred during ESRB's audit of Midway. During the audit, the Plant was experiencing issues with Unit 2's hydraulic starter that resulted in an outage lasting from December 10 through December 12, 2024. While the Plant was in a forced outage, ESRB informed the Plant of the outage reporting requirements. The Plant submitted the outage report on December 12, 2024, at 1615 hours.

Finding 3: Electrical equipment cabinets labeled with an arc flash hazard sign and other high voltage electrical equipment must remain closed.

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, 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."*

ESRB observed a circuit breaker panel for the hydraulic pump starter that was left open while the site technician was in a prolonged training session. The breaker cabinet was left open prior to the outage starting on December 10 at 0945 hours, as the image below was taken at 0833 hours. While left unattended, the cabinet must remain closed. Ajar electrical equipment cabinets pose a safety hazard to life and limb for staff, contractors, and emergency personnel. The Plant must continuously monitor electrical equipment and ensure doors are properly closed. At the time the cabinet was discovered to be open, the Plant immediately closed the cabinet door.

Additionally, the unit is labeled with an Arc Flash hazard. The Arc Flash label must be updated for all applicable Arc Flash hazards at the Plant to include the respective equipment, Arc flash boundary, incident energy, the Personal Protective Equipment Category, and the date of the last Arc flash Analysis.

Figure 1: Unattended Hydraulic Starter Pump Cabinet ajar

Finding 4: The Plant does not utilize the Job Hazard Analysis (JHA) program provided by NAES.

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 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."

North American Energy Services (NAES) is the corporate operations and maintenance contractor for Midway. NAES provides a through safety program outline, The Safety Manual Program (SMP) that is underutilized at Midway. Within the SMP, is a Job Hazard Analysis (JHA) program that the Plant does not implement. The JHA program creates a framework for identifying, evaluating and controlling hazards associated with the specified tasks that are conducted at the Plant or when working with certain equipment. JHA programs are implemented to improv safety by breaking down work activities into steps and analyzing the risks with each step and creating awareness of the hazards and communicating methods to eliminate or mitigate the risks.

Due to the Plant having only one technician at the site, implementing a robust JHA program, as provided by NAES, would improve safety for the individual by ensuring the technician is aware of the hazard for the work activities they conduct. By working alone and without a JHA program, the technician must rely on experience and memory to understand the hazards associated with the assigned work. The Plant must implement resources and framework provided by NAES, the operations and maintenance contractor.

Finding 5: The Plant must improve coordination with the Authority having Jurisdiction (AHJ) for fire related events.

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 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."*

Due to the site not being staffed 24 hours, the Plant must improve planning and coordination with the local fire department (Mendota) for fire-related events. The Plant's plan for fighting a fire is to use the large water storage tanks on-site and the on-site fire pumps. The fire pumps are continuously kept off unless they are conducting a routine test or if there is an immediate need or threat. The technician is trained to turn the pumps on, but if the emergency event takes place outside of standard working hours, the technician's response time is approximately 1 hour due to the Plant's remote location. In the event of a fire related emergency, and if the local fire department needs to respond, the responders may not be able to access the Plant's water supply due to not knowing how to operate the fire pumps. The Plant must conduct a walkthrough with the local fire department (Mendota) and provide a training on the use of the fire pumps. If the Plant's fire protection system is not equipped with a remote notification method, one should be implemented due to the site not being staffed continuously.

Finding 6: The Plant's fire protection systems require maintenance.

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 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 9: Conduct of Maintenance states:

"Maintenance is conducted in an effective and efficient manner so equipment performance and materiel 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 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."

National Fire Protection Association (NFPA) 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems states in part:

"1.1 ***Scope:*** *This document established the minimum requirements for the periodic inspection, testing, and maintenance of water based fire protection systems*

1.1.1 Coordination with NFPA 72 Testing Requirements

1.1.1.1 The inspection, testing and maintenance required by this standard and NFPA 72 [National Fire Alarm and Signaling Code] shall be coordinated so that the system operates as intended."

The Plant has various fire protection systems throughout the facility. ESRB inspected each and discovered indications on the fire protection systems that indicated faults or failures. The Plant must address faults and failed equipment promptly to ensure readiness in the event of an emergency. The Plant must develop a routine inspection and maintenance schedule and documentation requirement for the fire protection system. The schedule and documentation must comply with NFPA 25 and NFPA 72.

Figure 2: Fire Pump Phase Failure

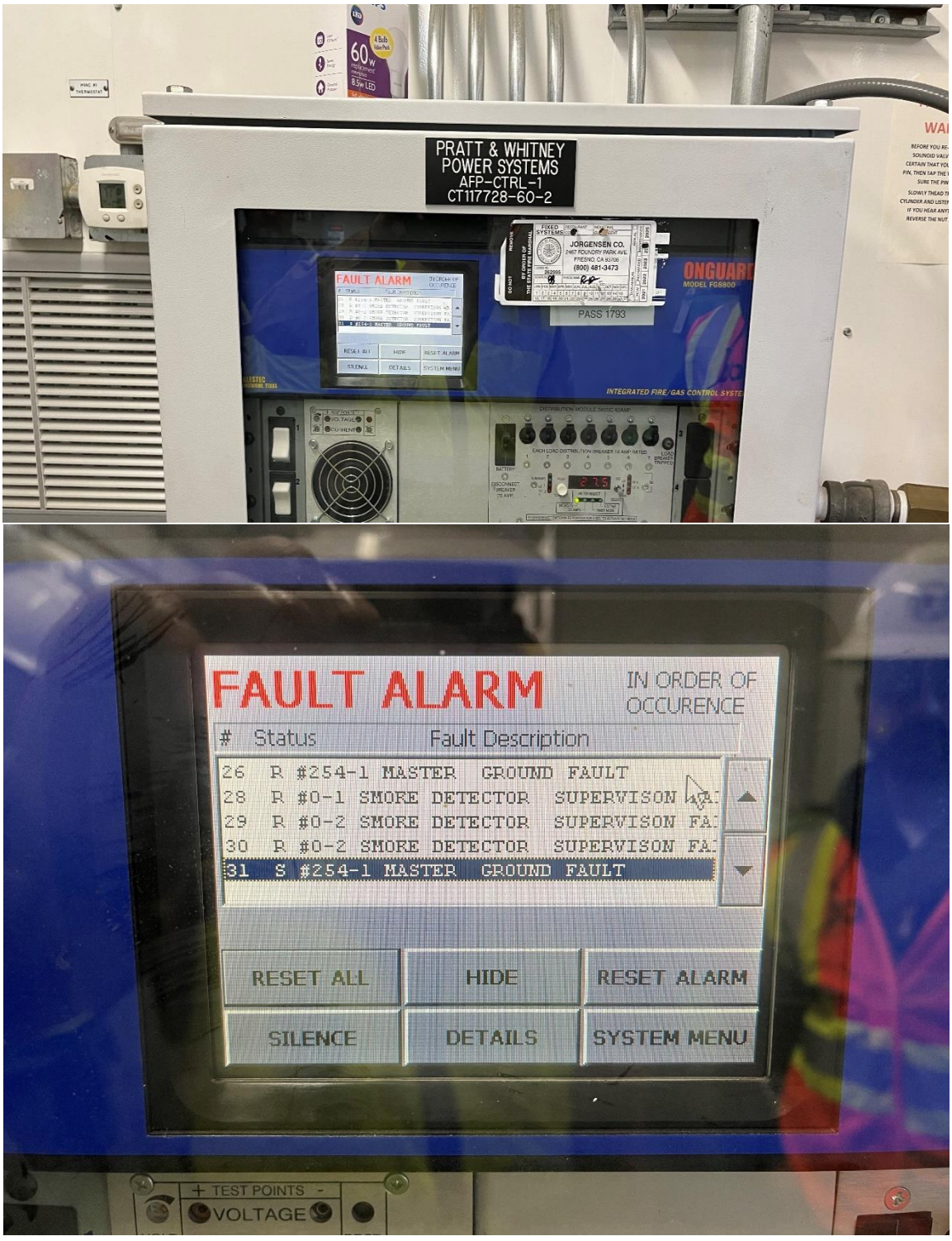

Figure 3: Fire Protection System Fault Alarm

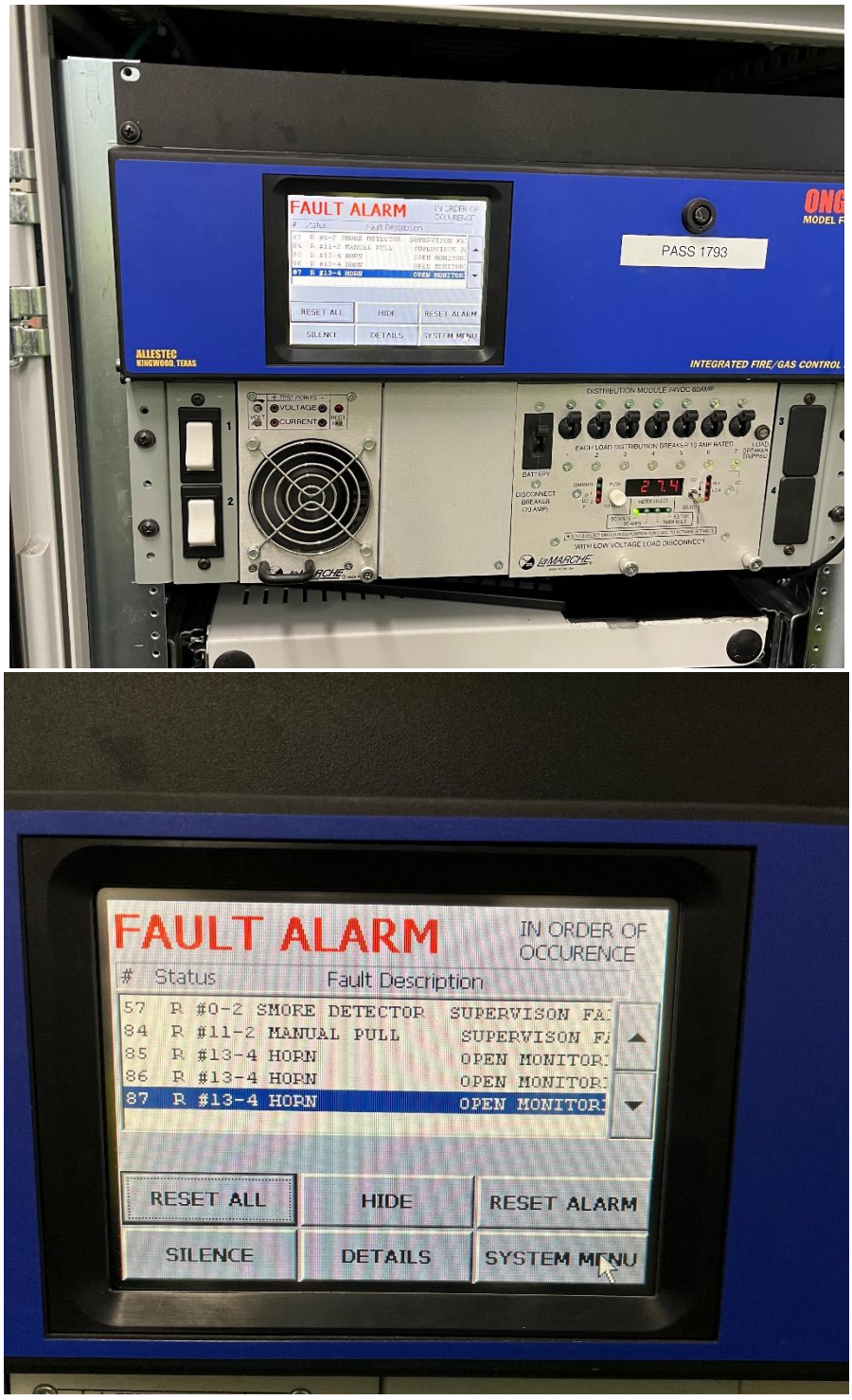

Figure 4: Fire Protection System Fault Alarms

Finding 7: Portable fire extinguisher inspection and maintenance practices and tracking 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, 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 staff observed two deficiencies regarding portable fire extinguisher inspection, maintenance practices and tracking of such activities. First, the Plant does not individually record the portable fire extinguisher's monthly inspections performed by the Plant and does not utilize the monthly inspection tag on the extinguisher. Instead, monthly inspections are tracked collectively in an electronic format and therefore do not appear on the tags attached to the portable fire extinguishers. By tracking the inspections collectively, the Plant has no way of verifying if each portable fire extinguisher received or passed the monthly inspection, leaving a risk that one or multiple fire extinguishers do not receive their monthly inspection. Monthly inspections must be tracked individually, by using the tag on each fire extinguisher or tracked individually in an electronic format. A blank inspection tag is shown below.

Figure 5: Blank Monthly Inspection Tag

Second, the portable fire extinguishers located in Unit 1 and Unit 2 CEMS buildings were missing annual maintenance in 2023 and 2024. As shown below, the two portable fire extinguishers located in CEMS building 1 and 2 have not received annual maintenance since March 2022. The Plant must establish a practice of verifying the certified fire extinguisher contractor completes maintenance for all in service fire extinguishers.

Figure 6: Fire extinguishers last inspected in 2022.

Finding 8: The Plant's windsock on top of Unit 2 is in disrepair.

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 materiel condition effectively support reliable plant operation."*

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."*

ESRB observed the windsock on top of Unit 2's exhaust, near the ammonia hydroxide tank, is in disrepair. Windsocks are important for emergency evacuation procedures in the event of an ammonia release. This windsock is used by the Plant to determine the direction of the wind so the Plant can evacuate to avoid exposure to ammonia. Due to its poor condition, the windsock would not be useful in determining the wind direction and is unable to be used by the Plant, contractors, and visitors in the event of an emergency. The Plant must conduct routine visual inspections of the windsock and proactively repair damaged windsocks to ensure proper function in case of an emergency.

Figure 7: Deteriorated Windsock on Unit 2

Finding 9: Balance of Plant building must have a spill kit suitable for Direct Current (DC) batteries.

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 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."*

ESRB inspected the Balance of Plant (BOP) building at Midway. Inside the building are liquid filled DC batteries used as a backup power source. The battery chemistry of liquid DC batteries is corrosive, which is a hazard to the Plant. Due to the associated hazards, the Plant must place a spill kit with an acid neutralizer in proximity of the hazard. The nearest spill kit is underneath Unit 1 and not in adequate proximity to the DC batteries. Other DC batteries inspected were not liquid filled and do not require a spill kit.

Figure 8: DC Battery Cabinet in BOP

Finding 10: Emergency equipment was not available at the indicated location.

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 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."*

The material storage area on the north side of the Plant had a storage container with a sign indicating "First Aid Station". Upon ESRB's inspection of the area and the container, no First Aid kit or emergency supplies were available in the area. The sign must be removed or first aid supplied must be maintained in this location, and all other locations at the Plant that indicate emergency supplies are available.

Figure 9: Storage Container with First Aid signage

Finding 11: The Plant's Emergency eyewash stations exterior conditions must be improved.

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

"Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant 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."

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. 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."

ESRB staff observed two eye wash stations that were poorly maintained and had significant debris, cobwebs, insects, and bird droppings near the eye wash fountains. The current condition of the emergency equipment could be unsafe for use. Emergency equipment must be well maintained for use in the event of an emergency. The eyewash stations identified below are located outside the Balance of Plant building and near the multistage water filters. ESRB inspected the internal contents of the portable eyewash stations, which were well maintained and clean from debris. ESRB verified that the Plant conducts routine inspections of the emergency eyewash stations; however, the fidelity of the inspections must be improved to ensure exterior cleanliness and usability.

Figure 10:Emergency Eye was stations BOP (Left) Water Filters (Right)

Finding 12:The emergency eye wash signage must be replaced at the Ammonia Hydroxide tank.

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 4: Problem Resolution and Continuing Improvement states:

> *"The company values and fosters an environment of continuous improvement and timely and effective problem resolution."*

ESRB Staff observed emergency eye wash signage that was damaged beyond recognition, as shown below. Signage identifying emergency equipment must be proactively repaired or replaced.

Figure 11: Damaged emergency eyewash sign

Finding 13: Eyewash stations must be labeled on the evacuation map and Spill Countermeasure and Control (SPCC) Plan.

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 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."*

The Evacuation and Fire Protection/Detection Systems Map shows only two eye-wash stations; however, ESRB staff observed at least two additional eye-wash stations that must be identified on the map. Proper identification of emergency safety equipment is critical for promoting safety and awareness of safety equipment in the event of an emergency.

Figure 12:Midway Peaking Evacuation and Fire Protection/Detection Systems Map

Finding 14: Sign indicating danger for Ammonia Hydroxide must be replaced.

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 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 9: Conduct of Maintenance states:

> *"Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation."*

Midway uses aqueous ammonia (19.5% aqueous ammonia solution) to control nitrogen oxide emissions. The solution is stored in a 12,000-gallon storage tank. If not handled properly, aqueous ammonia is hazardous to human health and the environment. ESRB staff observed a faded sign that previously indicated the dangers associated with ammonia hydroxide. As shown below, the sign has deteriorated and must be replaced.

Figure 13: Faded danger sign for Ammonia Hydroxide

Finding 15: NFPA diamond on the ammonia hydroxide tank is inaccurate and deteriorated.

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; Section 4.2.3.3 states in part:

> *"Where more than one chemical is present in a building or specific area, professional judgment shall be exercised to indicate ratings using the following methods:*
>
> *(1) Composite Method. Where many chemicals are present a single sign shall summarize the maximum ratings contributed by the materials in each category and the special hazard category for the building and/or the area.*
>
> *(2) Individual Method. Where only a few chemicals are present or where only a few chemicals are of concern to emergency responders (taking into account factors including physical form, hazard rating and quantity), individual signs shall be displayed. The chemical name shall be displayed below each sign.*
>
> *(3) Composite-Individual Combined Method. A single sign shall be used to summarize the ratings via the compose method for building or other area containing numerous chemicals. Signs based on the individual method shall be used for rooms or smaller area withing the building containing small numbers of chemicals."*

ESRB staff observed that the ammonia hydroxide tank had a NFPA placard indicating incorrect health hazard rating for aqueous ammonia 19.5% solution. The health hazard on the left side of the diamond should be a 3 rather than a 2, as depicted below. 3 indicates that short exposure to hazardous material could cause serious temporary or moderate residual injury.

Additionally, the NFPA 704 placard has deteriorated, resulting in faded colors for health, reactivity, and flammability indicators. The "danger" painted on the tank to the right of the placard, is also faded and must be fixed.

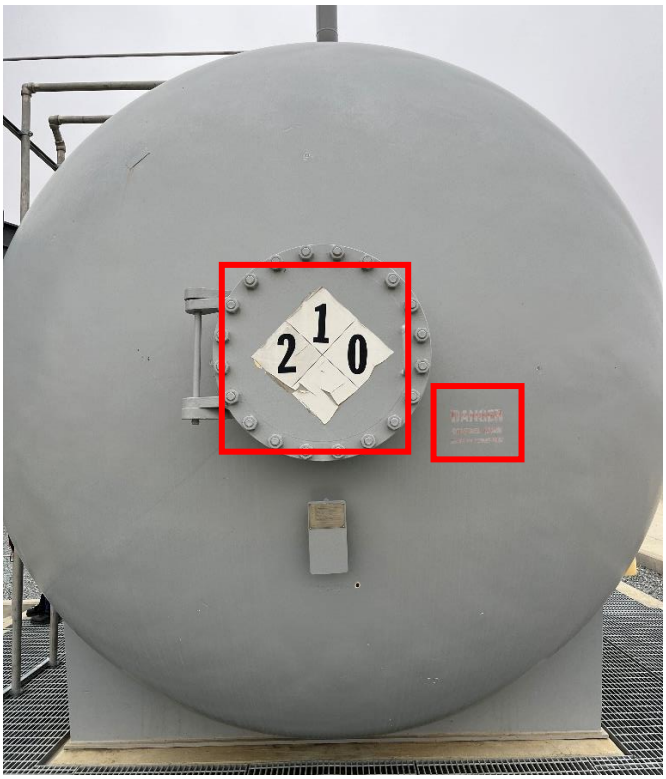

Figure 14: Ammonia Hydroxide tank

Finding 16: Spill containment bin is missing a NFPA 704 placard.

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 704 Standard System for the Identification of the Hazards of Materials for Emergency Response; Section 4.2.3.3 states in part:

"Where more than one chemical is present in a building or specific area, professional judgment shall be exercised to indicate ratings using the following methods:

(1) Composite Method. Where many chemicals are present a single sign shall summarize the maximum rating s contributed by the materials in each category and the special hazard category for the building and/or the area.
(2) Individual Method. Where only a few chemicals are present or where only a few chemicals are of concern to emergency responders (taking into account factors including physical form, hazard rating and quantity), individual signs shall be displayed. The chemical name shall be displayed below each sign.
(3) Composite-Individual Combined Method. A single sign shall be used to summarize the ratings via the compose method for building or other area containing numerous chemicals. Signs based on the individual method shall be used for rooms or smaller area withing the building containing small numbers of chemicals."

ESRB staff found a spill containment bin with a roll-up cover containing hazardous materials. The container was missing a NFPA 704 placard used to identify and communicate hazards associated with the contents in the container. The Plant must identify the hazardous content stored in the container and place a NFPA 704 placard on the container identifying the hazards of its contents. Identifying hazards is critical for day-to-day operations as well as for emergency response personnel for identifying and evaluating hazards present during an emergency.

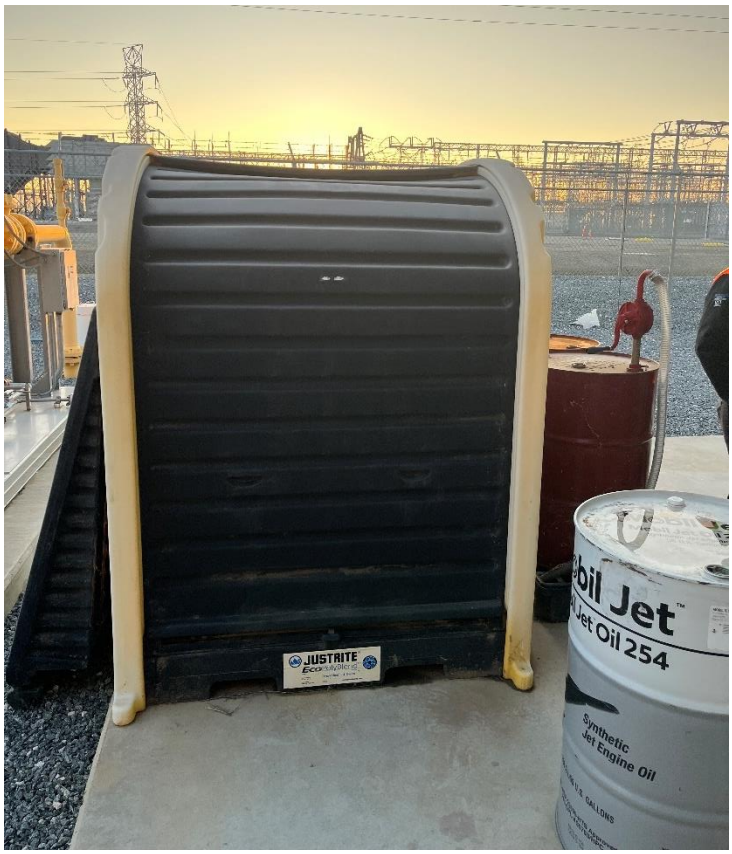

Figure 15: Containment bin m*issing NFPA 704 placard.*

Finding 17: Liquid filled drums stored outside are in poor condition.

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 materiel 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."*

ESRB observed two 55-gallon drums stored outside that were exposed to the elements. The tops of the containers were rusted and covered in debris. The cap to the drums were not tightly sealed, which could result in oil contamination or allow water to penetrate the seal. Contamination and water entering the drum can negatively impact lubrication properties and result in corrosion and degradation of the machinery. Additionally, the drums' labels were weathered and did not clearly indicate the type of liquid contained, and the associated hazards. The Plant stated the drums had been there for several years and were unused. The Plant must determine the usability of the

contents. If the content is usable, the drums must be stored properly, with clear labeling of the contents and the associated hazards. If the contents are deemed unusable, the material must be disposed of in accordance with Plant and local guidelines. In Midway's response to the audit report, state the usability of the contents and the Plant's Plan.

Figure 16: Contaminated 55-gallon drums

<u>Finding 18: The confined space label on the oily water separator is painted over and illegible.</u>

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."*

Occupational Safety and Health Administration (OSHA) Standard 1910.146(c)(2): Permit-required confined spaces states:

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

ESRB observed that the sign identifying the confined space on the oily water separator was painted over. Confined space signage is required for the operational safety of the Plant, so staff and contractors are aware of the potential safety hazards associated with a confined space and the need to obtain a confined space entry permit before entering the confined space. The Plant must continuously monitor the condition of the confined space signage and replace, or repair as needed.

Figure 17: Oily water separator confined space label.

<u>Finding 19: Hydraulic filters are leaking oil.</u>

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 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 staff observed leaking oil seemingly coming from the hydraulic starter filters. The leaked oil saturated absorbent padding under the filters. Hydraulic starters have pressure fluctuations that can result in oil leaks. The Plant should verify filters are installed properly, verify seal and gasket condition, and analyze during operation to check for over pressurization or vibration. The Plant should identify the location and cause of the leaks and implement repairs. The Plant must proactively repair the leaks.

Figure 18: Saturated absorbent padding under hydraulic filters.

Finding 20: Front gate needs additional signage to improve safety.

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 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."*

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

"Signs shall be in locations approve 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 of facility

(2) Each access point to a room or area

(3) Each principal means of access to an exterior storage area"

The Plant must add signage at the front gate, depicted below, to provide warning and safety information to contractors, visitors, and Authority having Jurisdiction (AHJs) about safety risks and other relevant information. These signs must include: 1) NFPA 704 composite method labeling for all hazards inside, 2) Prohibited items sign to prevent unintentional introduction of contraband prior to entry, 3) Emergency Muster point, and 4) Speed Limit.

Figure 19: Midway Peaking Front Gate

Finding 21: Turbine enclosure light must be replaced.

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

"Maintenance is conducted in an effective and efficient manner, so equipment performance and materiel condition effectively support reliable plant 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."

ESRB staff observed a light that burned out while inspecting inside the gas turbine compartment, depicted below. Lights are important for the proper visibility and safety of Plant personnel when in the turbine compartment.

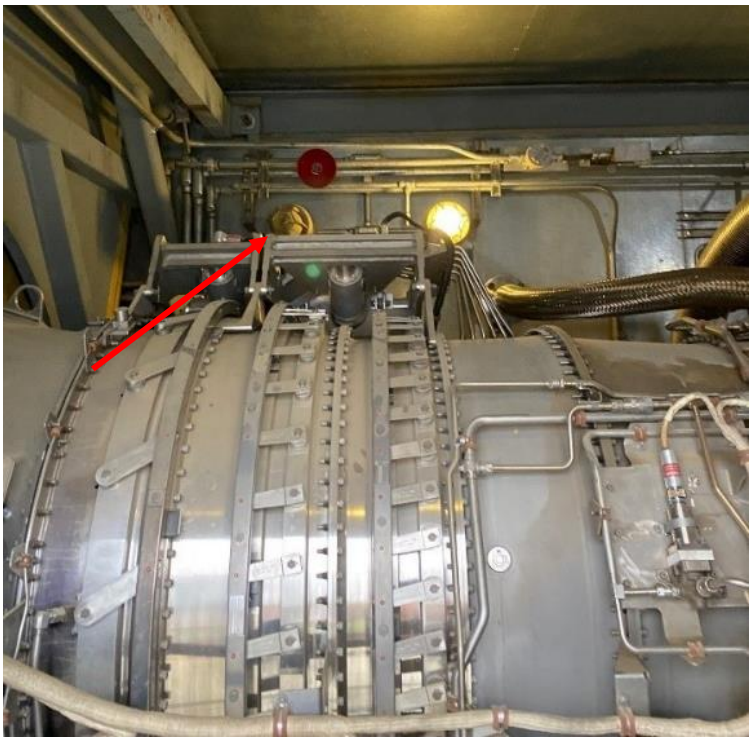

Figure 20: Light bulb in turbine compartment

Finding 22: Hazardous Material Business Plan references must be updated to the correct county.

GO 167-B, Appendix D, 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."*

GO 167-B, Appendix E, OS 10: Environmental Regulatory Requirements states:

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

The Hazardous Material Business Plan (HMBP) erroneously references Solano County Environmental and Health Division and local Certified Unified Program Agency (CUPA). Consequently, the standards used to develop the HMBP may be based on Solano County and the local CUPA, rather than the applicable standards for Midway, Fresno County and the local CUPA. The reference to Solano County must be corrected and the Plant must review and revise the HMBP to ensure compliance with Fresno County and the applicable CUPA standards.

Finding 23: Employees have not received the Hazardous Energy Control Program (Lock Out Tag Out) annual refresher training.

GO 167-B, Appendix D, MS 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."*

GO 167-B, Appendix E, OS 14: Clearances states in part:

> *"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."*

Per the Plant's Hazardous Energy Control Program or Lock Out Tag Out (LOTO), affected and authorized employees are required to receive training on the program. According to the Plant's program guidelines, after the initial training, the Plant must provide annual refresher training to their employees. The technician at Midway did not receive the latest annual refresher training administered in 2024. During the audit, the Plant determined the technician was on personal leave when the group training was administered for Midway and other generation facilities in the Generating Assets Owner's portfolio. If an employee is absent, the Plant must follow up and ensure the training is readministered in a timely manner. In Midway's response to the audit report, include the training record showing completion.

Finding 24: Periodic audits of the Lock Out Tag Out Program must be conducted monthly and annually.

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."

Per the Plant's Hazardous Energy Control Program section, *Audits and Inspections*, the Plant must conduct Monthly and Annual audits of the program. To complete the periodic audits, the Plant must utilize Appendix K, LOTO Monthly Audit Form, and Appendix L, LOTO Annual Audit Form. During the audit ESRB requested to review completed LOTO audit forms, and the Plant was unable to provide completed forms and stated the Plant does not complete these periodic audits. Periodic audits of the LOTO Program must be completed by an authorized employee that is not utilizing the energy control procedure. By conducting periodic LOTO audits at specified intervals, the Plant will be able to ensure the LOTOs are being administered and closed out correctly, ensure trainings are completed, and identify trends and program improvements, and ensure compliance with NAES corporate guidelines and Cal/OSHA regulations. In Midway's response to the audit report, provide a completed annual audit of the LOTO program for 2024. Additionally, moving forward, the Plant must comply with the NAES policy to conduct monthly and annual audits for 2025. In the response, include the names of personnel who will be responsible for conducting the periodic LOTO audits.

Finding 25: Confined space audits must be conducted - monthly and annually.

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 Plant's Confined Space Entry Program section titled *8. Audits*, the Plant must conduct Monthly and Annual audits of the program. To complete the periodic audits, the Plant must utilize Appendix F, Confined Space Program Monthly Audit Form, and Appendix G, Confined Space Annual Audit Form. During the audit ESRB requested to review completed Confined Space Program audit forms; however, the Plant was unable to provide completed forms. The Plant stated that it does not complete these periodic audits. 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, the Plant must evaluate the effectiveness of the Confined Space entry program and identify improvements to the program based on the specific requirements of the Plant. In Midway's response to the audit report, provide a completed annual audit of the Confined Space program for 2024. Additionally, moving forward, the Plant must comply with

the NAES policy to conduct monthly and annual audits for 2025. In the response, include the names of personnel who will be responsible for conducting the periodic audits.

Finding 26: The Plant does not keep procedures, policies, and programs in reference binders.

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."*

The Plant must maintain updated hard copies of approved Plant procedures, policies, and programs in the main building at Midway. This includes but is not limited to, Injury and Illness Prevention Plan, Emergency Response Plan, the updated Spill Prevention Countermeasure and Control Plan, Hazardous Material Business Plan, Hazardous Energy Control Program, Confined Space Entry Program, Job Hazard Analysis and Safe Work Permits. Maintaining updated physical copies allows for immediate access when the online repository may not be accessible or available in emergency situations.

II. Recommendations

Recommendation 1: Midway would benefit from increasing on site staffing.

Midway Peaking is a part of a Middle River Power's (MRP) power generation portfolio, consisting of several other power generation facilities in California. At other MRP facilities, including Midway Peaking, there is only one technician assigned to each site. ESRB observed several instances where the on-site technician would benefit from additional staffing.

Due to unique circumstances during ESRB's audit, more technicians from different MRP facilities were at the Plant to receive forklift training. During that time, Midway had equipment issues with the hydraulic starter that required extensive support from the Operations and Maintenance Manager, Compliance Manager, and three technicians (Midway Peaking, Cal Peak Panoche, and Cal Peak Vaca-Dixon). Without the unique scenario of all personnel coincidentally being at the Plant at the time of the equipment issues, it was apparent to ESRB that the troubleshooting process and corrective actions would have been substantially more difficult for the one Midway technician to complete independently. For this reason, ESRB recommends evaluating the need to add an additional technician to Midway or to the MRP portfolio who supports various MRP facilities based on need.

Additionally, due to the high-risk nature of working at a power plant, having one person staffed at a site raises safety concerns for life and limb of the individual. If the technician were to be injured or incapacitated, the lack of immediate assistance in an emergency could prove to be detrimental. Based on personnel safety, CPUC recommends MRP implements various strategies to improve overall safety for the technician. Possible strategies in addition to increased staff include scheduled check-ins with technicians, implementing a robust JHA program, wearable monitoring systems, and improved site monitoring through cameras.

Having only one staff member present also increases risk when a LOTO is applied. Independent verification is a key aspect of a strong LOTO program, allowing for an independent entity to verify the clearance in person. Independent verification cannot be sufficiently implemented with only one individual assessing the control method.

Recommendation 2: Industry best practice is to restrain pressurized gas cylinders at two points.

Outside the CEMS building, several gas cylinders are secured with one chain each. Best practice is to have two points of restraint using chains at one-third and two-thirds of the cylinder's height. Two points of restraint provides increased stability over one point of restraint. One point of restraint may cause the cylinder to pivot or tip over. A fallen cylinder can result in damage to the valve and the possibility of turning the cylinder into a projectile.

Figure 21: Compressed Gas Cylinders outside of CEMS building

III. List of Documents Reviewed

Category	Ref #	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) (last 3 years)
	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 Test Report and Inspection Record (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	Fire Protection System Inspection Record
	19	Job Safety Analysis Program**
Training	20	Safety Training Records*
	21	Skill-related Training Records*
	22	Certifications for Welders, Forklift & Crane Operators*
	23	Hazmat Training and Record*
Contractor	24	Latest list of Qualified Contractors*
	25	Contractor Selection / Qualification Procedure
	26	Contractor Certification Records
	27	Contractor Monitoring Program
Regulatory	28	Daily CEMS Calibration Records
	29	Air Permit
	30	Water Permit
	31	Spill Prevention Control Plan (SPCC)
	32	CalARP Risk Management Plan (RMP)
O&M	33	Daily Round Sheets / Checklists
	34	Feedwater Grab-sample Test Records

	35	Water Chemistry Manual
	36	Logbook**
	37	List of Open/Backlogged Work Orders*
	38	List of Closed/Retired Work Orders (last 2 years)*
	39	Work Order Management Procedure (last 3 revisions, if applicable)
	40	Computerized Maintenance Management System (Demonstration Onsite)**
	41	SCADA system (Demonstration On-site)**
	42	All Root Cause Analyses (if any)
Gas Turbine	43	Borescope Inspection Reports (last 2 years)
	44	Maintenance & Inspection Procedures (or Related Documents) (last 3 revisions, if applicable)
	45	Intercooler Inspection Reports
	46	Combustors Inspection (CI) Reports
	47	Hot Gas Path (HGI) Inspection Reports
	48	Bearing Lube Oil Analysis Reports
	49	DC Lube Oil Pump Test Records
Main Plant Compressor(s)	50	Inspection Procedures and Records
Document	51	P&IDs*
	52	Vendor Manuals*
Spare Parts	53	Spare Parts Inventory List
	54	Shelf-life Assessment Report
Management	55	Employee Performance Review Procedures and Verifications
	56	Organizational Chart
Generator	57	Bearing Lube Oil Analysis
	58	Maintenance & Inspection Procedures (or related documents)
	59	Polarization Test Records
Transformer	60	Hot Spots / IR Inspection Reports
	61	Oil Analysis Reports
Cathodic Protection	62	Procedures and Inspection Records
Instrumentation	63	Instrument Calibration Procedures and Records
Test Equipment	64	Calibration Procedures and Records
Emission Control Equipment	65	Maintenance & Inspection 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.