

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 4, 2023

Joe Shephard
Plant Manager
Malaga Power Plant
2611 E North Ave
Fresno, CA 93725

SUBJECT: Generation Audit of Malaga Power Plant – Audit Number GA2023-07MLG

Dear Mr. Shephard:

On behalf of Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Dmitriy Lysak of ESRB staff conducted a power plant audit of Malaga Power Plant from March 20, 2023, through March 24, 2023.

During the audit, ESRB staff observed Plant operations, inspected equipment, reviewed data, interviewed Plant staff, and identified violations of General Order (GO) 167-B. A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than June 1, 2023, by providing electronic copy of all corrective measures taken by Malaga Power Plant to remedy and prevent the recurrence of such 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 Saimon Islam at Saimon.Islam@cpuc.ca.gov. Please note that although Malaga Power Plant 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.

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". The request should be sent to Saimon Islam with a copy to me and the GO 167-B inbox GO167@cpuc.ca.gov by May 18, 2023.

If you have any questions concerning this audit, you can contact Dmitriy Lysak at dmitriy.lysak@cpuc.ca.gov or (415)-940-4423.

Sincerely,

A handwritten signature in blue ink, appearing to read "Banu Acimis".

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

Attachment: CPUC Generation Audit Findings

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Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Rickey Tse, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Dmitriy Lysak, Utilities Engineer, ESRB, SED, CPUC

I. Findings Requiring Corrective Action

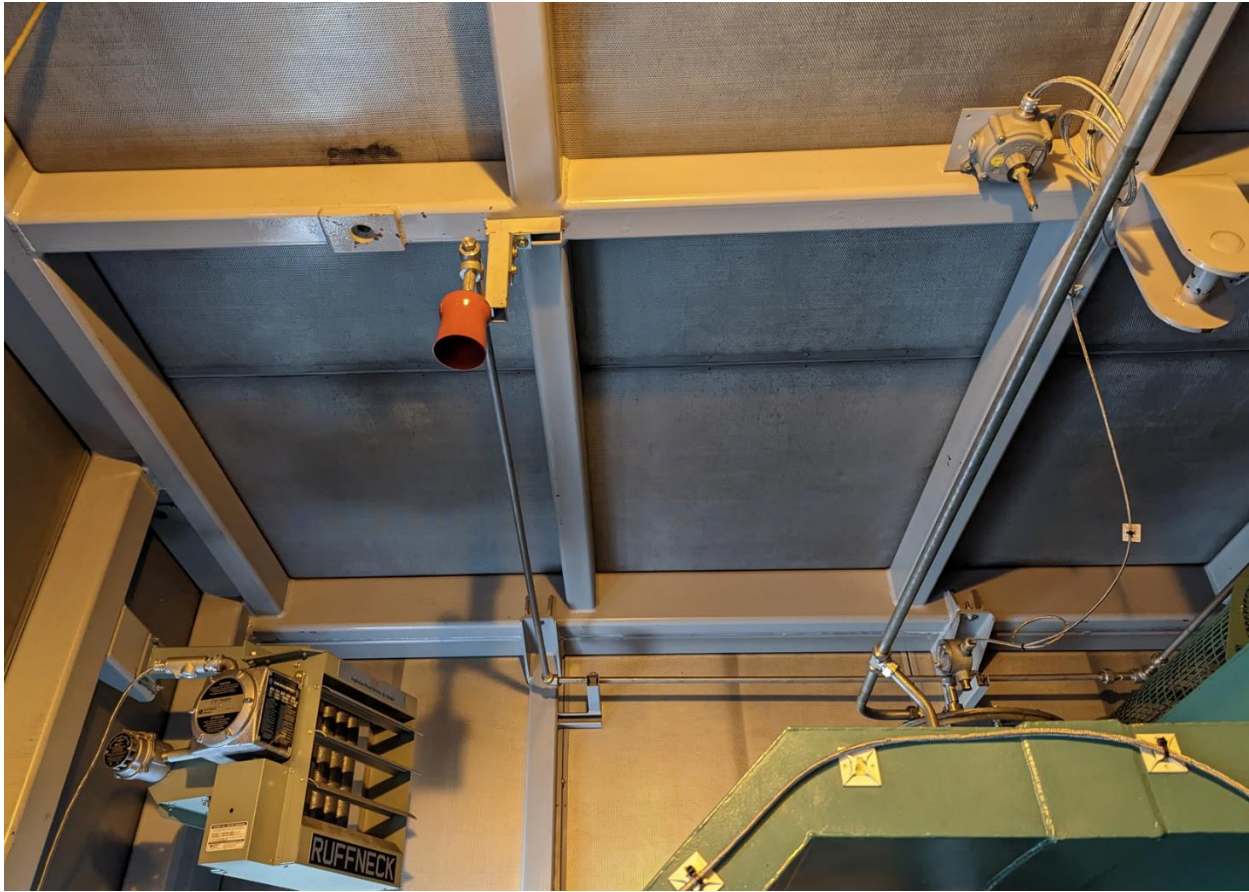
Finding 1: Fire Protection Equipment

GO 167-B, Appendix E, Operating Standards (OS) 28. Z. - Fire Protection System, Detailed Guideline 2.f, Fire Protection Equipment Markings states:

“Fire protection equipment, including but not limited to fire blanket boxes, pumps, hose locations, hydrants, sirens, and extinguishers, are painted red.”

ESRB staff observed various fire suppression equipment throughout the Plant not painted red.





Finding 2: Faded/Missing Trip Hazard Caution Strips

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 faded/missing trip hazard caution strips throughout the facility. These strips shall be restored to good working condition to help prevent accidental trips.





Finding 3: Improperly Stored Spare Parts

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 found spare air filters stored in a switchgear building on the floor, which may pose a tripping hazard. Spare parts shall be inventoried and stored in the warehouse.



Finding 4: Birds Nest on Walkway

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 large bird’s nest in a walkway near the top of the smokestack. The nest obstructs access to the top of the tower and presents a safety hazard for workers.



Finding 5: Turbine Enclosure Lighting

GO 167-B, Appendix D, Maintenance Standards (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. Lights are important for the proper visibility and safety of Plant personnel.



Finding 6: Natural Gas Compressor Vent Stack

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.”

ESRB staff observed surface corrosion and degradation on the gas compressor vent stack.





Finding 7: Damaged Exit Signs

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, Operation Standard 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 observed damaged or illegible exit signs in the gas compressor building. Exit signs shall be kept in good working condition. These signs help inform employees, contactors, and visitors who may be unfamiliar with the Plant of exits in case of emergencies.





Finding 8: Transformer Oil Leaks

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.”

ESRB staff observed oil leaks on the Generator Step Up (GSU) transformer. Some leaks were already repaired but were not cleaned properly. The existing leaks shall be repaired and already repaired leaks shall be cleaned.





Finding 9: Fire Extinguisher Inspections

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, 11.4: Preservation of Records states in part:

“A Generating Asset Owner shall retain all records including logbooks, whether in paper or electronic format, concerning the operation and maintenance of a Generating Assert for five years.”

ESRB staff observed a fire extinguisher that has not been inspected since January 2021. The fire extinguisher was located in the spare parts storage building. It is not clear if the extinguisher is misplaced as it is not included in the spare parts list. The fire extinguisher shall be reinspected and returned to its proper location or added to the spare parts list.

Malaga was not able to locate records for the 2022 Fire Extinguisher Inspection Report and 2022 Q3 Fire Sprinkler Inspection Report. They were able to find an invoice for the work and are in the process of obtaining copies from the vendor.



Finding 10: Damaged Generator Building Cable Tray

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 damaged cable tray that leads into the generator building. The damage likely occurred when employees were working inside the access panels and stepped on the cable tray. Malaga uses scaffolding when working on the cable tray but should reiterate best practices when evidence of improper use is observed.



Finding 11: Expired Wastewater Permit

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.”

Malaga Power Plant wastewater permit expired 12/31/2022. Malaga is in the process of renewing the permit with the county.

II. Observations and Recommendations

Observation 1: Digital Record Storage System

GO 167-B, 11.4: Preservation of Records states in part:

“A Generating Asset Owner shall retain all records including logbooks, whether in paper or electronic format, concerning the operation and maintenance of a Generating Asset for five years.”

Malaga recently switched their digital record storage system from a local server to a cloud-based storage solution. Due to the transition, some records were not in the expected locations and needed to be retrieved elsewhere. ESRB acknowledged that Malaga is in the process of transitioning record retention systems and will continue to optimize access to records.

Observation 2: MSDS Binders

Malaga Power Plant moved to an online portal for tracking and updating Material Safety Data Sheets. Access is available to all Plant employees. However, physical MSDS books are still present and have not been updated since 2013. Outdated MSDS binders could present problems but access to a physical copy could still be beneficial in emergencies. Malaga shall determine how to keep the MSDS binders more up-to-date if they intend to keep the physical copies.

Observation 3: Equipment and SPCC Maps

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.”

The equipment map notates locations of fire extinguishers, med kits and eye wash stations. The equipment is marked with colors, but no legend is available to determine what each color represents. The map should be updated with a legend to limit confusion.

The SPCC Plan map shows the location of spill kits for ammonia but omits the spill kit for oil spills. The map should be updated for completeness.

III. Documents Reviewed

ESRB Staff reviewed the following records and documents:

Category	Reference #	CPUC-Requested Documents
Safety	1	Orientation Program for Visitors and Contractors**
	2	Evacuation Procedure
	3	Evacuation Map and Plant Layout
	4	Evacuation Drill Report & Critique (last 3 years)
	5	Hazmat Handling Procedure
	6	MSDS 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 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	Fire Protection System Inspection Record
Training	19	Safety Training Records*
	20	Skill-related Training Records*
	21	Certifications for Welders, Forklift & Crane Operators*
	22	Hazmat Training and Record*
Contractor	23	Latest list of Qualified Contractors*
	24	Contractor Selection / Qualification Procedure
	25	Contractor Certification Records
	26	Contractor Monitoring Program
Regulatory	27	Daily CEMS Calibration Records
	28	Air Permit
	29	Water Permit
	30	Spill Prevention Control Plan (SPCC)
	31	CalARP Risk Management Plan (RMP)
O&M	32	Daily Round Sheets / Checklists
	33	Logbook**
O&M	34	List of Open/Backlogged Work Orders*
	35	List of Closed/Retired Work Orders (last 2 years)*

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