# PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

GA2022-17IG



December 20, 2022

Mike Carpenter Plant Manager Indigo Generation LLC 63500 19th Ave N. Palm Springs, CA 92258

SUBJECT: Audit report of Indigo Generation LLC

Mr. Carpenter:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Saimon Islam of my staff conducted a power plant audit of Indigo Generation LLC from October 10, 2022, through October 14, 2022.

During the audit, my 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 January 20, 2023, by electronic or hard copy, of all corrective measures taken by Indigo Generation LLC 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.

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 <u>GO167@cpuc.ca.gov</u> by January 20, 2023.

If you have any questions concerning this audit, you can contact Saimon Islam at <u>Saimon.Islam@cpuc.ca.gov</u> or (213) 326-2600.

Sincerely,

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

Attachment: Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC Nika Kjensli, Program Manager, ESRB, CPUC Majed Ibrahim, Senior Utilities Engineer, ESRB, CPUC Saimon Islam, Utilities Engineer, ESRB, CPUC

# **I. Findings Requiring Corrective Action**

# Finding 1: ESRB staff witnessed lube oil leakage in different areas of the plant.

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

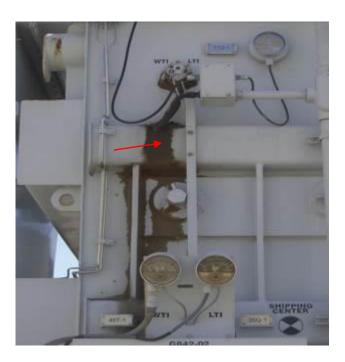
Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable plant operation.

ESRB staff witnessed lube oil leaking in the turbine unit and some weeping from the transformers. Leaking lube oils are an indication of a lack of maintenance and standing lube oil can result in different hazards.











## Finding No. 2: ERSB staff witnessed a light inside the turbine unit compartment out of order

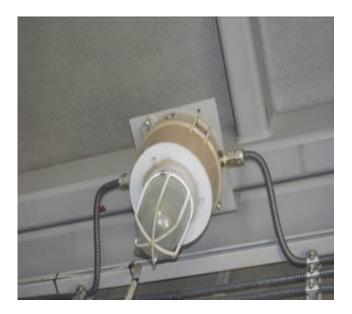
#### GO 167-B, Appendix D, Maintenance Standard 9: Conduct of Maintenance, states:

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 staff witnessed one of the lights inside the turbine unit access compartment that was out of order. Lights are important for the proper visibility and safety of plant personnel.



#### Finding No. 3: ERSB staff witnessed several defective gauges

#### GO 167-B, Appendix D, Maintenance Standard 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.

ERSB staff found numerous illegible gauges. Few gauges had water inside because of having not had a proper seal. Gauges are important for proper operation as they indicate different readings such as pressure, temperature, etc.





# **II. Documents Reviewed**

ESRB Staff reviewed the following records and documents: (\*\* documents were not provided during the time the audit was conducted\*\*)

Category	Reference #	<b>CPUC-Requested Documents</b>
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	Feedwater Grab-sample Test Records

	34	Water Chemistry Manual
-	35	Logbook**
-	36	List of Open/Backlogged Work Orders*
-	30	List of Closed/Retired Work Orders (last 4 quarters)*
-	37	
-	30	Work Order Management Procedure (last 3 revisions, if applicable)
	39	Computerized Maintenance Management System (Demonstration Onsite)**
	40	All Root Cause Analyses (if any)
Gas Turbine	41	Borescope Inspection Reports (last 2 years)
	42	Maintenance & Inspection Procedures (or Related Documents) (last 3 revisions, if applicable)
-	43	Intercooler Inspection Reports
	44	Combustors Inspection (CI) Reports
-	45	Hot Gas Path (HGI) Inspection Reports
	46	Bearing Lube Oil Analysis Reports
	47	DC Lube Oil Pump Test Records
Main Plant Compressor(s)	48	Inspection Procedures and Records
Document	49	P&IDs*
	50	Vendor Manuals*
Spare Parts	51	Spare Parts Inventory List
	52	Shelf-life Assessment Report
Management	53	Employee Performance Review Procedures and Verifications
	54	Organizational Chart
Generator	70	Bearing Lube Oil Analysis
	71	Maintenance & Inspection Procedures (or related documents)
	72	Polarization Test Records
Transformer	73	Hot Spots / IR Inspection Reports
	74	Oil Analysis Reports
Cathodic Protection	75	Procedures and Inspection Records
Instrumentation	79	Instrument Calibration Procedures and Records
Test Equipment	80	Calibration Procedures and Records
Emission Control Equipment (SCR, Ammonia, NOx,		
CO)	81	Maintenance & Inspection Procedures and Records
Internal Audit	82	Internal Audit Procedures and all Records
		at such as a searchable PDF, Word Document, Excel Spreadsheet, etc.
** These items may be	e provided or	n-site by the first day of the audit.