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Abstract

This report focuses on Generating Units 3 and 4, two Mitsubishi-manufactured units with a rated output of 130 MW each, commissioned in June and December 1997, respectively. While both units share a similar design, differences exist in their maintenance history and current operating condition. Turbine valve and turbine thermal shield modifications were implemented in 2010 on Unit 3 and in 2011 on Unit 4. The most recent major overhaul of Unit 3 was completed in 2017, whereas Unit 4 underwent its last major overhaul in 2011. At present, Unit 3 remains in commercial operation and continues to generate power, while Unit 4 is currently not in production.

This document outlines the plant's major components, their technical specifications, and operational performance metrics.



The 2x 130 MW power block is designed to deliver reliable, scalable, and efficient energy production by repurposing the infrastructure of a former coal power plant. This innovative approach maximizes value from existing assets while supporting the global transition to sustainable energy.

Key Features and Benefits

1. High-Capacity Output

Provides up to 2x130 MW of consistent, baseload power to meet the needs of industries, utilities, and grid operators.

2. Proven Reliability

Features robust infrastructure of a decommissioned coal facility, ensuring operational stability and long-term reliability.

Designed with state of the art safety and efficiency standards.

3. Cost-Effective Energy Solution

Lower Capital Investment: Reduces costs and time to grid by utilizing existing equipment.

Operational Efficiency: Optimized for reduced maintenance and operational expenses.

4. Strategic Location

Situated in immediate vicinity to a seaport.

5. Supporting the Energy Transition

Sustainability-Focused: Repurposing decommissioned facilities contributes to environmental goals by minimizing waste and utilizing existing resources.

Applications

2x130 MW power blocks are well-suited for a wide range of applications:

- Utility-Scale Power Generation: Reinforce grid reliability and provide baseload.
- Renewable Energy Backup: Serve as a dependable energy source to balance intermittent renewable inputs.
- The power block can alternatively be adapted to suit gas fired boilers or HRSG's (e.g. gas turbine fired or fed with CSP).

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1. Asset description - General Overview of Power Plant



Figure 1: aerial view of the plant. On the left side is unit 1&2 and on the right side 3&4

The four generating units were manufactured by Mitsubishi and have a largely similar design, with some differences in terms of rated output, commissioning dates, major maintenance activities, and current operating status. Units 1 and 2 are rated at 125 MW and were commissioned in 1981 and 1982, respectively. The last major overhaul was carried out in October 2015 for Unit 1 and in 2012 for Unit 2. During the 2012 overhaul, the generator rotor of Unit 2 was replaced. Both units were permanently taken out of service in December 2019. Units 3 and 4 are rated at 130 MW and were commissioned in June 1997 and December 1997, respectively. Modifications to the turbine valves and turbine thermal shield were performed in 2010 for Unit 3 and in 2011 for Unit 4. The last major overhaul of Unit 3 was completed in 2017, while Unit 4 underwent its last overhaul in 2011. Currently, Unit 3 remains in operation and is producing power, whereas Unit 4 is currently not in production.

The main differences between the units can be summarized as follows:

- Rated output: 125 MW for Units 1 and 2; 130 MW for Units 3 and 4.
- Commissioning date: 1981–1982 for Units 1 and 2; 1997 for Units 3 and 4.
- Major maintenance activities: generator rotor replacement on Unit 2; turbine valve and thermal shield modifications on Units 3 and 4.
- Current status: Units 1 and 2 have been out of service since December 2019; Unit 3 is operational; Unit 4 is currently not in production.

2. Description of Unit 3 and 4

Units 3 and 4 are equipped with Mitsubishi TC2F-23" condensing steam turbines featuring a double-flow, tandem-compound configuration with single reheat. The turbines are rated at approximately 128.6 MW and operate at a nominal speed of 3,000 rpm. Steam is admitted at 156 bar(a) and 538°C, with a reheat temperature of 538°C. The turbine design incorporates HP, IP, and LP sections with a combination of Curtis, impulse, and reaction blading, six feedwater extraction stages, labyrinth sealing systems, and large 23-inch last-stage blades designed for efficient low-pressure expansion.

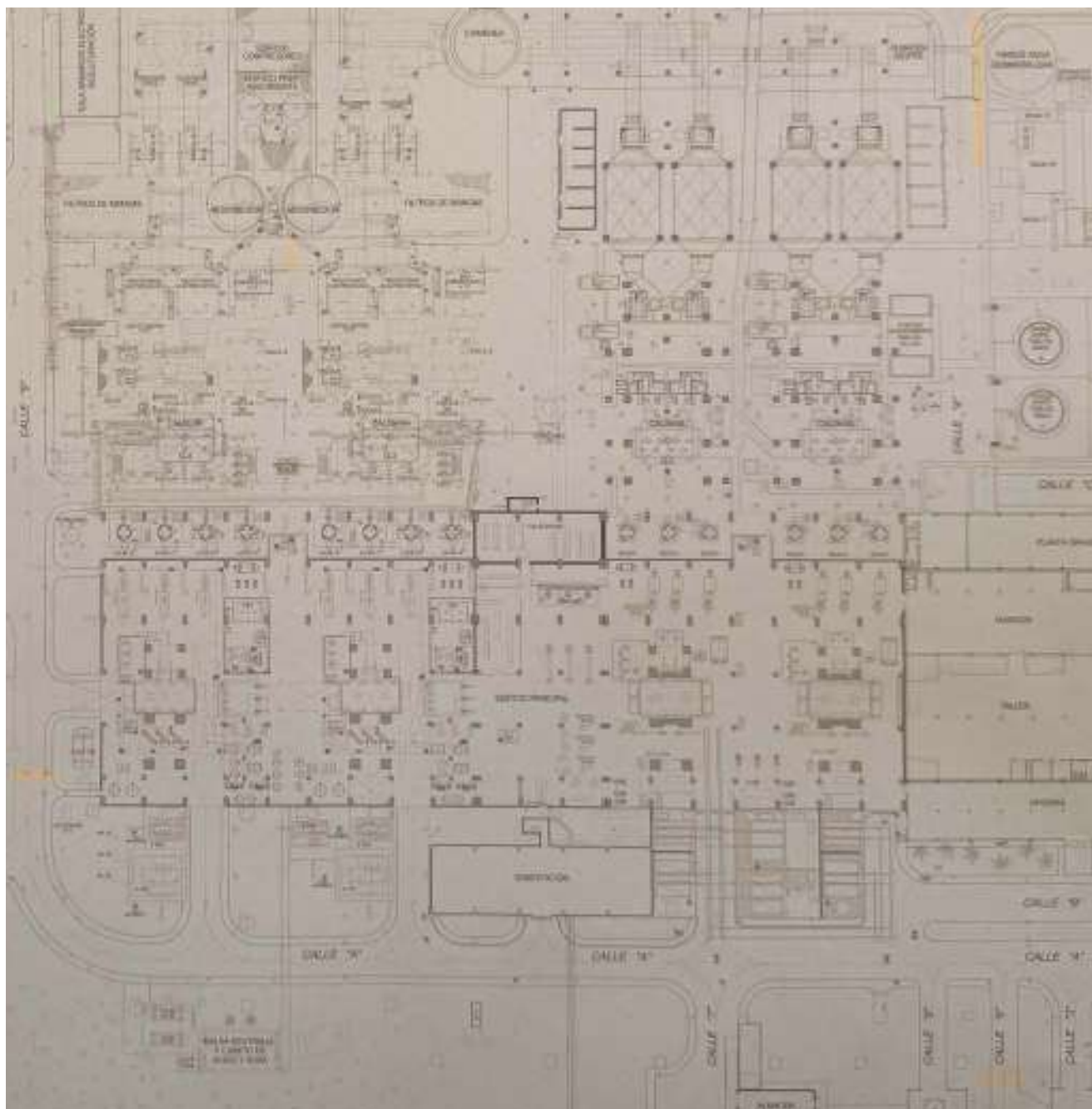


Figure 2: Unit3 and Unit4 diagram

2.1 Steam Turbines technical data

Parameter	Value
Manufacturer	Mitsubishi
Type	TC2F-23
Turbine Type	Condensing steam turbine, double-flow, two-cylinder tandem-compound arrangement with single reheat (TC2F-23")
Rated Output	128.6 MW
Maximum Continuous Output	128.6 MW
Rated Speed	3'000 rpm
Direction of Rotation	Clockwise (viewed from governor end)
Main Steam Pressure (MSV Inlet)	156 bar(a)
Main Steam Temperature (MSV Inlet)	538 °C
Hot Reheat Steam Temperature (RSV Inlet)	538 °C
Condenser Pressure	945.3 mbar (a)
Feedwater Heater Extraction Stages	6
HP Turbine Stages	1 Curtis stage + 6 impulse stages
IP Turbine Stages	10 impulse stages
LP Turbine Stages	7 reaction stages per exhaust flow path

Table 1: steam turbines technical data



Figure 1: ST nameplate

2.2 Generators technical data

Parameter	Value
Manufacturer	Alstom
Type	T 240-370
Year of Commissioning	1995
Rated Apparent Power	162.7 MVA
Rated Active Power	130.2 MW
Rated Current	8'170 A
Frequency	50 Hz
Rotational Speed	3'000 rpm

Table 2: generators technical data

2.3 Boiler / Steam Generator technical data

Parameter	Value
Boiler Type	Pulverized Coal / Fuel Oil Fired Utility Boiler
Manufacturer	Hispánica de Calderería S.A.L.
Main Components	Economizer, Steam Drum, Water Walls, Primary, Radiant and Final Superheaters, Primary, Secondary and Tertiary Reheaters
Fuel	Coal with fuel oil support/start-up firing

Table 3: boilers technical data

2.4 Turbine-generator set

The turbine island is the core of the power block, where thermal energy is converted into mechanical energy.

The turbine control system monitors performance, ensuring efficient operation and preventing damage from pressure fluctuations.

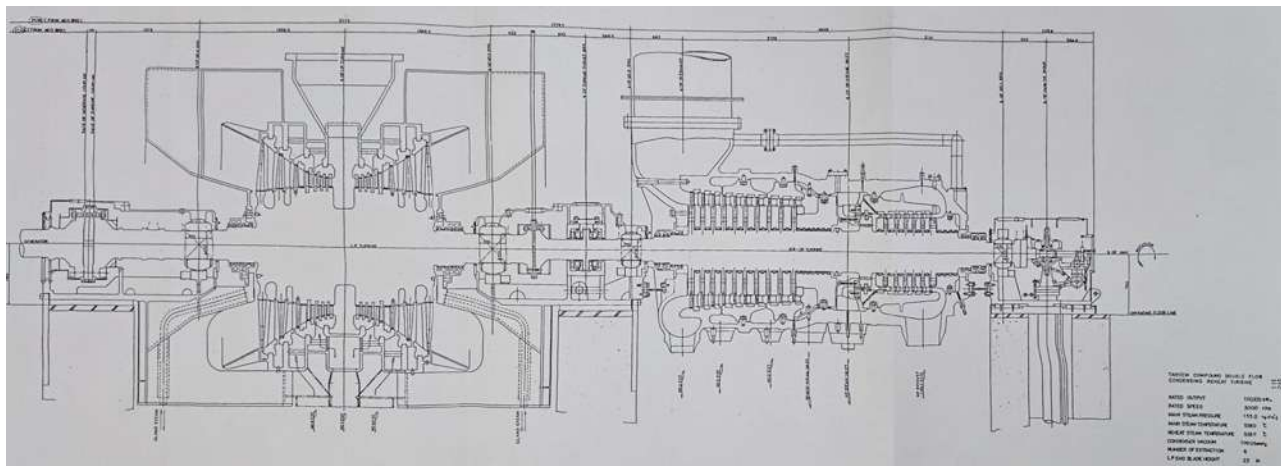


Figure 3: ST diagram

- Turbine Type: Condensing steam turbine, double-flow, two-cylinder tandem-compound arrangement with single reheat
- Manufacturer: Mitsubishi
- Capacity: 2x130 MW
- Generator Type: Synchronous AC generator
- Operating Speed: 3000RPM – 50Hz

The turbine-generator set is designed to convert the steam's thermal energy into rotational energy, which is then converted into electrical power. The steam first enters the high-pressure turbine, then passes through reheaters, and subsequently expands in intermediate and low-pressure turbines before being exhausted into the condenser.

Units 3 and 4 were manufactured by Mitsubishi and share a similar design. Both units are rated at 130 MW and were commissioned in 1997, with Unit 3 entering service in June and Unit 4 in December.

Important turbine upgrades were carried out on both units, including modifications to the turbine valves and thermal shield. These modifications were implemented in 2010 on Unit 3 and 2011 on Unit 4.

The most recent major overhaul of Unit 3 was completed in 2017, while Unit 4 underwent its last major overhaul in 2011.

Regarding current status:

- Unit 3 remains in operation and continues to generate power.
- Unit 4 is currently not in production.

Overall, Unit 3 is the only active steam unit of the two, having benefited from a more recent major overhaul, whereas Unit 4 has not undergone a major overhaul since 2011 and is presently not operating.

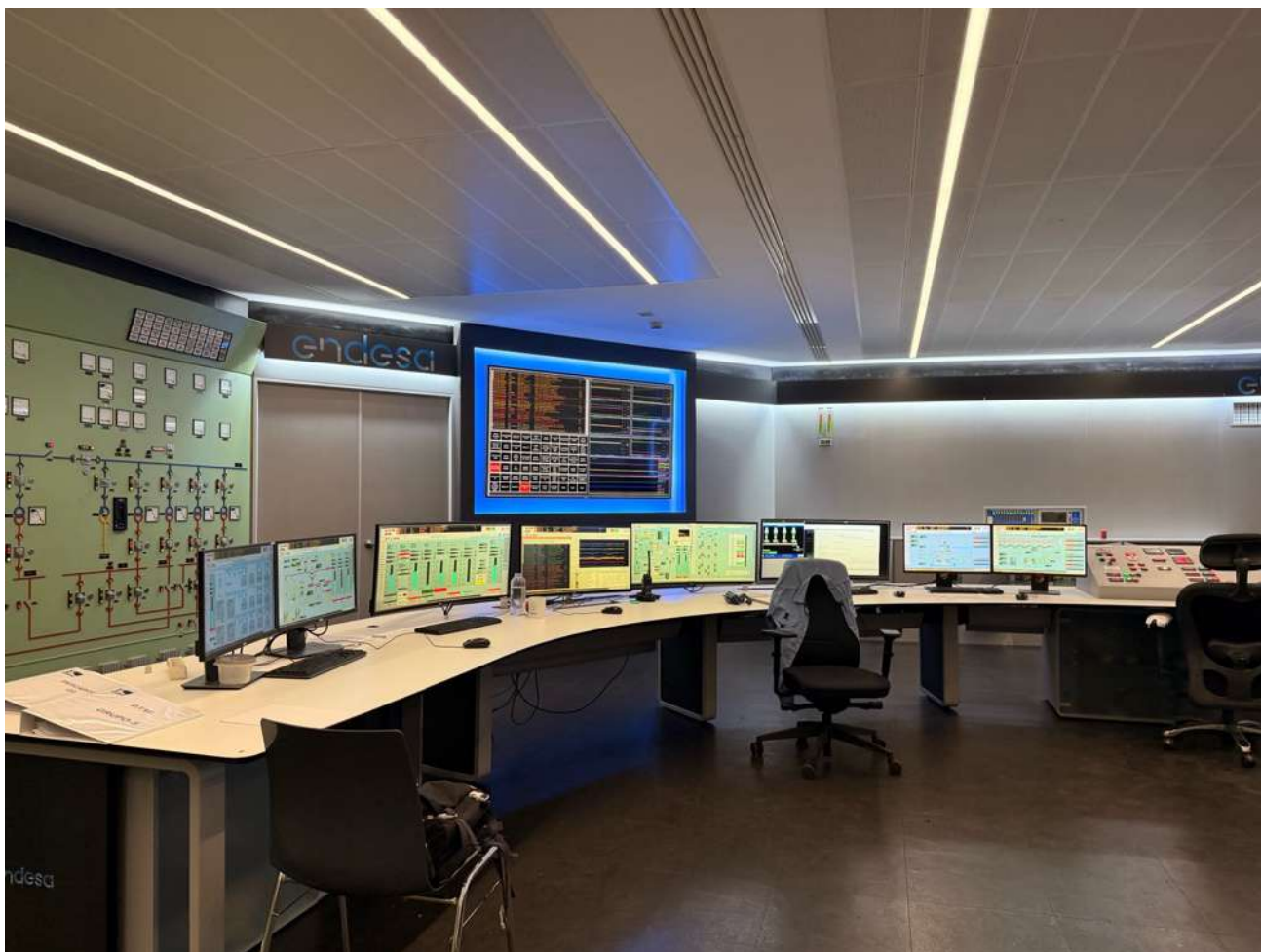


Figure 4: control room



Figure 5: overview of the steam turbine Unit3



Figure 6: overview of the steam turbine Unit4



Figure 7: detail of the HP turbine, Unit3



Figure 8: detail preheaters. All are visually in perfect condition.



Figure 9: overview of the condenser



Figure 10: detail of condensate pumps



Figure 11: overview of drain tank

2.4.1 Steam Turbine Operating History

The operating history of the steam turbines provides valuable information regarding the cumulative mechanical and thermal stresses experienced by the units throughout their service life.

As of July 2026, Unit 3 has accumulated approximately 182,875 operating hours and 192,520 equivalent operating hours (EOH). During the period for which startup records are available, the unit performed 41 hot starts, 19 warm starts, and 24 cold starts.

Unit 4 has accumulated approximately 180,391 operating hours and 188,913 equivalent operating hours (EOH). Recorded startup statistics include 40 hot starts, 20 warm starts, and 23 cold starts.

The relatively similar operating profiles of the two machines reflect their common role within the power plant and their comparable utilization throughout their service life. Both turbines have exceeded 180,000 operating hours, placing them within the category of mature assets that require increasing attention to ageing-related mechanisms such as creep, thermal fatigue, wear of steam-path components, valve degradation, and rotor life consumption.

However, the number of recorded starts remains very moderate when compared with other similar units. This suggests that the turbines have historically operated predominantly in continuous duty load, limiting the accumulation of low-cycle fatigue damage associated with frequent shutdown and startup sequences.

From a life-management perspective, the Equivalent Operating Hours (EOH) values of approximately 192,500 hours for Unit 3 and 188,900 hours for Unit 4 indicate a significant level of accumulated service exposure.

Overall, the operating history indicates that both turbines have experienced extensive long-term service but relatively limited cyclic duty, a combination that is generally more favourable for steam turbine longevity than frequent cycling operation.

2.4.2 Operating History Summary

Parameter	Unit 3	Unit 4
Operating Hours	182,875 h	180,391 h
Equivalent Operating Hours (EOH)	192,520 h	188,913 h
Hot Starts	41	40
Warm Starts	19	20
Cold Starts	24	23
Current Status	In Service	Not in production

Table 4: Turbine-generator set operating hours

2.5 Generator

The power station is equipped with two Alstom T240-370 synchronous turbo-generators directly coupled to Mitsubishi steam turbines. Both machines were built in 1995 and are rated at approximately 163 MVA and 130 MW, operating at 50 Hz and 3'000 rpm.

Despite their common design and similar operating principles, the two generators exhibit different maintenance histories, operating profiles and current operating status. Both machines have accumulated more than 180'000 operating hours and can therefore be considered mature assets that have reached a significant stage in their operational life cycle. Nevertheless, major inspections and diagnostic campaigns performed over the years indicate that the electrical and mechanical condition of the generators remains generally satisfactory.

Particular attention has been given to the condition of the stator insulation systems, rotor windings, cooling systems and bearing assemblies. The available inspection and testing results show no evidence of severe insulation degradation or defects requiring immediate corrective action.

2.5.1 Generator Unit 3

Generator Unit 3 is an Alstom T240-370 turbo-generator built in 1995 with a rated apparent power of 162.7 MVA and a rated active output of 130.2 MW. As of July 2026, the machine has accumulated 182'875 operating hours and 192'520 equivalent operating hours, reflecting a long but stable operational history. The unit has experienced 24 cold starts, 19 warm starts and 41 hot starts during the available operating period.

A major overhaul was completed in 2017 and included generator dismantling, rotor extraction, stator inspection, bearing inspection, cooler maintenance and an extensive electrical testing programme. The final assessment concluded that the generator was suitable for continued operation.

The stator winding system was found to be in generally good condition. Inspection revealed limited dust contamination, minor fretting marks and localized corona activity within the end-winding region. These observations are consistent with normal ageing mechanisms expected in generators of comparable age and service exposure. No significant deterioration of the insulation system was detected, and all identified areas were repaired or stabilized during the outage.

The stator core inspection and ELCID tests produced satisfactory results, with no evidence of active core faults, excessive local heating or deterioration of the inter-laminar insulation system. The stator wedge condition also remained within acceptable limits, indicating that the winding support system continues to provide adequate mechanical restraint.

Rotor inspections reported no significant mechanical or electrical deficiencies. Ventilation components were found in good condition, balancing weights remained secure and the rotor grounding brush was replaced as a preventative maintenance action.

Additional insulation diagnostic testing demonstrated strong dielectric performance. Polarization Index values exceeding 3.0, low leakage current levels and stable capacitance measurements indicate that the stator insulation system remains in good electrical condition despite the generator's age and accumulated service hours.

Overall, Unit 3 can be considered to be in good mechanical and electrical condition.

2.5.2 Generator Unit 4

Generator Unit 4 is also an Alstom T240-370 turbo-generator built in 1995, with identical electrical ratings to Unit 3. According to the latest operating records, the machine has accumulated 180'391 operating hours and 188'913 equivalent operating hours. The recorded starts include 23 cold starts, 20 warm starts and 40 hot starts. The unit is currently out of service.

The latest major overhaul was performed in 2014 and included comprehensive mechanical inspections, rotor electrical testing, exciter testing and inspections of the medium-voltage systems and cooling equipment. The machine was considered fit for continued operation following completion of the maintenance works.

Electrical testing of the rotor produced excellent results. Insulation resistance measurements, pole balance tests, impedance measurements and Rotor Shorted Turn (RSO) tests all met acceptance criteria and revealed no evidence of winding defects or insulation failures.

The exciter was also found to be in satisfactory condition. Although dust contamination was observed, no winding damage or structural defects were identified. One rectifier diode exhibited abnormal leakage current and was replaced during the outage, after which all electrical test results became satisfactory.

Pressure testing confirmed that the coolers remained leak-tight following maintenance.

Overall, Unit 4 demonstrates very good electrical characteristics and satisfactory mechanical condition.



Figure 12: overview of the generator with its exciter.

2.6 Electrical Systems

The electrical systems of this asset include:

- Step-up Transformers: Increase voltage to suitable transmission levels for integration into the national grid.
- Switchyard: Includes circuit breakers and busbars to regulate electricity distribution and safeguard equipment from faults.
- Power Management System (PMS): A fully automated control unit optimizes power dispatch and monitors real-time performance, ensuring stability and grid compliance.

2.6.1 Main Power Transformers

The generating units are connected to the transmission network through oil-immersed power transformers designed for large-scale utility service. The transformer nameplates indicate a robust and conventional configuration consistent with thermal power station applications. The available information suggests the presence of a generator step-up (GSU) transformer for power evacuation and an auxiliary transformer supplying the station electrical services.

2.6.1.1 Generator Step-Up Transformer

The main generator transformer was manufactured by General Eléctrica Española (GEE) in 1979 and is identified as type TPAV 150000/245. The transformer is rated at 150 MVA under forced-air cooling and 112.5 MVA under natural cooling conditions. The voltage ratio is 245 kV / 12.3 kV, providing the connection between the generator terminals and the high-voltage transmission network.

The transformer is configured with a YNd11 vector group, consisting of a grounded-star high-voltage winding and a delta-connected low-voltage winding. This arrangement is commonly employed for generator step-up applications due to its ability to provide effective grounding of the transmission system while suppressing the circulation of zero-sequence currents on the generator side.

The transformer is a large utility-class unit with a total weight of approximately 172 tons, including about 40 tons of insulating oil. The active part alone weighs approximately 92 tons, highlighting the substantial dimensions of the equipment.

Given its manufacturing date, the transformer has accumulated nearly five decades of service and is likely one of the oldest major electrical assets within the generating plant.

2.6.1.2 Auxiliary Transformer

The station auxiliary transformer was manufactured by ABB Trafonor S.A. in 1994 and is identified as type TPA 29175/226. The transformer is rated at 25 MVA and includes an additional 8.35 MVA tertiary winding.

The nominal voltage ratio is 22.6 kV / 6.35 kV, supplying the medium-voltage distribution system that feeds the plant auxiliary loads, including pumps, fans, motors, control systems, and balance-of-plant equipment.

The transformer is configured with a YNyn0-d11 vector group, consisting of grounded-star primary and secondary windings together with a delta-connected tertiary winding. This configuration is frequently adopted in power stations to improve system grounding performance, reduce harmonic effects, and enhance network stability.

The nameplate indicates multiple tap positions, suggesting the presence of an on-load tap changer (OLTC) for voltage regulation under varying operating conditions. The total transformer weight is approximately 85.5 tons, including around 27.2 tons of insulating oil.

2.6.1.3 Spare Generator Step-Up Transformer

In addition to the installed power transformers, the plant has an unconnected spare generator step-up (GSU) transformer manufactured by EFACEC (Portugal) in 2012.

The transformer is a three-phase oil-immersed unit designed specifically for the steam units and is suitable for application on both Unit 1/2 and Unit 3/4 configurations through dedicated tap-changer settings. The transformer is rated at:

- 130 MVA under ONAN cooling conditions.
- 162 MVA under ONAF cooling conditions.
- 245 kV / 11.5-12.3 kV nominal voltage ratio depending on the selected operating position.
- 50 Hz frequency.
- YNd11 vector group.

The unit is equipped with an on-load tap changer and several predefined operating positions to match the different generator terminal voltage configurations used across the plant. The transformer has a short-circuit impedance of approximately 14-15%, referenced to 162 MVA, which is consistent with modern generator step-up transformer design.

From a mechanical standpoint, the transformer is a large utility-class asset with a total transport weight of approximately 203 tons, including around 26.5 tons of insulating oil. The active part alone weighs approximately 114 tons, reflecting a robust design intended for high-power generation service.

The replacement transformer is significantly newer than the original GSU transformers currently installed at the station, having been manufactured in 2012 compared with the original units dating from 1979. As a result, it represents a valuable strategic asset for the plant, substantially reducing the risk associated with a potential failure of an existing generator transformer.

From an asset-management perspective, the availability of a spare transformer of equivalent rating is a major advantage. Generator step-up transformers are typically among the most critical and longest-lead-time components within a thermal power plant, often requiring many months or even years for replacement in the event of a catastrophic failure. The presence of a compatible spare unit therefore provides a significant improvement in overall plant resilience and operational flexibility.

2.6.1.4 Overall Assessment

The transformer fleet reflects a conventional and proven design philosophy for steam power generation facilities. The auxiliary transformer, manufactured in 1994, remains broadly consistent in age with the generators and turbine units. In contrast, the generator step-up transformer dates from 1979 and therefore represents the oldest critical electrical asset identified during this review.

Based on the nameplate information, both transformers appear adequately sized for their intended functions and feature industry-standard vector group configurations. However, due to the advanced age of the generator step-up transformer, particular attention should be given to asset-life management activities and transformer health monitoring programmes, as its condition will be a key factor influencing the long-term reliability and availability of the generating unit.

A significant positive aspect identified during the assessment is the availability of a dedicated spare generator step-up transformer manufactured by EFACEC in 2012. The spare unit is rated at 130 MVA (ONAN) and 162 MVA (ONAF) and is specifically designed to be compatible with the generating units installed at the plant. As such, it represents a strategically important asset that can be deployed in the event of a major failure of one of the existing generator transformers.

From an asset management perspective, the presence of a fully compatible spare GSU transformer substantially reduces the operational and financial risks typically associated with ageing transformer fleets. Generator step-up transformers are among the most critical components in a thermal power plant and generally have long procurement and replacement lead times. The availability of a modern spare unit therefore significantly improves the resilience of the electrical infrastructure and mitigates one of the most severe single-point failure scenarios within the plant.

Overall, while the installed generator step-up transformer remains an ageing asset that requires continued condition monitoring, the existence of the 2012 spare transformer is considered one of the most important positive findings of this assessment and provides a substantial reduction in transformer-related availability risk.



Figure 13: overview of transformers



Figure 14: overview of transformers



Figure 15: overview of spare transformer



Figure 16: detail of MCC Group4

3. Units 1 and 2 Assessment

Units 1 and 2 have been out of service for a considerable length of time and were found to be in a poor state of preservation. During the site inspection, it was observed that the level of conservation and maintenance of these units is significantly below that of Units 3 and 4. The preservation measures implemented over the years do not appear to be sufficient to ensure the long-term integrity and potential reusability of the assets.

It should also be noted that Units 1 and 2 are significantly older than Units 3 and 4, having been commissioned in 1981 and 1982 respectively. As a result, the age of the equipment further limits its commercial attractiveness for relocation, refurbishment, or future operation when compared with the newer Units 3 and 4.

Furthermore, the presence of asbestos-containing materials (ACMs) was identified within the Units 1 and 2 facilities. Any future dismantling, rehabilitation, or recommissioning activities would therefore require dedicated asbestos management and removal programs in accordance with applicable environmental, health, and safety regulations, resulting in additional costs, technical constraints, and project risks.

In addition, Units 1 and 2 belong to a different generation and design configuration than Units 3 and 4. Consequently, they do not offer the same degree of equipment interchangeability, operational compatibility, or strategic spare-parts value that Unit 4 provides in support of Unit 3. From both a technical and commercial perspective, Units 1 and 2 cannot be considered a meaningful source of spare parts for the continued operation or support of Units 3 and 4.

Considering:

- The prolonged period of inactivity;
- The poor state of preservation of the assets;
- The advanced age of the equipment, commissioned in 1981 and 1982;
- The presence of asbestos-containing materials;
- The limited commercial attractiveness for relocation or recommissioning;
- The lack of strategic compatibility with Units 3 and 4;

it is the opinion of the assessment team that Units 1 and 2 should be regarded primarily as candidates for decommissioning and dismantling, with any residual value largely limited to scrap recovery and the selective salvage of reusable materials.

Consequently, Units 1 and 2 have not been considered in the technical and commercial valuation presented in this report. The present assessment focuses exclusively on Unit 3, which is currently in operation and fully functional, and Unit 4, which has been preserved in satisfactory condition and is considered suitable as a strategic source of spare parts and long-term support for Unit 3.

4. Balance of Plant Systems

4.1 Cooling System: Once-through seawater cooling



Figure 17: Seawater cooling water pumps

4.2 Water treatment system



Figure 18: desalinator1

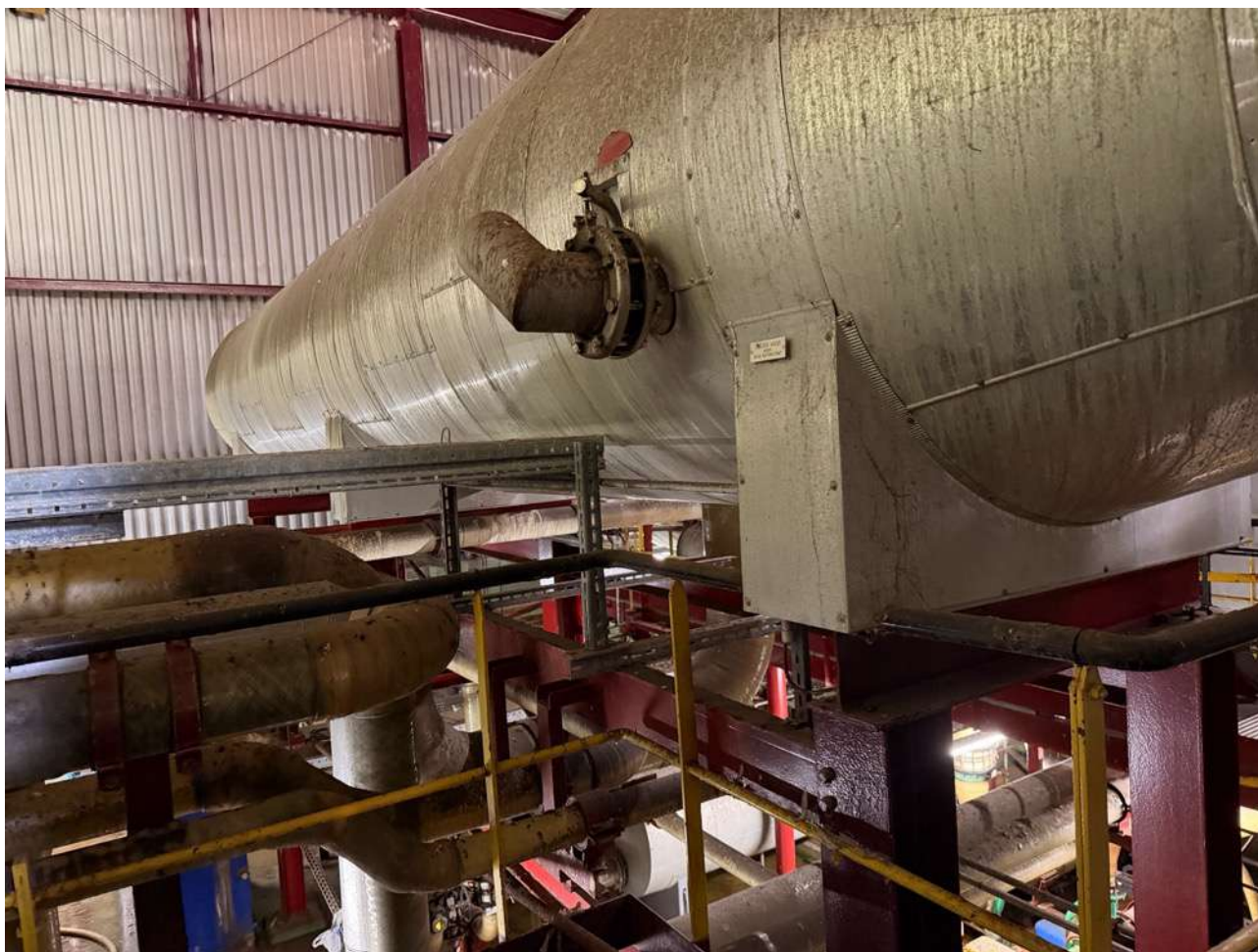


Figure 19: desalinador2

4.3 Boiler System

Units 3 and 4 of the Power Station are large, coal fired, utility steam generators designed to supply superheated and reheated steam to the turbine-generator sets. The boilers are equipped with the typical heat transfer sections found in pulverized-fuel power plants, including economizers, water walls, steam drum, primary, radiant and final superheaters, as well as primary, secondary and tertiary reheaters. The design incorporates extensive pressure-part systems such as downcomers, risers, feeders and main steam piping to ensure efficient steam generation and heat recovery. The inspection reports confirm the presence of all these components and their continued satisfactory condition.

The steam generating units were built as coal-fired boilers, with the capability to operate using fuel oil/diesel as support or alternative fuel during startup, low-load operation and fuel flexibility requirements. The boiler arrangement includes dedicated fuel-oil heating systems, fuel-oil equipment and auxiliary steam systems, confirming the capability for liquid-fuel firing in addition to their traditional solid-fuel operation.

After more than 180'000 operating hours each, both boilers continue to demonstrate solid mechanical integrity and reliable performance. Unit 3 has accumulated approximately 182'875 operating hours with 84 recorded starts, while Unit 4 has accumulated approximately 180'391 operating hours with 91 recorded starts.

CALDERA VAPOR GRUPOS 3 Y 4

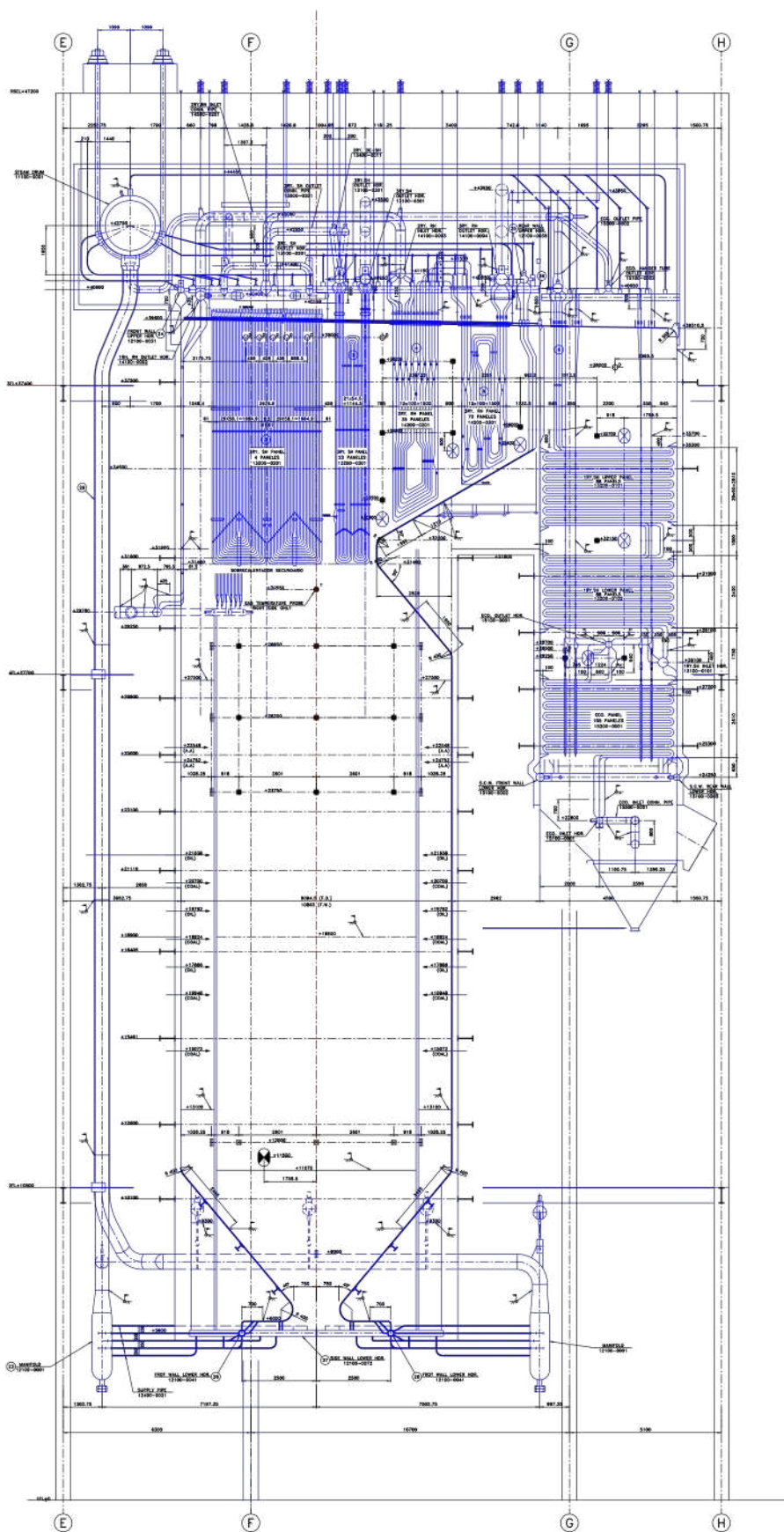


Figure 20: Boiler System

4.3.1 Boiler Condition Assessment

The inspections performed during the 2023 and 2024 outages indicate that both boilers remain in generally good condition and suitable for continued operation. Comprehensive non-destructive examinations performed during the major outages found no evidence of significant cracking, creep damage, structural deterioration or other critical defects affecting the pressure parts. Thickness measurements, metallographic examinations, magnetic particle testing, liquid penetrant testing and ultrasonic inspections confirmed that the majority of components remain within acceptable service limits.

Some age-related degradation mechanisms were identified, including localized oxidation, corrosion, erosion in sootblower areas, isolated low wall-thickness readings on selected water-wall and superheater tubes, and deterioration of protective tiles and refractory materials in high-wear zones. However, these findings were limited in scope, did not compromise the integrity of the boilers, and are being addressed through routine maintenance and periodic monitoring programs.

Overall, the condition of Units 3 and 4 can be considered good for their service age, with no major findings requiring immediate corrective action. Based on the inspections performed, both boilers are considered capable of maintaining safe and reliable operation until the next scheduled major outage, provided that the recommended monitoring of erosion-prone and corrosion-prone areas continues.



Figure 21: side view of the boiler Unit4



Figure 22: side view of the boiler Unit3.



Figure 23: the sooth blowers are installed below the boiler, the fresh air blowers on the sides



Figure 24: coal mill. Perfectly cleaned.

4.4 Coal conveyor system



Figure 25: coal conveyor building.

4.5 Ash Handling System: MAC® (Magaldi Ash Cooler) system

Waste Management

- Ash Handling: Dry handling system to reduce water usage.
- Wastewater Treatment: Meets regulatory standards for discharge compliance.

The ash handling system provides a dry ash cooling and extraction solution, reducing water consumption and improving environmental performance.



Figure 26: ash conveyor



Figure 27: ash storage system

5. Asset condition

The asset has been well maintained throughout its operational life.

Unit 3 is currently in operation and was observed to be fully functional at the time of this assessment.

Unit 4, despite being not in operation has also been preserved and maintained to a high standard. At the time of issuance of this report, all Unit 4's electrical systems remained energized or were maintained in cold standby condition. Although the shutdown process and subsequent preservation activities were carried out in a professional and technically sound manner, major equipment such as the boiler, steam turbine, generator, transformers, and associated auxiliary systems are likely to require comprehensive inspections, condition assessments, and overhaul activities prior to recommissioning.

Technical documentation is complete and readily available in both hard-copy and electronic formats, ensuring adequate support for future operation, maintenance, refurbishment, or rehabilitation activities.

Overall, the inspections performed indicate that the plant has retained a satisfactory level of integrity and maintainability. Further details regarding the condition assessment, inspection findings, identified deficiencies, and recommendations for the main plant systems and equipment are provided in Chapter 3, within the dedicated sections for each asset and subsystem.



Figure 28: documentation is available, in electronic format as well as in original hardcopies.

6. Warehouse

The warehouse is in excellent condition and the tracking of the equipment is fair. The stock of strategic operational spares is reasonable, however it needs to be completed in case of future utilization.

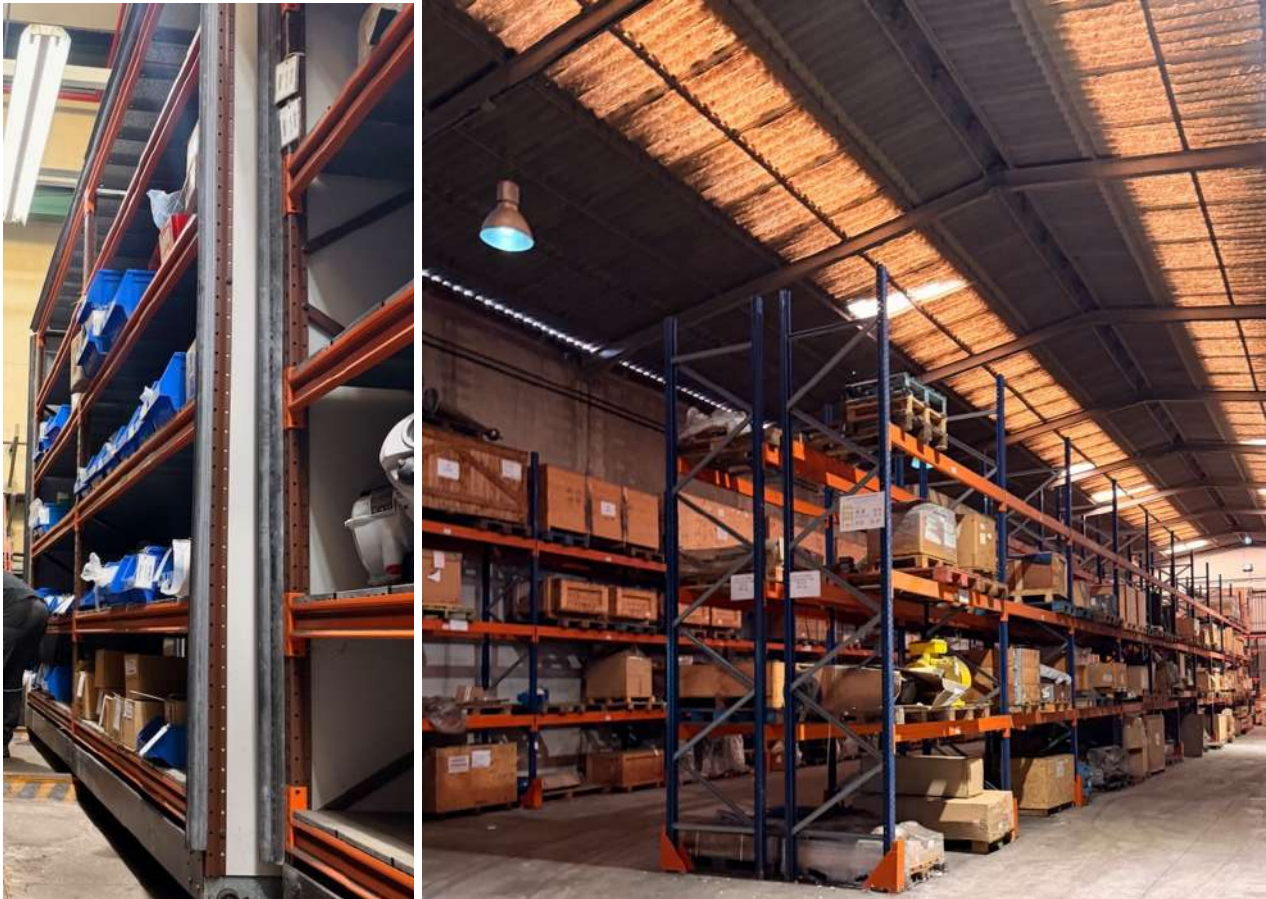


Figure 29: Power Plant Warehouse: small materials area (left) and large equipment (right).