

No.	Project Name	Brief Description
1	Purchase of Capital Spares ABB 2024	Purchase Spares for PTL10MOH2024
2	Purchase of Transformers	To improve Black Start Capabilities at Point Lisas to start PTI13 & 14
3	Installation of a low-impedance Bus bar Protection Scheme for PTLS 66kV Bus bar	To supply material and labour to design, install and commission a low-impedance bus bar protection scheme for PTLS 66kV Bus bar.
4	Control Room Upgrade	PTL Control Room 1.Conversion to a Command Centre. 2.Refurbishment with safe and ergonomic work space
5	Replacement of Switchyard Isolators, Moving Contacts and Breakers	1. Purchase and installation of Isolator drives. 2. Purchase and installation of Isolators and contacts. 3. Purchase of 132kV breakers Reliability spares.
6	Purchase of Reliability Spares	1. ABB Exciter 2. Breaker - 4160V Westinghouse 3. Breaker - 4160V Siemens
7	New Capital Spares Siemens 2024	Purchase of Reliability spares
8	PTL 14 Generator Rotor Installation	Turnkey project <ul style="list-style-type: none"> <li>• Dismantle the PTL14 Generator, Remove rotor</li> <li>• Test and Install the new generator rotor</li> <li>• Re-assemble and align Turbine- Generator</li> <li>• Commission unit</li> </ul>
9	Purchase of Capital Spares - Frame 7EA	Purchase Spares for to replace non-repairable items from PEN 10 MOH
10	Purchase of Steam Turbine Bearings 2024	PEN 9 -Purchase of HP & LP Bearings.

11	Purchase of Reliability Spares	Purchase of Boiler Feed Motor & HRSG/ST Pneumatic Tool
12	Change out of existing Air Conditioning Units	Purchase and Install A/C Units at PEN
13	Purchase of Furniture	Purchase of new furniture at PEN - to replace old and defective items
14	Generator Breaker - PEN 10	Purchase one Generator Breaker for installation
15	Generator Breaker - PEN8 & 9	Purchase one Generator Breaker for installation
16	Installation of a Deluge System for PEN 10 Generator Transformer	Installation of a Deluge System for PEN 10 Generator Transformer
17	Mark VI migration	Upgrade to the Mark VIe. -Purchase of Hardware
18	Purchase & Install New Frame 5 Excitation System	Purchase and install a new excitation system for the two units - Pen 6 & 7
19	Natural Gas Line Replacement	Planned replacement of natural gas line
20	Performance Assessment for Penal Combined Cycle Power Generation Facility	Evaluate & compare the current performance versus original design performance (1985) and retrofitted performance (2002).
21	Network Infrastructure Upgrade	Upgrade of IT Networking devices (routers, wireless controllers and wireless access points).
22	Server Hardware Upgrade	Upgrade of IT Server Assets
23	Digitalization - Phase 2	Second phase of the Digitalization project
24	CCTV System Upgrade - Penal	Upgrade the CCTV System at Penal

25	Purchase of Furniture (Finance)	Purchase of new furniture at PEN - to replace old and defective items
26	Operations Technology (Ot) Asset Management Platform	Implement an OT Asset Management platform on the OT systems for continuous critical cyber asset monitoring
27	Nexgen Firewall for Operations Technology (Ot) Systems	Implement a NexGen Firewall to segment and segregate the OT systems
28	Internet Redundancy - Penal	Install a secondary site firewall with redundant links
29	Recovery of OT System	Testing the OT backups at both Point Lisas and Penal Plants.
30	Business Development	Business development projects
31	Repair of Maintenance Spares	Repair live tank 132kV breaker, dead tank 132kV breaker, EHC valves, ABB acceleration limiter, ABB Speed changer, Siemens IGV Ram, Repairs to ABB Exciter
32	PTL 8 Combustor Inspection 2024	Inspect Combustor Components – Hot gas casing, U-duct inner liner, combustor lower insert, tiles and tile carrier
33	PTL 12 Hot Gas Path Inspection 2024	PTL12HGPI2024
34	PTL 9 Combustor Inspection 2024	PTL9CI2024
35	Fuel Gas Compressor Rebuild	Replacement of crank shaft and connecting rods and associated bearings.

36	T3000 CSA (customer service agreement) and application whitelisting	T3000 CSA (customer service agreement) and application whitelisting
37	Installation of SEL-787 numerical transformer protection relays	Supply material and labour to install, program and commission SEL-787 numerical transformer protection relays
38	Alternative Black Capabilities	Rental of two (2) 1MW Diesel Generators.
39	Repair of Capital Spares - Siemens	Recondition Row 1-4 turbine Blades
40	Point Lisas Unit 13 and 14 Power Diagnostic Basic Service	Siemens Energy Power Diagnostics Basic Service installation and yearly fees
41	Penal 8 Enhanced Borescope & Annual Inspection	PEN8EBI2024
42	Penal 9 Annual Inspection	PEN9IA2024
43	Repair of Capital Spares - Frame 5	Repair and replacement of defective combustion components removed from Penal 6
44	Repair of a Spare Replacement Gas Control Valve for Penal 8 & 10	Repair of a Spare Replacement Gas Control Valve for Penal 8 & 10
45	Indoor 66kV switchgear design, engineering & replacement	Upgrade and Replacement - Indoor 66kV switchgear

46	Purchase and Installation of Vibration Monitoring Equipment for Plant Auxiliary Equipment	Purchase and Installation of Vibration Monitoring Equipment for the Plant Auxiliary Equipment:
47	Upgrade of 33kV bus and line protection, control and system monitoring	Upgrade of 33kV bus and line protection, control and system monitoring
48	Upgrade of Generator, Main Power Transformer and Auxiliary Transformer Protection for Penal 8,9 & 10	Upgrade of electromechanical relays to digital relays
49	Roof Repair - Mechanical Workshop	Replacement of sheeting
50	Operations Technology Assessment	Operations Technology Assessment
51	PTL 10 Major Overhaul 2024	PTL10MOH2024
52	PTL 13 Major Overhaul 2024	PTL13MOH2024
53	Pen 10 Major Overhaul	PEN10MOH 2024