

The Fund's significant management and future direction in management

Maintenance in 2020

In 2020, Electricity Generating Authority of Thailand (EGAT) has performed maintenance of the North Bangkok Power Plant Block 1 to be in readiness for seeking benefit. The detail of maintenance activities is set out as follows;

No.	Maintenance	Objective
1	Hot Gas Path Inspection (HGPI) for Gas Turbine System	<ul style="list-style-type: none"> - Change spare parts by life of equipment which installed in path of hot natural gas - To inspect malfunction of Compressor, Combustion, Gas Turbine.
2	Minor Inspection (MI) for Steam Turbine System by expanding the scope of work of High Pressure and Intermediate Pressure Steam Turbine to Overhaul	- Follow as recommendation of OEM after steam leakage problem in year 2018
3	Change reheat attemperator to new design and check tube leakage and thickness of tube in HRSG	- To resolve the circumference crack problem by stress concentration.
4	Upgrade Gas Turbine Control System (MkVIe)	Upgrade
5	Change Load Commutated Inverter (LCI) and Exciter	Upgrade
6	Overhaul both of Circulating Water Pump :CWP	Follow as recommendation of OEM
7	Inspect Condenser by Eddy Current	Inspect leakage of Condenser Tube
8	Change GT11 Generator Rotor	Found cooling hole block during generator inspection which ever occurred in GT12 Generator Rotor in year 2016

Future direction in management of the fund

According to the maintenance schedule in 2021, EGAT will perform an annual yearly inspection for North Bangkok power plant block 1, but during the maintenance operation in a previous year, it was found that 1 of the IP steam turbine blade stage 21 was partially damaged. Therefore, EGAT has consulted with the manufacturer (OEM) about the partially damage, and the OEM has recommended to replace the entire blade stage 21 for the safety reason of the power plant.

In 2021, apart from the yearly inspection, EGAT plans to replace the blade stage 21 at the expense of EGAT, according to the RTA. the replacement of the blade stage 21 will reduce the risk of steam turbine break down. The detail of the maintenance work in this year is as follow.

No.	Maintenance	Objective
1	Replace IP Steam Turbine Blade Stage 21	OEM recommendation
2	Inspect Compressor, Combustion, Gas Turbine by Bore Scope Inspection	To inspect malfunction of Compressor, Combustion, Gas Turbine yearly.
3	Realignment GT11	To rectify mass unbalance problem
4	Overhaul CTG (Combustion Turbine Generator) Power Transformer	Time based maintenance
5	Assess remaining life of HRSG (Hear Recovery Steam Generator)	To prepare maintenance activities for Major Overhaul in year 2024
6	Inspect Condenser Tube 100% by Eddy Current and Clean Condenser	To inspect leakage of tube in Condenser and to prepare maintenance activities for Major Overhaul in year 2024