Annex – 3
(Immediate measures without financial implication)

Measures implemented

Sr. No.	volume	Recommendations	Effects / Results / Improvements seen
1	NTPS_VOL1, PAGE-10,S.N.-3	The responsibility and accountability of coal consumption is to be shared as follows: Source end to receiving end: Fuel Cell Receiving end to Bunker: Coal handling plant: Consumption beyond bunker: Operations	Closely monitoring the coal consumption
2	NTPS_VOL1, PAGE-16,S.N.-103	Implementing a detailed rainy season station management plan.	1.Improvement in Generation 2.Unwarranted emergencies are avoided.
3	NTPS_VOL3, PAGE-8,S.N.-20	Optimizing the time for wagon tipplers	Improvement in Unloading.
4	NTPS_VOL3, PAGE-8,S.N.-21	Strengthening and Improving the maintenance practices at CHP	Availability of conveyor system improved
5	NTPS_VOL3, PAGE-8,S.N.-22	Operating the CHP near to its full capacity	1.Increasing unloading. 2. Reduction in demurrage 3. Avoiding generation loss 4.Streams operating at rated capacity
6	NTPS_VOL3&4, Page-8, S.N.-24	Measuring the ash to water ratio on daily basis	Will result in substantial reduction in water, auxiliary consumption & running hours.
7	NTPS_VOL3&4, Page-8, S.N.-25	Optimizing water to ash ratio	Will result in substantial reduction in water, auxiliary consumption & running hours.
8	NTPS_VOL1, Page- 10, S.N.-7	Sampling improvement : Sampling through automatic samplers under the supervision of chemists. Chemists must witness the taking of the samples.	Representative sampling results are available
9	NTPS_VOL1 , Page- 14, S.N.-73	For special components which are posing difficulty in obtaining spares, competent agencies for reverse engineering should be identified.	NTPS TM-II _ Reverse Engineering Done For GS Pump Old Design Impeller . Commissioned In Unit No.5 GS Pump 5D Running normal Developed Normal Parameters.

10	NTPS_VOL1, Page- 12, S.N.-41	Each and every maintenance action must be reviewed and unnecessary planned scheduled maintenance frequency may be modulated based on reliability and risk indices.	Availability of auxiliaries increased.
11	NTPS_VOL1, Page- 12, S.N.-43	The time constant for online repair of steam leaks must be restricted to a few hours and not wait for the next shut down clearance.	Steam leakages are arrested by on line leak seal as early as possible. Due to this deteoriated Heat rate restored.
12	NTPS_VOL1, Page- 15, S.N.82	The station may seek exciting challenges such as operating one unit continuously for 100 days at a stretch.	Already in Practice at NTPS and related combined O&M efforts are initiated
13	NTPS_VOL3, Page- 8, S.N.29	Overhauling of inter-stage cooler heat exchanger	Coolers performance improved . Temperatures maintaining within limit.-
14	NTPS_VOL1, Page- 18, S.N.-134	Focused in-house training based on actual need for training in required areas.	Increased competency level of participants
15	NTPS_VOL1, Page- 18, S.N.-135 a	Young talent with around 3 years of service in operation/maintenance side should be regularly brought into POG for training and enrichment.	Improvement in plant performance
16	NTPS_VOL1, Page- 11, S.N.-26	Digitization of the work instructions, drawings, records, specifications, etc.	Soft copy of the drawings are easily available.
17	NTPS_VOL3, Page- 7, S.N.-15	Plotting of auxiliary power variation with plant load and made available at control room for the operator to monitor the auxiliary power	-
18	NTPS_VOL3,4, Page- 8, S.N.-27	Reducing the overloading of motors	Overhauling of motors and proper tightness of joints helps in reducing overloading but there is no quantified measurement.
19	NTPS_VOL3,4, Page- 8, S.N.-31	Reducing the pressure of service air compressors to 4.0 kg/cm^2	Compressor availability improved.
20	NTPS_VOL3,4, Page- 8, S.N.-32	Optimizing the voltage at motor terminals	Voltages at motor terminals & various L.T. Boards are maintaining at rated voltages.

21	VOL2_U1,2,3,4,5, Page-8, S.N.-21	Air washer unit of unit may be made effective.	Dust ingress reduced.