Annex – 6
(Long Term Measures)

Table 1: KTPS status of CPRI recommendation long term measure.

S. N.	VOL NO	STATION / UNIT	CPRI Recommendations	Date / Month of Imple-mentation	STATUS AS ON 31-12-2011	Effects / Results / Improvement seen
1	V-4	STAGE-II	Separate DM flow meter for each unit.	Apr-10	Individual unit DM consumption record AVAILABLE	
2	V-4	STAGE-II	DM make-up and CW make-up flows must be made available in LAN system on daily basis.	Dec-12	DM make up available since Apr 2010. CW work will be completed till Dec 2012	For better monitoring
3	V-3	UNIT 5	Installation of pressure and flow transducers to monitor the SEC for major auxiliaries .	Dec-14	Is being covered in R&M	For better monitoring of Auxiliary performance
4	V-3	UNIT 6	Installation of pressure and flow transducers to monitor the SEC for major auxiliaries .	Dec-14	Is being covered in R&M	For better monitoring of performance
5	V-4	STAGE-II	Specific energy consumption calculation of AHP on daily basis.	Aug-12	COVERED IN DPR OF SMART ENERGY MEASUREMENT. PROPOSAL	For better monitoring & saving of energy

6	V-4	STAGE-II	Specific energy consumption calculation of DM Plant on daily basis	Aug-12	Proposed through DPR	For better monitoring & saving of energy
7	V-4	STAGE-II	Specific energy consumption calculation of CHP on daily basis.	Apr-11	Daily monitoring is being done. Energy Meters are installed & calibrated regularly.	----
8	V-3	UNIT 5	Change over to rotating vane wheel assy. for coal mill.	ALREADY IMPLEMENTED	Already Done during MPSP system.	----
9	V-3	UNIT 7	Replace APH full set to reduce air leakage.	IMPLEMENTED	It is regularly replaced During overhaul & short shutdowns & setting of the seals is carried out regularly.	Leakages minimized
10	V-3	UNIT 5 6 & 7	Extension of center feed pipe by 140 mm.	ALREADY IMPLEMENTED	IMPLEMENTED	----
11	V-3	UNIT 5	Increase PA fan discharge pressure.	N/A	The existing pressure is sufficient.	-----
12	V-3	UNIT 6	Increase PA fan discharge pressure.	IMPLEMENTED	Design Shut off pressure is 1250 mmwc. Normal head required is 750 mmwc. While actual pressure maintained is @ 800 mmwc due to modification carried out in APH by increasing PA sector.	Already the pressure is sufficient
13	V-3	UNIT 5	Installation of VFD for ID fans .	N/A	As the fans are axial flow , VFD	---

					are not found feasible.	
14	V-2	UNIT 5	Installation of VFD for FD fans.	N/A	As the fans are axial flow , VFD are not found feasible.	---
15	V-3	UNIT NO 5	Replacement of Bag filter by ESP.	Mar-14	Included in R&M scope	Unit loadability will increase.
16	V-3	UNIT NO 6	Replacement of Bag filter by ESP.	Mar-13	INCLUDED IN UNIT 6 R&M	Plant loadability will increase
17	V-4	STAGE-II	Provision for feeding the stacked coal directly to bunkers	N/A	Coal stacked at Augment. Yard is directly fed to bunker. Direct Feeding of coal stacked at 15/15A yard is not possible due to manual unloading of wagons in the same yard. Hence Not Feasible	----
18	V-2	UNIT 5	Modernization of instrumentation & control	Mar-14	DCS retrofit already done. Additional provisions such as turbovisory, flame scanners control etc is covered in DPR	Better accuracy, reliability flexibility & control
19	V-2	UNIT 6	Modernization of instrumentation & control	Mar-13	Included in R&M scope	Better accuracy, reliability flexibility & control
20	V-4	STAGE-II	The operation of conveyor system may be automated.	ALREADY PARTIALLY AUTOMATED	The conveyors are already automated with Zero speed limit switches, Pull chord system, Tripping sequence of conveyors, Chute choke-up relays etc.	For efficient & safe operation

21	V-3	UNIT 5 6 & 7	Installation of fixed capacitor banks at UAT secondary.	N/A	As our system has facility to share MVAR & installation of capacitor banks at UAT secondary is high cost & low benefit. During EER&M however it will be implemented	-----
22	V-2	UNIT 5	Boiler re-engineering for high ash coals	Mar-14	PROPOSED TO CARRYOUT THROUGH EXTENSIVE R&M	1) Expected Improvement in Heat rate by @ 80-90 kcal / kWh (2) Reduction in Aux cons by ~ 1.9 % (3) Unit Loadabiltity will improve by ~ 16 %
23	V-3	UNIT 5	Replace APH full set to reduce air leakage.	IMPLEMENMTED	It is regularly replaced During overhaul & short shutdowns & setting of the seals is carried out regularly.	Leakages minimized
24	V-2	unit 5	LPT retrofit.	Apr-13	Included in EER&M	-------
25	V-2	unit 6	LPT retrofit.	Apr-13	Included in EER&M	-------
26	V-2	unit 7	LPT retrofit.	Apr-13	Included in EER&M	-------

27	V-2	UNIT 6	Boiler re-engineering for high ash coals	Apr-13	COVERED IN UNIT 6 R&M WORK	1) Expected Improvement in Heat rate by @ 80-90 kcal / kWh (2) Reduction in Aux cons by ~ 1.9 % (3) Unit Loadabiltity will improve by ~ 16 %
28	V-2	UNIT 7	Boiler re-engineering for high ash coals	Mar-15	proposed through extensive R&M	1) Expected Improvement in Heat rate by @ 80-90 kcal / kWh (2) Reduction in Aux cons by ~ 1.9 % (3) Unit Loadabiltity will improve by ~ 16 %
29	V-3	UNIT 6	Installation of VFD for ID fans .	N/A	Is being proposed in R&M	---
30	V-2	UNIT 6	Installation of VFD for FD fans.	N/A	As the fans are axial flow , VFD are not found feasible.	---
31	V-3	UNIT 7	Installation of VFD for ID fans .	N/A	As the fans are axial flow , VFD are not found feasible.	---
32	V-3	UNIT 7	Installation of VFD for FD fans.	N/A	As the fans are axial flow , VFD are not found feasible.	---
33	V-4	UNIT 5,6 & 7	Dry fly ash disposal	FY 2010	The scheme has been implemented for complete unit 5 & partially for unit 6. Tender for Unit 7 & balance of 6 was floated but	

					no res[ponce has been received	