

ANNEXURE-1

SN	Description	Genset 1	Genset 2	Genset 3
1	Make of Engine	WARTSILA	WARTSILA	WARTSILA
2	Type	12V32LN	12V32LN	9R32LN
3	ESN	8419	8942	9744
4	Rating of Engine	4.2 MW	4.2 MW	3.15 MW
5	Rating of Alternator	11KV(5337KVA)	11KV(5337KVA)	11KV(3906KVA)
6	Make of Alternator	ABB	ABB	ABB
7	Model of Alternator	HSG 900MKB	HSG 900MKB	AMG 0710L R08 DSE
8	Year of manufacturing	1997	1998	2004
9	Year of commissioning	1998	1999	2005
10	Present running hours (18.07.2013)	80182	71693.35	27262.2
11	Previous maintenance/ O/H done at running hours	72112	64133	13583
12	Last recorded SFC (in gms/kWh)	223	224	223
13	Last recorded SLOC (in gms/kWh)	0.9	0.88	0.4
14	Type of Governing (Electronic/Hydraulic)	Electronic	Electronic	Electronic
15	Make of Governor	Woodward 721	Woodward 721	Woodward 723
16	Model of Governor	PG-EG 50	PG-EG 50	PG-EG 50
17	Type of Excitation Control (Electronic/Analogue)	Electronic	Electronic	Electronic
18	Make of AVR	Basler Electric	Basler Electric	Basler Electric
19	Model of AVR	DECS	DECS	DECS
20	Details of control system e.g. PLC based/conventional	PLC Baesd	PLC Baesd	PLC Baesd
21	Details of Synchronizing system	Auto Synchronization	Auto Synchronization	Auto Synchronization
22	Auxiliaries available with Genset, along with their model numbers & manufacturer name	BOOSTER UNIT	BOOSTER UNIT	BOOSTER UNIT
		MAKE-Wartsila	MAKE-Wartsila	MAKE-Wartsila
		MODEL NO-AMB-L 18000EE	MODEL NO-AMB-L 18000EE	MODEL NO-AMB-L 18000EE
		FEEDER UNIT	FEEDER UNIT	FEEDER UNIT
		MAKE-Wartsila	MAKE-Wartsila	MAKE-Wartsila
		MODEL NO-AMB-L 18000	MODEL NO-AMB-L 18000	MODEL NO-AMB-L 18000
		LUB OIL SEP	LUB OIL SEP	LUB OIL SEP
		MAKE-ALFA LAVAL	MAKE-ALFA LAVAL	MAKE-ALFA LAVAL
		MODEL NO-LOPX 705 SFD-34	MODEL NO-LOPX 705 SFD-34	MODEL NO-LOPX 705 SFD-34
		HFO SEP.	HFO SEP.	HFO SEP.
		MAKE-ALFA LAVAL	MAKE-ALFA LAVAL	MAKE-ALFA LAVAL
MODEL NO-MFPX-307TFD-21	MODEL NO-MFPX-307TFD-21	MODEL NO-FOPX		

SNo.	Make	Model	HP	KVA	MW	RPM	No of Cylinder	Engine No & Make
1	Wartisla	12V32 LN	5630.02681	5337	4.27	750	12	8419
2	Wartisla	12V32 LN	5630.02681	5337	4.27	750	12	8942
3	Wartisla	9R32 LN	4222.520107	3906	3.15	750	9	9744

S No.	Make	Model	Alternator No	Commissioning Year	Running hours
1	Wartisla	12V32 LN	4559751	1998	80182
2	Wartisla	12V32 LN	4561659	1999	71693.35
3	Wartisla	9R32 LN	4578607	2005	27262.2

ANNEXURE-3

Sheet2

List of items not given with WARTSILA DG sets (Consider all 3 no DG sets)

SI NO	Particular	Location
1	Out Going HT breakers, Bus copupler, Station transformer breaker & 3nos DG generator breakers and related electrical drawings	MV switchgear room
2	Incommer breaker & HT cables came from 132 KV yard.	MV switchgear room to 132KV yard.
3	Out going HT cables goes to plant & station transformer.	MV switchgear room to mills.
4	Station transformer "Aux transformer"	Out side near stack
5	Remot control panel/Syn panel BAP 901	Control room
6	Rockwell DG Control System panel & PC	Control room
7	110VDC battery bank with charger	Control room
8	Black start DG & it's control panel.	Near station transformer
9	Auxiliary distribution board 440Volts supplyo/going feeders	Auxiliary DB room
10	Tools other then wartsila	Workshop & store room
11	Tower DB 1 & 2	DB room
12	Lighing DB	Near DG no. 3
13	All lighting fixtures & Exhaust fan <u>2</u> A.C .	
14	All almera & MS rack.	
15	Other misc items like – UPS, Computers, AC etc.	
16	Wartsila Building	