

No.: TPL-SUGEN/FINANCE/CERC/17-18/7395
26th February, 2018

**SUGEN
MEGA POWER PROJECT**
Off. National Highway No 5,
Tal.: Kamrej,
Dist. Surat - 394155 India
Phone : +91-2621-661000
Fax : +91-2621-661151

To,

The Central Electricity Regulatory Commission,
3rd & 4th Floor, Chandertok Building,
36, Janpath,
New Delhi-110001

Subject: Information sought by Hon'ble CERC with respect to Terms and Conditions of tariff for the tariff period starting from 1.4.2019

Reference: Order No L-1/225/2017/CERC dated 10th November, 2017

Dear Sir,

We write in response to the Hon'ble CERC Order no. L-1/225/2017/CERC dated 10th November, 2017.

As directed by Hon'ble CERC, we have enclosed herewith the desired details, in respect of Sugen Mega Power Project (1147.5 MW Gas based Power Generating Station) of Torrent Power Limited, covering the period 2012-13 to 2016-17 in the formats annexed to the above referred Order as below -

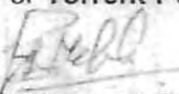
Sr. No.	Annexure as per CERC Order	Details	Pg. no.
1	II	Actual annual performance / Operational data	1 to 5
2	IV	Plant Availability/Plant Load Factor achieved	6
3	VI(A)	Details of Operation And Maintenance Expenses	7 to 9
4	VI(C)	Details of Water Charges	10
5	VI(D)	Details of Capital Spares	11
6	XIX	Time series analysis	12 to 13

We hereby request Hon'ble CERC to condone the delay in submission.

Thanking you.

Yours faithfully,

For Torrent Power Limited


Authorised Signatory

Encl.: As above

TORRENT POWER LIMITED

Regd. Office : "Tapovan", 600 Tapovan, Ambawadi, Ahmedabad-380012 India. Website : www.torrentpower.com
Phone : 079 26628000 CIN : L31200GJ2004PLC044068

Q. Patel

Annexure-II

Pro-forma for furnishing Actual annual performance/operational data for the Gas/Liquid Fuel based thermal generating stations for the 5 year period from 2012 -13 to 2016-17

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
1	Name of Company	Torrent Power Limited					
2	Name of Station	Sugen Mega Power Project					
3	Installed Capacity and Configuration	MW	Sugen - 1147.5 MW (382.5X3) Combined Cycle Plant with GT-ST on single shaft configuration				
4	Make of Turbine		SIEMENS AG				
5	Rated Steam Parameters		ST steam pressure 125.16 Bar and Temperature 565 °C				
6	Average site ambient conditions		Average of Ambient RH 63% and Temperature 28 °C				
7	Any other Site specific feature		NA				
8	Fuels :						
8.1	Main/Primary Fuel		Natural Gas / RLNG				
8.1.1	Annual Allocation/ Requirement	in MMSCMD	RIL KG-D6: 3.31 GAIL-PMT : 0.90 RLNG (as required)		GAIL-PMT 0.90 RLNG (as required)		
			IOCL-RLNG : 0.40	IOCL-RLNG : 0.88	IOCL-RLNG : 1.1		
8.1.2	Sources of supply		Domestic: 1) RIL-KG D6 2) GAIL-PMT RLNG: 1) IOCL-RLNG 2) RLNG	Domestic: 1) GAIL-PMT RLNG: 1) IOCL-RLNG 2) RLNG			
8.1.3	Transportation Distance of the station from the Sources of supply	km	RIL-KG D6: ~ 1400 KM GAIL PMT: ~50 KM IOCL-RLNG: ~ 70 KM Spot RLNG: ~ 70 KM	GAIL PMT: ~50 KM IOCL-RLNG: ~ 70 KM Spot RLNG: ~ 70 KM			
8.1.4	Mode of Transport		Rail/Road/Pipeline/Sea				
8.1.5	Maximum Station capability to stock main/primary fuel	Million Cubic meter or MT or Kilo Litre	NA				
8.2	Alternate Fuel :		There is no alternate fuel				

Pro-forma for furnishing Actual annual performance/operational data for the Gas/Liquid Fuel based thermal generating stations for the 5 year period from 2012 -13 to 2016-17

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17	
8.2.1	Annual Allocation/ Requirement	Million Cubic meter or MT or Kilo Litre	NA					
8.2.2	Sources of supply		NA					
8.2.3	Transportation Distance of the station from the Sources of supply	km	NA					
8.2.4	Mode of Transport		Rail/Road/Pipeline/Sea - NA					
8.2.5	Maximum Station capability to stock secondary fuels	Million Cubic meter or MT or Kilo Litre	NA					
9	Cost of Spares :							
9.1	Cost of Spares capitalized in the books	(Rs. Lakhs)	As on 01.04.2012: 15,737.11 As on 31.03.2017: 15,674.57					
9.2	Cost of spares included in capital cost for the purpose of tariff	(Rs. Lakhs)	15,380.00					
10	Generation :							
10.1	Actual Gross Generation at generator terminals	MU	4,119.86	2,318.25	2,600.59	3,612.06	4,771.53	
10.1.1	Total	MU	4,119.86	2,318.25	2,600.59	3,612.06	4,771.53	
10.1.2	On Gas	MU	4,119.86	2,318.25	2,600.59	3,612.06	4,771.53	
10.1.3	On Naphtha or any other liquid fuel	MU	NA					
10.2	-Actual Net Generation Ex-bus	MU	4,018.45	2,229.91	2,518.39	3,516.18	4,655.07	
10.3	-Scheduled Generation Ex-bus	MU	3,975.16	2,465.10	2,662.48	3,558.55	4,749.61	
11	Average Declared Capacity (DC)	MW	1,049.90	1,100.74	1,097.79	1,100.74	1,078.26	
12	Actual Auxilliary Energy Consumption excluding colony consumption	MU	99.36	87.40	83.60	98.94	113.51	
13	Actual Energy supplied to Colony from the station	MU	2.05	0.94	0.49	0.80	0.73	

Ch.

Pro-forma for furnishing Actual annual performance/operational data for the Gas/Liquid Fuel based thermal generating stations for the 5 year period from 2012 -13 to 2016-17

	Particulars		Units	2012-13	2013-14	2014-15	2015-16	2016-17
14	Main/Primary Fuel* :							
14.1	Consumption		MMSCM	720.09	420.84	459.71	638.68	848.30
14.1.1	Natural Gas	APM Gas	MMSCM	-	-	-	-	-
		Non-APM Gas	MMSCM	503.37	153.80	160.25	136.98	127.39
14.1.2	RLNG		MMSCM	216.72	267.04	299.46	501.70	720.92
14.1.3	Liquid Fuel			NA				
14.2	Weighted Gross Calorific Value (GCV)		(kCal / SCM, Kg or Litre)					
14.2.1	Natural Gas (as received)			9,776.15	9,557.42	9,699.82	9,672.63	9,642.57
14.2.2	RLNG (as received)							
14.2.3	Liquid fuel (as received)			NA				
14.3	Weighted Average Landed Price		(Rs per SCM)					
14.3.1	APM Gas							
14.3.2	Non-APM Gas			18.25	30.22	33.61	27.26	20.05
14.3.3	RLNG							
14.3.4	Liquid Fuel			NA				
14.4	Percentage of Declared Capacity			94.32%	98.89%	98.12%	98.38%	96.38%
14.4.1	APM Gas							
14.4.2	Non-APM Gas							
14.4.3	RLNG					NA		
14.4.4	Liquid Fuel							
14.5	Actual Average stock maintained for liquid fuel		(MT or KL)			NA		
15	Alternate Fuel :							
15.1	Consumption		(MT/KL)			NA		

(Signature)

Pro-forma for furnishing Actual annual performance/operational data for the Gas/Liquid Fuel based thermal generating stations for the 5 year period from 2012 -13 to 2016-17

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
15.2	Weighted Average Gross Calorific value (As received)	(kCal /Kg or Litre)	NA				
15.3	Weighted Average Landed Price	(Rs per MT or KL)	NA				
15.4	Actual Average stock maintained	(MT or KL)	NA				
16	Weighted average duration of outages(Unit-wise details)						
16.1	Planned Outages	(Days)	53	11	8.4	17.9	28.9
16.2	Forced Outages	(Days)	20.8	1.7	9.4	0.3	10.8
16.3	Number of tripping		10	4	2	2	2
16.4	Number of start-ups :		Unit 10 - 7, Unit 20 - 6, Unit 30 - 8	Unit 10 - 2 Unit 20 - 1 Unit 30 - 3	Unit 10 - 2 Unit 20 - 3 Unit 30 - 2	Unit 10 -1 Unit 20 -3 Unit 30 -1	Unit 10 -3 Unit 20 -6 Unit 30 -5
16.4.1	Cold Start-up	Nos.	NA				
16.4.2	Warm Start-up	Nos.					
16.4.3	Hot start-up	Nos.					
17	Cost of spares consumed	Rs. Lakhs					
18	Average stock of spares	Rs. Lakhs					
19	NOx and other particulate matter emission :						
19.1	Design value	ppm or mg/Nm3	Nox - 25ppm (GPCB Limits - Nox - 50ppm & Particulate 150mg/Nm3)				
19.2	Actual emission	Nox	12.8	12.53	12.02	12.87	13.28
		Particulate	0.71	2.22	1.73	1.39	1.01
20	Number of employees deployed in O&M						
20.1	- Executive		481	442	450	477	484
20.2	- Non Executive						
20.3	Corporate Office						
21	Man-MW ratio	Man/MW	0.42 : 1	0.39 : 1	0.39 : 1	0.42 : 1	0.42 : 1

Pro-forma for furnishing Actual annual performance/operational data for the Gas/Liquid Fuel based thermal generating stations for the 5 year period from 2012 -13 to 2016-17

	Particulars	Units	2012-13	2013-14	2014-15	2015-16	2016-17
--	-------------	-------	---------	---------	---------	---------	---------

Notes:

1. List of beneficiaries/customers along with allocation by GoI including (allocation of unallocated share) / capacity as contracted shall also be furnished separately.

Ans.: (a) Torrent Power Limited –Ahmedabad /Surat Distribution Divisions and (b) Madhya Pradesh Power Management Company Limited, Jabalpur through PTC

2. In case of two or more alternate fuels, information should be furnished for each of the alternate fuel. Gross generation on generator terminal for different fuel may be based on estimates.

Ans.: Not Applicable

3. In case of two or more stages or two or more unit sizes, information should be furnished separately to the extent possible.

Ans.: Not applicable

4. A brief write-up on the methodology to arrive at the performance & operation parameters should also be furnished.

Ans.: Based on details recorded/captured in the respective system

5. Any relevant point or a specific fact having bearing on above performance or operating parameters may also be highlighted or brought to the notice of the Commission.

Ans.: (a) Sugen is having an advanced class GT. The main feature of the GT is high reliability at competitive performance and low environmental emissions. Critical success factor are dependent on the availability of spares and specialized technical knowledge from Siemens AG, Germany [OEM to the machine]. Therefore the company has entered in to LTSA / LTMA with OEM to ensure availability and efficiency of Plant. The cost for LTSA/LTMA are offset by benefits of superior availability & efficiency.

✓ (b) Due to uncertain domestic gas scenario & volatile LNG prices, the auxillary consumption is often higher than 3% due to the station operating at low PLF. This needs to be considered on a practical basis.

6. If RLNG, Non APM gas or Liquid fuel is alternate fuel then details should be given under head Alternate fuel.

Ans.: Not applicable

Dh

PLANT AVAILABILITY/SCHEDULED PLANT LOAD FACTOR ACHIEVED

Generating company: **Torrent Power Limited**

Name of Generating station: **Sugen Mega Power Project**

Installed Capacity (MW) : **1147.5 MW**

Normative Annual Plant Availability Factor (%) approved by Commission : **85% (for the Tariff Period 2014-19)**

Plant Availability Factor Achieved (%)

Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PAF achieved vis-a-vis NAPAF
April	67%	100%	100%	100%	100%	Extended outage of HGPI* of Unit-30 due to GT foundation settlement problem during Apr'12 & May'12
May	76%	100%	95%	100%	100%	
June	100%	100%	100%	100%	100%	
July	100%	100%	100%	100%	100%	
August	100%	100%	93%	100%	100%	
September	100%	94%	96%	100%	99%	
October	92%	100%	100%	100%	99%	
November	100%	99%	99%	100%	88%	
December	100%	100%	99%	88%	97%	
January	100%	100%	100%	93%	90%	
February	99%	100%	96%	100%	82%	HGPI outage of Unit-10 in Feb'17
March	99%	94%	99%	100%	100%	
Annual	94%	99%	98%	98%	96%	

* Hot Gas Path Inspection

Plant Load Factor Achieved (%)

Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PLF achieved vis-a-vis Target PLF
April	61%	21%	24%	30%	49%	Plant did not operate at high PLF due to following reasons. - Due to continuous reduction in availability of allocated domestic gas from 2010-11 onwards (including curtailment of supply from RIL KG-D6) - Higher Spot R-LNG gas price and unwillingness of beneficiaries to offtake capacity available on R-LNG - No further allocation of domestic gas - scheduled outages
May	61%	23%	25%	31%	63%	
June	55%	24%	25%	29%	70%	
July	47%	23%	25%	27%	60%	
August	51%	24%	30%	46%	55%	
September	50%	23%	26%	50%	62%	
October	51%	24%	26%	28%	57%	
November	29%	20%	25%	27%	42%	
December	28%	20%	24%	28%	35%	
January	24%	25%	23%	40%	22%	
February	19%	25%	25%	52%	25%	
March	18%	24%	30%	43%	29%	
Annual	41%	23%	26%	36%	47%	

Annexure VI(A)

DETAILS OF OPERATION AND MAINTENANCE EXPENSES						
(To be filled for each of the Thermal /Hydro Generating Station)						
Name of the Company: Torrent Power Limited						
Name of the Power Station :- Sugen Mega Power Project						
(Rs. In Lakhs)						
Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Breakup of O&M expenses :					
1	Consumption of Stores and Spares*	7,455.52	4,991.97	4,366.16	6,881.40	9,736.85
2	Repair and Maintenance*					
3	Insurance	697.57	607.06	599.22	564.70	507.74
4	Security (normal)	217.13	309.67	199.98	277.65	252.29
4.1	Additional Security if any on the advise of Govt. Agency/Statutory Authority					
5	Gross Water Charges	819.66	463.47	601.44	833.02	1,187.10
6	Administrative Expenses :					
6.1	- Rent	8.20	3.59	11.08	4.98	6.11
6.3	- Traveling and conveyance	43.86	23.88	15.56	11.48	14.34
6.4	- Communication expenses					
6.5	- Advertising	-	-	1.85	-	-
6.6	- Foundation laying and inauguration					
6.7	- Donations	-	0.25	-	-	-
6.8	- Entertainment	0.08	0.15	0.06	0.29	1.45
6.9	-Filing Fees	1.02	1.62	-	-	-
	Sub-Total (Administrative Expenses)	53.16	29.49	28.55	16.75	21.90
7	Employee Cost					
7.1	Salaries, wages and allowances	1,757.18	1,820.09	2,701.87	2,924.29	2,121.42
7.2	-Staff welfare expenses	47.46	34.04	29.60	36.08	47.66
7.3	-Productivity linked incentive			-		
7.4	- Expenditure on VRS			-		
	Sub-Total (Employee Cost)	1,804.64	1,854.13	2,731.47	2,960.37	2,169.08
8	Loss of store					
9	Provisions					
10	Prior Period Adjustment , if any					

Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
11	Corporate office expenses allocation	2,378.51	731.32	1,093.81	2,397.96	2,364.54
12	- Others (Specify items)	1,505.24	1,304.77	735.93	2,076.04	696.84
12.1	Discount for prompt payment of bills	369.62	357.34	81.18	266.64	-
12.2	Foreign Exchange Rate Variation	-	175.19	-	1,288.23	-
12.3	Registration Charges & Stamps	299.10	105.98	175.55	-	178.59
12.4	Legal, Professional & Consultancy fees	204.74	63.55	87.73	94.33	59.10
12.5	Rates and Taxes	74.97	38.14	50.01	31.07	33.79
12.6	General Charge	23.23	54.22	42.48	25.49	28.20
12.7	EHS Service	52.91	43.90	54.29	57.05	57.72
12.8	Housekeeping Expenses	45.54	41.18	46.80	62.55	71.12
12.9	Other	435.13	425.25	197.90	250.68	268.31
13	Total (1 to 12)	14,931.43	10,291.89	10,356.56	16,007.88	16,936.33
14	Revenue/ Recoveries, if any					
15	Net Expenses	14,931.43	10,291.89	10,356.56	16,007.88	16,936.33
16	Capital spares consumed not included in (A) (1) above and not claimed /allowed by					
Notes:		x''				
	I. The details of Corporate Expenses and the methodology of allocation of corporat expenses to various functional activities and allocation of Corporate expenses pertaining to power generation/transmission system to each operating stations/ transmission region/system and stations/transmission region/system under construction should be clearly specified in ANNEXURE-VIII as provided here separately					
	II. An annual increase in O&M expenses under a given head in excess of 10% percent should be explained.					
	III. The data should be based on audited balance sheets,duly reconciled and certified.					
	IV. Employee cost should be excluding arrears paid for pay hike/prior period adjustment /payment					
	IV. Details of arrears, if any, pertaining to period prior to the year 2008-09 should be mentioned separately.					
	V. No. of employees opting for VRS during each year should be indicated.					
	VI. Details of abnormal expenses, if any, shall be furnished separately.					
	VII Break-up of staff welfare expenses should be furnished					
	VIII: Details of Consumptive Water requirement , contracted quantum and actual water consumed with source , rate etc. should be furnished year-wise for Thermal Power Stations					
	IX. Details of capital spares consumed each year which were not claimed/allowed in the tariff should be furnished giving item wise unit price and quantity consumed.					
	X. Salaries and staff welfare expenses shall be provided into different heads such as pension, gratuity, provident fund, leave encashment. Also provide provision for revision in wage allowance.					

* duly adjusted for change in accounting policies

Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7

An annual increase in O&M expenses is explained as below:

1 Repairs and Maintenance including Consumption of Stores & Spares

To ensure availability of plant, Company has entered into Long Term Supply Agreement/Long Term Maintenance Agreement (LTSA / LTMA) with OEM Siemens AG, Germany. As per LTSA / LTMA Agreement, Company is required to carry out minor / major overhauling of Plant based on milestone linked to EOH. Considering issue of availability of Gas, we have restructure the LTSA/LTMA Agreement in 2014-15. Till 2014-15, Company was following practice of accounting LTSA/LTMA expenses in terms of EOH linked to PAF. From 2015-16 Company has changed its accounting practice of booking LTSA/LTMA expenses from PAF bases to PLF based. The reversal of the same was effected in FY 2014-15 & FY 2015-16, however we have given effect of the same in respective years in above table.

2 Water Charges: The variation in Water Charges is in line with the PLF in respective years.

3 Registration Charges & Stamps: Such expenses mainly includes the Sale of Proceed (SoP) Charges paid to United Nations Framework Convention on Climate Change (UNFCCC) at the time of issuance of Certified Emission Reductions (CER) units. Such expenses are linked to number of CER issued in the respective year. Further, There is no issuance of any CER in FY 2015-16 and accordingly there is no expense related thereto.

4 Foreign Exchange Rate Variation: the loss due to change in Exchange Rate (Euro) incurred in FY 13-14 & FY 15-16 only and for other financial years there was gain due to favourable change in exchange rate.

5 Security Expenses: The expenses incurred are linked with the actual security man power deployed at the site.

(Signature)

Annexure-VI (C)

Annexure-VI (C)						
DETAILS OF WATER CHARGES						
(To be filled for each of the Thermal Generating Station)						
Name of the Company: Torrent Power Limited						
Name of the Power Station and Stage/Phase: Sugan Mega Power Project						
						(Rs. In Lakhs)
Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of Plant	Combined Cycle Plant with Gas Turbine & Steam Turbine on single shaft configuration				
2	Type of Cooling Tower	Natural Draft Cooling Towers				
3	Type of Cooling Water System	Recirculating System.				
4	Any Special Features which may increase/reduce water consumption	Features for reduction in water consumption 1) DM Plant RO reject water is being again utilised . 2) Unit 10 and 30 CW Sampling coupon shifted to CT Basin area to reuse the sampled water. 3) DM Plant backwash sump water diverted to GB clarifiers to conserve the water.				
(B)	Quantum of Water : (Cubic Meter)					
5	Contracted Quantum	15 MGD	15 MGD	15 MGD	15 MGD	15 MGD
6	Allocation of Water (cum)	90,67,374	37,47,088	37,49,499	45,27,698	55,85,596
7	Actual water Consumption (cum)	51,96,049	28,75,108	33,94,148	42,74,087	55,36,849
8	Rate of Water Charges (Rs./cum)	14.64	16.10	17.72	19.49	21.44
9	Other charges/Fees , if paid as part of Water Charges	58.95	0.58			
	Total water Charges Paid	819.66	463.47	601.44	833.02	1,187.10
Note::	Any abnormal increase in Water consumption & water Charges on any year shall be explained separately					

Annexure VI (D)

DETAILS OF CAPITAL SPARES

(To be filled for each of the Thermal Generating Station or Transmission System in each Region)
(For ULDC scheme to be filled up separately)

Name of the Company: Torrent Power Limited

Name of the Power Station or Transmission Region: Sugem Mega Power Project

		(Rs. In Lakhs)				
Sl.No.	ITEM	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Details of Capital Spares in opening Stock	15,737.11	15,737.11	15,674.57	15,674.57	15,674.57
1	...					
2	...					
3	...					
4	...					
...						
(B)	Details of Capital Spares procured during the year	-	-	-	-	-
1	...					
2	...					
3	...					
4	...					
(C)	Details of capital spares consumed during the year	-	62.54	-	-	-
1	...					
2	...					
3	...					
4	...					
...						
(D)	Details of capital spares closing at the end of the year	15,737.11	15,674.57	15,674.57	15,674.57	15,674.57
1	...					
2	...					
3	...					
4	...					
...						

Annexure-XIX

Name of the Utility: Torrent Power Limited															
Name of the Generating Station: Sugem Mega Power Project															
Station/ Stage/ Unit: Sugem Mega Power Project															
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Natural Gas/RLNG															
Capacity of Plant (MW): 1147.5 MW															
COD: 15-08-2009															
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
1	Plant Availability Factor (PAF) (%)						97%	95%	89%	94%	99%	98%	98%	96%	
2	Plant Load Factors (PLF) (%)						86%	83%	76%	41%	23%	26%	36%	47%	
3	Scheduled Energy (MU)	NA					5,284	7,686	7,113	3,975	2,465	2,662	3,559	4,750	
4	Scheduled Generation (MU)						5,284	7,686	7,113	3,975	2,465	2,662	3,559	4,750	
5	Actual net Generation (MU)						5,609	8,070	7,430	4,018	2,230	2,518	3,516	4,655	
6	Quantum of coal consumption (MT)								NA						
7	Value of coal (Rs. Lakh)								NA						
8	Specific Coal Consumption (kg/kwh)								NA						
9	Gross Calorific Value of Coal (Kcal/ Kg)								NA						
10	Heat Contribution of Coal (Kcal/kwh)								NA						
11	Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC								NA						
12	Quantum of Oil Consumption (Lit.)								NA						
13	Value of Oil (Rs. lakh)								NA						
14	Gross calorific value of oil (kcal/lit)								NA						
15	Specific Oil Consumption (ml/kwh)								NA						
16	Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC								NA						
17	Heat Contribution of Oil (Kcal/kwh)								NA						
18	Station Heat Rate (kcal/kwh)						1,696	1,684	1,682	1,709	1,735	1,714	1,710	1,714	
19	Auxiliary Energy Consumption (%)						1.84%	1.81%	1.71%	2.46%	3.81%	3.21%	2.74%	2.38%	
20	Debt at the end of the year Normative (Rs. Crore)						1,930	1,798	1,692	1,538	1,384	1,234	1,082	930	
21	Equity at the end of the year Normative (Rs. Crore)						869	877	896	896	896	897	897	897	
22	Working Capital (Rs. Crore) – finally admitted by CERC						730	733	740	747	749	1,597	1,609	1,616	
23	Capital cost at the end of the year (Rs. Crore) – finally admitted by CERC						2,896	2,922	2,987	2,987	2,986	2,989	2,989	2,989	
24	Capacity Charges/ Annual Fixed Cost (AFC) (Rs. Crore)						902	909	917	945	935	1,015	1,022	1,029	
	(a) Return on equity – pre tax (admitted by CERC)														
	Absolute value (Rs. Crore)						161	169	172	174	176	176	176	176	
	Rate (%)						18.67%	19.36%	19.38%	19.38%	19.61%	19.61%	19.61%	19.61%	

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
(b) interest on Loan													
Absolute value (Rs. Crore)						199	189	181	194	174	153	135	118
Rate (%) – Weighted Average Rate						10.13%	10.16%	10.38%	12.01%	11.90%	11.68%	11.68%	11.69%
(c) Depreciation (finally allowed by CERC)													
Absolute value (Rs. Crore)						147	150	152	154	154	152	152	152
Rate (%)						5.10%	5.15%	5.15%	5.15%	5.15%	5.09%	5.09%	5.09%
(d) Interest on working Capital													
Absolute value (Rs. Crore)					NA	89	90	91	91	92	216	217	218
Rate (%)						12.25%	12.25%	12.25%	12.25%	12.25%	13.50%	13.50%	13.50%
(e) Operation and maintenance cost (finally admitted by CERC)													
Absolute value (including water charges for FY 2014-15 onwards) (Rs. Crore)						306	311	321	332	341	319	341	365
Rate (%)													
(f) Compensation Allowances						0	0	0	0	0	0	0	0
25 AFC (Rs. Kwh) @85%PAF and with normative water cost						1.09	1.10	1.10	1.14	1.13	1.22	1.22	1.23
26 Energy Charge (Rs./Kwh) (net of sharing of Gain w.e.f FY 2014-15 onwards)						2.21	2.14	2.25	3.60	6.05	6.41	5.46	3.85
27 Total tariff (Rs. Kwh)						3.30	3.24	3.36	4.74	7.18	7.63	6.69	5.09
28 Revenue realisation before tax (Rs. Crore) (AFC + Energy Charge net of Sharing of Gain)						1,298	2,040	2,159	2,244	2,326	2,481	2,392	2,644
29 Revenue realisation after tax (Rs. Crore) (AFC + Energy Charge net of Sharing of Gain)						1,298	2,040	2,159	2,244	2,326	2,481	2,392	2,644
30 Profit/ loss before Tax (Rs. Crore)						804	855	1,006	530	504	701	791	526
31 DSM Generation (MU)						325	385	317	43	(235)	(144)	(42)	(95)
32 DSM Rate (Ps/Kwh)						278.49	300.97	586.10	1,916.68	139.93	247.15	177.76	168.31
33 Revenue from DSM (Rs. Crore)						91	116	186	83	(33)	(36)	(8)	(16)

Note: Generating Companies are required to submit data for all generating stations.
This is a general format. Plants of different fuel users have to fill the cells as applicable to them.
Tariff for the Hydro may be understood as composite tariff.
The data provided for the corresponding years need to mention as Actual or provisional.
Data for each Unit and Stage is required to be submitted in additional sheets as per the format.

DT

Pg. 13 of 13