

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

GANDHINAGAR



CASE NO. _____

Filing of Petition for True Up of FY 2017-18

&

Tariff for FY 2019-20

Under

GERC MYT Regulations 2016 and

Section 62 of the Electricity Act, 2003.

Filed by:-

Gujarat State Electricity Corporation Limited

Regd. Office: Vidyut Bhavan, Race Course Circle, Vadodara – 390 007



**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR**

Filing No:

Case No:

IN THE MATTER OF	Filing of Petition for True Up of FY 2017-18 and Determination of Tariff for FY 2019-20 under GERC MYT Regulations, 2016 and Section 62 of the Electricity Act, 2003.
AND	
IN THE MATTER OF	Gujarat State Electricity Corporation Limited, Vidyut Bhavan, Race Course, Vadodara 390007 Phone No. :0265 6612003; Fax: 0265 2344537 E-mail: gmf.gsecl@gebmail.com PETITIONER
AND	
IN THE MATTER OF	Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhavan, Race Course, Vadodara 390007 Phone No. 0265 6613221; Fax: 0265 2337918; E-mail: coacom@gebmail.com RESPONDENT

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS



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ABBREVIATIONS

1.	AOH	Annual Over Hauling
2.	ARR	Aggregate Revenue Requirement
3.	CEA	Central Electricity Authority
4.	FY	Financial Year
5.	GEB	Gujarat Electricity Board
6.	GERC	Gujarat Electricity Regulatory Commission
7.	GoG	Government of Gujarat
8.	GSECL	Gujarat State Electricity Corporation Limited
9.	GUVNL	Gujarat Urja Vikas Nigam Limited
10.	KV	Kilo Volt
11.	KWh	Kilo Watt Hour
12.	MW	Mega Watt
13.	MYT	Multi Year Tariff
14.	O&M	Operation & Maintenance
15.	PAF	Plant Availability Factor
16.	PLF	Plant Load Factor
17.	R&M	Renovation & Modernization
18.	SHR	Station Heat Rate
19.	Second Control Period	FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15, FY 2015-16
20.	Third Control Period	FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20, FY 2020-21



SECTION 1. INTRODUCTION

1.1. PREAMBLE

1.1.1. This section presents the background and reasons for filing of this Petition.

1.2. INTRODUCTION

1.2.1. The Government of Gujarat (hereinafter referred to as "GoG") notified the Gujarat Electricity Industry (Reorganization and Regulation) Act 2003 (hereinafter called as "Act") in May 2003 for the reorganization of the entire power sector in the State of Gujarat.

1.2.2. Pursuant to the above, Gujarat Electricity Board (the Board) has been unbundled into functional entities with effect from 1st April, 2005 with assets of the GEB disaggregated into seven companies, and all power stations of erstwhile GEB transferred to GSECL.

1.2.3. Gujarat State Electricity Corporation Limited (GSECL) was registered in 1993 under the Companies Act 1956 for the generation of Electricity.

1.2.4. The Gujarat Electricity Regulatory Commission (hereinafter referred to as "GERC" or "the Commission"), an independent statutory body constituted under the provisions of the Electricity Regulatory Commissions (ERC) Act, 1998 and is currently under purview of the Electricity Act, 2003. GERC is vested with the authority of regulating the power sector in the State inter alia including determination of Tariff for electricity consumers.

1.2.5. Hon'ble Commission notified the Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016 ("GERC MYT Regulations, 2016") on 29th March 2016 and shall be applicable for determination of tariff in all cases covered under the regulations from 1st April, 2016 onwards. Based on these Regulations, the Commission issued the Multi-Year Tariff Order dated 31 March, 2017 in Petition No. 1619 of 2016 wherein Truing up of ARR for FY 2015-16 and determination of final ARR of FY 2016-17 and approval of Multi-Year ARR for the Third Control Period FY 2016-17 to FY 2020-21 was carried out. Subsequently, the Commission issued the Order in Petition No.1693 of 2017 on 31 March, 2018 wherein Truing up of ARR of FY 2016-17 was carried out.

1.3. MULTI-YEAR TARIFF FRAMEWORK REGULATIONS:

1.3.1. The key provisions of the Multi-Year Tariff Regulations, 2016 are reproduced below:

1.3.2. Section 3.1 of the GERC MYT Regulations, 2016:

3.1: The Commission shall determine tariff within the Multi-Year Tariff framework, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:

- i. Supply of electricity by a Generating Company to a Distribution Licensee
- ii. Intra-State transmission of electricity;
- iii. SLDC Fees and Charges;



- iv. Intra-State Wheeling of electricity;
- v. Retail supply of electricity

1.3.3. Section 17 of the GERC MYT Regulations, 2016:

"17.2 The filing for the Control Period under these Regulations shall be as under:

c) In case of Mid-term Review of Aggregate Revenue Requirement under Regulation 16.2 (i), the Petition shall comprise of:

- i. Truing Up for the previous year under these Regulations;*
- ii. Modification of the Aggregate Revenue Requirement for the remaining years of the Control Period, if any, with adequate justification for the same;*
- iii. Revenue from the sale of power at existing tariffs and charges for the ensuing year;*
- iv. Revenue gap or revenue surplus for the ensuing year calculated based on Aggregate Revenue Requirement approved in the MYT Order and truing up for the previous year;*
- v. Application for determination of tariff for the ensuing year."*

1.3.4. Under section 62 of the Electricity Act, 2003 and GERC MYT Regulations, 2016, GSECL is filing its Petition for True Up for FY 2017-18 and determination of revised Tariff for FY 2019-20 to the Hon'ble Commission for approval.



SECTION 2. EXECUTIVE SUMMARY

2.1. PREAMBLE

2.1.1. This section highlights the summary of Petition for True Up for FY 2017-18 and Determination of Tariff for FY 2019-20.

2.2. TRUE UP OF FY 2017-18

2.2.1. GSECL has worked out its Aggregate Revenue Requirement (ARR) for FY 2017-18 as a part of the True Up for FY 2017-18. GSECL has presented the actual cost components based on audited annual accounts for FY 2017-18.

2.2.2. Tables below summarize the results of True up of FY 2017-18 of GSECL Stations. For the purpose of True Up, GSECL compared the actual cost for FY 2017-18 with the cost approved by the Hon'ble Commission in "*Multi-Year Tariff Order dated 31st March, 2017*".

2.2.3. The actual fixed cost of GSECL based on audited accounts is as shown in below table.



Table 1 : Fixed Cost for GSECL for FY 2017-18

Sr. No.	Power Station	Depreciation (Actual)	Interest & Finance Charges (Actual)	Return on Equity (Actual)	Interest on Working Capital (Actual)	O&M Expenses (Actual)	Water Charges (Actual)	SLDC Charges (Actual)	Tax (Actual)	Total Fixed Cost (Actual)	Rs. Crores	
											Non-Tariff Income (Actual)	Net Fixed Charges
1	Ukai (3-5)	33.46	5.82	24.89	34.11	196.25	0.22	0.50	11.85	307.09	12.28	294.81
2	Gandhinagar (3-4)	31.96	-	20.89	26.17	115.77	43.05	0.49	8.16	246.49	20.43	226.06
3	Gandhinagr 5*	2.16	-	28.67	13.08	57.57	21.53	-	4.08	127.08	9.50	117.58
4	Wanakbori 1-6 TPS	67.60	16.79	73.52	68.43	213.95	47.97	0.91	24.48	513.65	24.74	488.91
5	Wanakbori 7*	2.13	-	26.17	10.91	16.59	10.43	0.15	4.08	70.47	4.02	66.45
6	Sikka TPS	-	-	-	-	-	-	-	-	-	-	-
7	Sikka Extension (3-4)*	179.68	178.37	142.59	38.75	103.53	3.80	0.42	9.71	656.86	10.63	646.22
8	KLTPS 1-3	33.13	2.80	49.82	9.59	110.75	0.53	0.16	4.18	210.95	3.48	207.48
9	KLTPS 4	35.65	16.01	28.76	3.45	14.79	0.01	0.05	1.46	100.19	0.01	100.18
10	Dhuvaran CCPP 1*	8.83	-	10.45	4.21	35.66	-	0.09	2.07	61.32	0.87	60.44
11	Dhuvaran CCPP 2	22.32	7.05	14.14	4.61	37.61	-	0.10	2.18	88.01	0.87	87.14
12	Dhuvaran CCPP 3*	78.77	75.41	64.80	48.97	3.28	-	0.27	7.31	278.80	-	278.80
13	Utran Extension*	68.06	44.33	57.36	28.40	44.71	1.43	0.27	7.28	251.83	0.61	251.21
14	Ukai 6*	152.88	121.51	123.40	30.92	51.97	-	0.36	9.71	490.76	28.03	462.73
15	Ukai Hydro	2.15	2.29	10.48	0.59	12.22	0.07	0.22	5.92	33.94	0.02	33.93
16	Kadana Hydro	5.14	-	28.55	1.82	29.90	-	0.18	4.70	70.29	0.82	69.46
Total		723.94	470.37	704.48	324.00	1,044.54	129.04	4.18	107.17	3,507.72	116.30	3,391.42

* PPA based Stations



2.2.4. Based on actual operating & fuel related parameters during FY 2017-18, table below indicates actual audited energy charges for GSECL's stations for FY 2017-18 along with the approved ones:

Table 2 : Energy Charges for GSECL's Plants for FY 2017-18

Sr. No.	Power Station	Approved (Rs/kWh)	Actual (Rs/kWh)
1	Ukai (3-5)	3.42	3.30
2	Gandhinagar (3-4)	3.69	3.62
3	Gandhinagr 5*	3.49	3.52
4	Wanakbori 1-6 TPS	3.26	3.21
5	Wanakbori 7*	3.14	3.06
6	Sikka TPS	-	-
7	Sikka Extension (3-4)*	3.67	3.87
8	KLTPS 1-3	2.16	2.39
9	KLTPS 4	2.03	2.30
10	Dhuvaran CCPP 1*	2.03	2.29
11	Dhuvaran CCPP 2	2.05	2.22
12	Dhuvaran CCPP 3*	4.80	12.38
13	Utran Extension*	5.16	5.32
14	Ukai 6*	3.06	3.02

* PPA Governed Station

2.2.5. The detailed comparison of various cost components with the values approved by the Hon'ble Commission vide "Multi-Year Tariff Order dated 31st March, 2017" for True up has been worked out in Section 4 of the Petition. Table below summarizes plant wise gains/ losses incurred by GSECL on account of controllable/ uncontrollable factors, which needs to be shared with the Consumers as per the mechanism prescribed by the Hon'ble Commission in the MYT Regulations.

Table 3 : Gains / (Losses) on account of Controllable Factors for FY 2017-18

Sr. No.	Power Station	Rs. Crores			
		Gain/(Loss) due to Controllable Factors	Total Gains/ (Losses) due to Controllable factors	Total Gains/ (Losses) to be passed through (1/3rd of gains/ losses)	
		O&M Expenses	Fuel Cost		
1	Ukai (3-5)	27.88	44.20	72.09	24.03
2	Gandhinagar (3-4)	(24.70)	13.78	(10.92)	(3.64)
3	Gandhinagr 5*	-	-	-	-
4	Wanakbori 1-6 TPS	20.23	28.79	49.02	16.34
5	Wanakbori 7*	-	-	-	-
6	Sikka TPS	-	-	-	-
7	Sikka Extension (3-4)*	-	-	-	-
8	KLTPS 1-3	1.00	(19.62)	(18.62)	(6.21)
9	KLTPS 4	4.16	(6.38)	(2.22)	(0.74)
10	Dhuvaran CCPP 1*	-	-	-	-
11	Dhuvaran CCPP 2	(4.91)	(5.82)	(10.73)	(3.58)
12	Dhuvaran CCPP 3*	-	-	-	-
13	Utran Extension*	-	-	-	-



Sr. No.	Power Station	Gain/(Loss) due to Controllable Factors		Total Gains/ (Losses) due to Controllable factors	Total Gains/ (Losses) to be passed through (1/3rd of gains/ losses)
		O&M Expenses	Fuel Cost		
14	Ukai 6*	-	-	-	-
15	Ukai Hydro	7.39	-	7.39	2.46
16	Kadana Hydro	(6.11)	-	(6.11)	(2.04)
Total		24.95	54.95	79.90	26.63

*PPA Governed Station



Table 4 : Gains/ (Losses) on account of uncontrollable Factors for FY 2017-18

Sr. No.	Power Station	Gain/(Loss) due to Uncontrollable Factors									Rs. Crores	
		O&M	Depreciation	Interest & Finance Charges	ROE	Interest on Working Capital	Water Charges	SLDC Charges	Tax	Non-Tariff Income	Total Gains/ (Losses) due to Uncontrollable factors	Total Gains/ (Losses) to be passed through
1	Ukai (3-5)	(7.04)	38.60	18.91	0.81	7.23	(0.09)	0.10	(7.02)	(9.83)	41.67	41.67
2	Gandhinagar (3-4)	(4.42)	23.85	11.90	(3.59)	(3.84)	(36.04)	0.01	(5.77)	4.96	(12.95)	(12.95)
3	Gandhinagr 5*	(2.21)	-	-	-	-	-	-	(2.89)	-	(5.10)	(5.10)
4	Wanakbori 1-6 TPS	(7.45)	33.76	0.46	0.46	(1.33)	(12.21)	(0.10)	(17.31)	(21.55)	(25.27)	(25.27)
5	Wanakbori 7*	(0.53)	-	-	-	-	-	-	(2.89)	-	(3.42)	(3.42)
6	Sikka TPS	-	-	-	-	-	-	-	-	-	-	-
7	Sikka Extension (3-4)*	(3.34)	-	-	-	-	-	-	(6.87)	-	(10.21)	(10.21)
8	KLTPS 1-3	(3.16)	32.70	(1.72)	(1.35)	(1.07)	(0.10)	0.01	(2.96)	(1.36)	21.00	21.00
9	KLTPS 4	(0.35)	0.38	3.25	0.44	(0.09)	0.12	(0.03)	(1.03)	(1.64)	1.04	1.04
10	Dhuvaran CCPP 1*	(0.92)	-	-	-	-	-	-	(1.46)	-	(2.39)	(2.39)
11	Dhuvaran CCPP 2	(0.98)	(1.65)	1.70	0.60	1.11	0.76	(0.05)	(1.54)	(0.94)	(0.99)	(0.99)
12	Dhuvaran CCPP 3*	(0.06)	-	-	-	-	-	-	(5.17)	-	(5.22)	(5.22)
13	Utran Extension*	(1.19)	-	-	-	-	-	-	(5.15)	-	(6.34)	(6.34)
14	Ukai 6*	(0.84)	-	-	-	-	-	-	(6.87)	-	(7.71)	(7.71)
15	Ukai Hydro	(0.49)	(2.15)	0.28	(0.06)	0.11	(0.07)	(0.05)	(4.19)	(3.49)	(10.12)	(10.12)
16	Kadana Hydro	(0.77)	10.49	-	0.05	(0.56)	-	(0.03)	(3.32)	(2.24)	3.63	3.63
Total		(33.75)	135.96	34.79	(2.64)	1.57	(47.63)	(0.14)	(74.44)	(36.10)	(22.38)	(22.38)

* PPA governed Station



2.2.6. Based on the above estimated gains / (losses) on account of controllable and uncontrollable factors, the Gap/ Surplus of GSECL for FY 2017-18 has been worked out as given below:

Table 5 : Net entitlement for FY 2017-18

				Rs. Crores
Sr. No.	Power Station	Gain/(Losses) due to controllable factor	Gain/(Losses) due to uncontrollable factor	Total Gain/(losses) to be passed through
a	b	c	d	e = c/3 + d
1	Ukai (3-5)	72.09	41.67	65.70
2	Gandhinagar (3-4)	(10.92)	(12.95)	(16.59)
3	Gandhinagr 5*	-	(5.10)	(5.10)
4	Wanakbori 1-6 TPS	49.02	(25.27)	(8.93)
5	Wanakbori 7*	-	(3.42)	(3.42)
6	Sikka TPS	-	-	-
7	Sikka Extension (3-4)*	-	(10.21)	(10.21)
8	KLTPS 1-3	(18.62)	21.00	14.79
9	KLTPS 4	(2.22)	1.04	0.30
10	Dhuvaran CCPP 1*	-	(2.39)	(2.39)
11	Dhuvaran CCPP 2	(10.73)	(0.99)	(4.57)
12	Dhuvaran CCPP 3*	-	(5.22)	(5.22)
13	Utran Extension*	-	(6.34)	(6.34)
14	Ukai 6*	-	(7.71)	(7.71)
15	Ukai Hydro	7.39	(10.12)	(7.65)
16	Kadana Hydro	(6.11)	3.63	1.59
Total		79.90	(22.38)	4.26

* PPA governed Station

2.3. UNABSORBED DEPRECIATION FOR GANDHINAGAR TPS UNITS 1 AND 2

2.3.1. GSECL has also claimed unabsorbed depreciation for Gandhinagar Units 1 and 2 which are decommissioned on 3 September, 2016 in 12 equal instalments in FY 2019-20. The detailed working of the same has been elaborated in subsequent chapters.

2.4. TARIFF DETERMINATION OF BLTPS UNITS 1 AND 2

2.4.1. Bhavnagar Energy Company Ltd. (BECL) Vide the GoG notification dated 27 August, 2018 is merged with GSECL. Accordingly the assets and liabilities is transferred to GSECL. The effective date of transfer is 1 April, 2018 as per the notification. GSECL requests the Hon'ble Commission to determine the Tariff for Bhavnagar Lignite Thermal Power Station (erstwhile BECL) Units 1 and 2 for FY 2019-20. The detailed working of the same has been elaborated in subsequent chapters.

2.5. TARIFF FOR FY 2019-20



- 2.5.1. Based on the Truing up, GSECL has projected the Fixed cost for FY 2019-20 on the basis of GERC MYT Regulations, 2016. The basis of such projections has been dealt in detail in subsequent sections of the petition. GSECL has considered the Variable Charge for FY 2019-20 based on Approved Variable Charges for FY 2019-20 in the MYT Order dated 31st March, 2017.
- 2.5.2. The Fixed and Variable cost of GSECL's Generating Plants for FY 2019-20 are estimated as under:



Table 6 : Approved Fixed Cost of GSECL plants for FY 2019-20

Sr. No.	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Water Charges	Tax	SLDC Fees & Charges	Total Fixed Cost	Rs. Crores	
											Less: Non-Tariff Income	Net Fixed Charges
1	Ukai (3-5)	74.23	35.79	27.47	29.93	174.13	0.10	3.47	0.60	345.72	15.87	329.86
2	Gandhinagar (3-4)	56.15	2.07	17.58	22.47	96.85	7.01	2.39	0.50	205.02	12.50	192.52
3	Gandhinagr 5*	-	-	30.88	14.70	24.68	11.87	1.19	0.05	83.37	11.93	71.45
4	Wanakbori 1-6 TPS	122.72	23.88	91.78	67.24	253.41	35.76	7.17	0.81	602.77	46.29	556.49
5	Wanakbori 7*	-	-	28.03	11.49	20.48	8.18	1.19	0.05	69.42	6.75	62.68
6	Sikka Extension (3-4)	172.90	161.10	137.53	29.29	106.80	1.19	2.84	0.23	611.88	9.60	602.27
7	KLTPS 1-3	66.50	0.01	49.03	8.80	121.38	0.43	1.22	0.17	247.54	4.84	242.70
8	KLTPS 4	36.28	12.39	29.40	3.35	20.79	0.13	0.43	0.02	102.79	1.65	101.16
9	Dhuvaran CCPP 1*	21.24	-	11.07	5.24	35.37	0.21	0.61	0.05	73.79	1.74	72.05
10	Dhuvaran CCPP 2	23.14	7.90	16.92	5.90	35.45	0.76	0.64	0.05	90.76	1.81	88.96
11	Dhuvaran CCPP 3*	76.43	71.64	65.36	13.12	73.64	-	2.14	0.17	302.50	4.32	298.18
12	Utran Extension*	66.54	37.58	57.60	19.22	58.68	3.64	2.13	0.14	245.53	5.69	239.83
13	Ukai 6*	141.13	112.02	122.46	29.95	106.80	0.10	2.84	0.34	515.64	12.71	502.94
14	Ukai Hydro	-	2.53	10.42	0.74	21.37	-	1.73	0.17	36.96	3.51	33.45
15	Kadana Hydro	15.81	-	28.76	1.32	25.73	-	1.38	0.15	73.15	3.06	70.09
16	Wanakbori 8 TPS*	235.75	274.82	187.53	55.68	145.25	-	-	-	899.03	-	899.02
17	Dhuvaran STPS *	-	-	-	-	-	-	-	-	-	-	-
Total		1,108.83	741.72	911.84	318.45	1,320.80	69.39	31.37	3.50	4,505.90	142.26	4,363.64

*PPA based stations



Table 7 : Proposed revised Fixed Cost of GSECL plants for FY 2019-20

				Rs. Crores
Sr. No.	Power Station	Fixed Charges for FY 2019-20	Total Gain/(losses) to be passed through	Net Fixed Charges for FY 2019-20
1	Ukai (3-5)	329.86	65.70	264.16
2	Gandhinagar (3-4)	192.52	(16.59)	209.11
3	Gandhinagr 5*	71.45	(5.10)	76.55
4	Wanakbori 1-6 TPS	556.49	(8.93)	565.42
5	Wanakbori 7*	62.68	(3.42)	66.10
6	KLTPS 1-3	242.70	14.79	227.91
7	KLTPS 4	101.16	0.30	100.86
8	Dhuvaran CCPP 1*	72.05	(2.39)	74.44
9	Dhuvaran CCPP 2	88.96	(4.57)	93.53
10	Utran Extension*	239.83	(6.34)	246.17
11	Ukai Hydro	33.45	(7.65)	41.10
12	Kadana Hydro	70.09	1.59	68.50
13	Ukai 6*	502.94	(7.71)	510.65
14	Dhuvaran CCPP 3*	298.18	(5.22)	303.40
15	Sikka 3&4*	602.27	(10.21)	612.48
16	Wanakbori 8 TPS*	899.02	-	899.02
17	Dhuvaran STPS *	-	-	-
Total		4,363.64	4.26	4,359.39

*PPA based stations

Table 8 : Approved Energy Charges of GSECL plants for FY 2019-20

Sr. No.	Power Station	2019-20 (Rs/kWh)
1	Ukai (3-5)	2.821
2	Gandhinagar (3-4)	3.308
3	Gandhinagr 5*	3.912
4	Wanakbori 1-6 TPS	3.269
5	Wanakbori 7*	3.093
6	Sikka Extension (3-4)*	2.425
7	KLTPS 1-3	1.496
8	KLTPS 4	1.469
9	Dhuvaran CCPP 1*	3.899
10	Dhuvaran CCPP 2	4.066
11	Dhuvaran CCPP 3*	2.256
12	Utran Extension*	4.345
13	Ukai 6*	2.516
14	Wanakbori 8*	2.941
15	Dhuvaran STPS*	-

2.5.3. GSECL requests Hon'ble Commission to approve Fixed Costs for FY 2019-20 as mentioned above.



SECTION 3. GSECL'S PERFORMANCE & FUEL RELATED PARAMETERS

3.1. PREAMBLE

3.1.1. This section outlines the performance & fuel related parameters for GSECL Power plants. For the above purpose, GSECL is indicating actual performance and fuel related parameters achieved in FY 2017-18 vis-à-vis parameters approved in "Multi-Year Tariff Order dated 31st March, 2017". In this section, GSECL has also provided reasons for deviation in the parameters from the approved figures, if any.

3.1.2. The parameters for the PPA governed stations are only indicative, and it may be noted that the parameters for these stations will be governed by terms & conditions of the Power Purchase Agreements.

3.1.3. The following table gives the details of the generating stations along with their capacity and the date of Commissioning:

Table 9 : Capacity, COD & Age of GSECL's generating stations

Name of Station	Unit No.	Capacity of the Unit (MW)	Date of Commissioning
Ukai	3	200	21/01/1979
	4	200	11/09/1979
	5	210	30/01/1985
	Sub Total	610	
Gandhinagar	3	210	20/03/1990
	4	210	20/07/1991
	5	210	17/03/1998
	Sub Total	630	
Wanakbori	1	210	23/03/1982
	2	210	15/01/1983
	3	210	15/03/1984
	4	210	09/03/1986
	5	210	23/09/1986
	6	210	18/11/1987
	7	210	31/12/1998
Sub Total	1470		
KLTPS	1	70	29/03/1990
	2	70	25/03/1991
	3	75	31/03/1997
	4	75	20/12/2009
Sub Total	290		
Dhuvaran	7 - Gas	106.617	28/01/2004
	8 - Gas	112.45	01/11/2007
	Sub Total	219.067	
Utran Extension	GT -1	375	08-11-2009
Sikka TPS 3&4	3	250	14/09/2015
	4	250	28/12/2015
	Sub Total	500	
Ukai TPS	6	500	08/06/2013



Name of Station	Unit No.	Capacity of the Unit (MW)	Date of Commissioning
Dhuvaran (Gas)	3	376	21/05/2014
SUB TOTAL GSECL (Coal + Lignite)		4000	
SUB TOTAL GSECL (Gas)		969.74	
TOTAL GSECL (Thermal)		4969.74	
Ukai Hydro	1	75	08/07/1974
	2	75	13/12/1974
	3	75	22/4/1975
	4	75	04/03/1976
	Sub Total	300	
Ukai LBC	1	2.5	08/12/1987
	2	2.5	19/02/1988
	Sub Total	5	
Kadana Hydro	1	60	31/03/1990
	2	60	02/09/1990
	3	60	03/01/1998
	4	60	27/05/1998
	Sub Total	240	
Panam	1	1	24/03/1994
	2	1	31/03/1994
	Sub Total	2	
SUB TOTAL GSECL (Hydro)		547.00	
Wind Mills		10.00	04/01/2009
Solar	Plant at GTPS Yard	1	27/03/2012
	Plant at Sanand Br.	1	29/03/2012
	Canal		
	Charanka	10	23/03/2015
	KLTPS	1	02/05/2016
	Sikka TPS	1	02/05/2016
TOTAL GSECL as a Whole		5540.74	

3.2. OPERATING PARAMETERS FOR GSECL

3.2.1. Power generating stations are broadly governed by the following operational parameters:

1. Station heat rate
2. Plant Availability factor
3. Plant load factor
4. Specific fuel oil consumption
5. Auxiliary consumption

3.2.2. The above operating parameters are dependent on various technical factors like design, level of operation (low/partial load operation), ageing etc. The justification



for the operational parameters has been discussed in detail in the subsequent sections.

3.2.3. **Low PLF:** The performance of generating stations depends on the generation level on the units as well as plant load factor. In Gujarat, the Intra State ABT / Merit order Despatch System is followed. Gujarat, being a power surplus State, the despatch instructions for a generating station depend upon the merit order (Low cost generation are given first priority) as per the Indian Electricity Grid Code. Accordingly, the GSECL stations are advised to be backed down or put under Reserve Shut Down depending upon system conditions. This results in lower plant load factor (PLF) of GSECL stations which is beyond the control of GSECL.

3.2.4. **Effects of low load operation/back down:** Partial load / low load operation results in deterioration in overall performance of the units and lower efficiency of power stations. Following performance issues can be attributed to the low load operation of generating stations;

- Increase in station heat rate (SHR)
- Increase in fuel consumption
- Increase in specific fuel oil consumption (Increase in no. of hot/cold startups increases the fuel oil consumption)
- Increase in auxiliary consumption

3.2.5. These factors are beyond the control of GSECL and it requests the Hon'ble Commission to approve the actual performance related factors of GSECL Stations. In spite of these uncontrollable issues, most of the GSECL power stations have performed up to the benchmark levels. (Individual details of plants and their reasons for under-performance are explained in subsequent sections.)

3.2.6. GSECL submits that all the above parameters are beyond the control of GSECL.

3.2.7. GSECL also submits that minor R&M projects are taken up to improve the automatic control systems and instrumentation of the old plants for replacing obsolete system to sustain performance.

3.2.8. Justification for the proposed operating parameters for true-up of FY 2017-18:

3.2.9. The actual operating parameters are dependent on the present condition of machine. The present operating condition of the machines is a function of several factors. The factors impacting GSECL stations have been specified in the Case no. 1619 of 2016 for "*Filing of Petition for True Up of FY 2015-16 and Multi Year Aggregate Revenue Requirement for FY 2016-17 to 2020-21 and Determination of final ARR for FY 2016-17 and Determination of Tariff for FY 2017-18 for GSECL Stations under MYT Framework Regulations and Section 62 of the Electricity Act, 2003*" & are still valid. Therefore, the Hon'ble Commission is requested to consider the same.

3.3. TARGET AVAILABILITY FOR RECOVERY OF FULL CAPACITY (FIXED) CHARGES



3.3.1. The plant availability factor achieved by the GSECL stations during FY 2017-18 for recovery of fixed charges is shown as per the **Table 10** below.

3.3.2. For true-up, the factors impacting availability of GSECL stations & reasons for deviation from norms are as below:

- **Ukai (6):** Generator Rotor Earth Fault (74 days).
- **Sikka (3 – 4):** Boiler Choke up, APH choke up, MSSV stuck up and PA Fan stalling (37 days) issue.
- **KLPTS (1 -3):** Bottom ash conveying & Clinker removal (77 days) and Non availability of coal mills (63 days) due to change in source of coal.
- **KLTPS 4:** Combuster inspection (44 days) and Cyclone vertax & seal pot (52 days) issue.
- **Dhuvaran CCPP 1:** Generator Rotor Earth Fault (74 days).
- **Dhuvaran CCPP 2:** Exhaust gas temp high (23 days) and Non availability of Gas (29 days).
- **Dhuvaran CCPP 3:** Non availability of Gas (25 days)

Table 10 : Plant availability factor

(In %)

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	80%	89.65%
2	Gandhinagar (3-4)	84%	93.37%
3	Gandhinagar 5*	85%	92.26%
4	Wanakbori 1-6 TPS	85%	86.95%
5	Wanakbori 7*	85%	100.00%
6	Sikka TPS	80%	0.00%
7	Sikka Extension (3-4)*	85%	84.49%
8	KLTPS 1-3	75%	65.62%
9	KLTPS 4	80%	49.02%
10	Dhuvaran CCPP 1*	85%	73.39%
11	Dhuvaran CCPP 2	85%	83.16%
12	Dhuvaran CCPP 3*	85%	83.19%
13	Utran Extension*	85%	90.18%
14	Ukai 6*	85%	74.94%
15	Ukai Hydro	80%	96.55%
16	Kadana Hydro	80%	91.98%

*PPA Governed Station



3.4. PLANT LOAD FACTOR

3.4.1. The actual Plant Load Factor achieved by the GSECL during FY 2017-18 is tabulated below.

3.4.2. For true-up, the factors impacting PLF of GSECL stations and reasons for deviation from norms are as below:

- **Ukai 6:** Generator Rotor Earth Fault (74 days)
- **Sikka (3-4):** Boiler Choke up, APH choke up, MSSV stuck up and PA Fan stalling (37 days) issue) and Reserve shut down (86 days)
- **KLTPS 1-3:** Bottom ash conveying & Clinker removal (77 days) and Non availability of coal mills (63 days) due to change in source of coal
- **KLTPS 4:** Combuster inspection (44 days) and Cyclone vertex & seal pot (52 days) issue
- **Dhuvaran CCPP1:** Generator Rotor Earth Fault (74 days) and Reserve shut down (155 days)
- **Dhuvaran CCPP3:** Reserve shut down (298 days) and Non availability of Gas (25 days)
- **Utran Extension:** Reserve shut down (282 days)
- **Ukai Hydro:** Low reservoir level

Table 11 : Plant load factor

(In %)

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	60%	70.75%
2	Gandhinagar (3-4)	45%	62.29%
3	Gandhinagar 5*	77%	78.83%
4	Wanakbori 1-6 TPS	55%	56.39%
5	Wanakbori 7*	70%	80.41%
6	Sikka TPS	40%	0.00%
7	Sikka Extension (3-4)*	70%	61.13%
8	KLTPS 1-3	75%	53.30%
9	KLTPS 4	75%	44.73%
10	Dhuvaran CCPP 1*	25%	21.03%
11	Dhuvaran CCPP 2	25%	37.79%
12	Dhuvaran CCPP 3*	25%	0.89%
13	Utran Extension*	25%	7.85%
14	Ukai 6*	77%	68.23%
15	Ukai Hydro	13%	12.14%
16	Kadana Hydro	6%	14.77%

* PPA Governed Station

**3.5. AUXILIARY CONSUMPTION**

3.5.1. The actual Auxiliary consumption recorded by GSECL during FY 2017-18 has been mentioned below. The old stations of GSECL, when operated at part load capacities under the constraints as shown, consume more auxiliary power resulting in higher auxiliary consumption.

3.5.2. For true-up, the factors impacting auxiliary consumption of GSECL stations & reasons for deviation from norms are as below:

- **Ukai 3-5:** Partial operation due to backing down & APC cons during RSD
- **Gandhinagar 3-4:** Partial operation due to backing down & APC cons during RSD
- **Gandhinagar 5:** Partial operation due to backing down & APC cons during RSD
- **Wanakbori 1-6:** Partial operation due to backing down & APC cons during RSD
- **Sikka 3-4:** Partial Operation due to backing down & Boiler and APH choke up & APC cons during RSD
- **KLTPS 1-3:** Partial Operation due to backing down and unit constrains (mill outages) & APC cons during RSD
- **KLTPS 4:** Partial Operation due to unit constrains (Combuster lower temp) & APC cons during RSD
- **Dhuvaran CAPP1:** Partial Operation due to backing down and condensor problem & APC cons during RSD
- **Dhuvaran CAPP2:** Partial Operation due to backing down and condensor problem & APC cons during RSD
- **Dhuvaran CAPP3:** APC cons during RSD
- **Utran Extension:** APC cons during RSD
- **Ukai Hydro:** Partial Operation due to backing down & APC cons during RSD

3.5.3. Over and above backing down, the units frequently undergo reserve shut down and during the same, minimum auxiliaries are required to be run to keep the units available so that the same can be taken as and when required by SLDC / system.

Table 12 : Auxiliary consumption

(In %)

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	9.00%	9.67%
2	Gandhinagar (3-4)	9.00%	10.59%
3	Gandhinagar 5*	9.50%	9.82%



Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
4	Wanakbori 1-6 TPS	9.00%	9.09%
5	Wanakbori 7*	9.50%	9.07%
6	Sikka TPS	11.00%	0.00%
7	Sikka Extension (3-4)*	9.00%	9.65%
8	KLTPS 1-3	12.00%	14.24%
9	KLTPS 4	12.00%	21.80%
10	Dhuvaran CCPP 1*	4.00%	7.26%
11	Dhuvaran CCPP 2	3.00%	5.33%
12	Dhuvaran CCPP 3*	3.00%	26.02%
13	Utran Extension*	3.00%	6.04%
14	Ukai 6*	6.00%	5.94%
15	Ukai Hydro	0.60%	1.04%
16	Kadana Hydro	1.00%	0.87%

* PPA Governed Station

3.6. STATION HEAT RATE

3.6.1. Actual Station Heat Rate attained by the generating stations of GSECL during FY 2017-18 has been mentioned in the table below. It may be noted that for any generation plant, the SHR always deteriorates with the time. Hence, the old stations of GSECL are not expected to achieve the SHR comparable to the norms of the Hon'ble Commission. Further as and when any unit operates on partial load, SHR increases drastically. GSECL has taken measures to improve SHR due to which some stations have shown considerable improvement.

3.6.2. For true-up, the factors impacting SHR of GSECL stations & reasons for deviation from norms are as below:

- **Gandhinagar 5:** Partial load operation due to backing down
- **Sikka 3-4:** Partial Operation due to backing down & Boiler and APH choke up, Frequent start stop due to RSD and Outages
- **Dhuvaran CCPP1:** Partial Operation due to backing down & condensor problem and frequent start stop
- **Dhuvaran CCPP2:** Partial Operation due to backing down & condensor problem and frequent start stop
- **Dhuvaran CCPP3:** Partial Operation due to backing down and frequent start stop
- **Utran Extension:** Partial Operation due to backing down and frequent start stop

**Table 13 : Station heat rate**

In Kcal/KWh

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	2,715	2,589
2	Gandhinagar (3-4)	2,625	2,532
3	Gandhinagar 5*	2,460	2,503
4	Wanakbori 1-6 TPS	2,625	2,580
5	Wanakbori 7*	2,460	2,450
6	Sikka TPS	3,003	-
7	Sikka Extension (3-4)*	2,398	2,507
8	KLTPS 1-3	3,231	3,231
9	KLTPS 4	3,000	2,968
10	Dhuvaran CCPP 1*	1,950	2,122
11	Dhuvaran CCPP 2	1,950	2,056
12	Dhuvaran CCPP 3*	1,850	3,643
13	Utran Extension*	1,850	1,848
14	Ukai 6*	2,385	2,368

* PPA Governed Station

3.7. SPECIFIC FUEL OIL CONSUMPTION

3.7.1. The actual Specific Oil Consumption recorded by GSECL during FY 2017-18 are mentioned below:

3.7.2. It may be noted that the Specific Oil Consumption is calculated in terms of percentage of total calorific requirement of the power generating unit and has relation with the size of the generating unit. For the lower size units the Specific Oil Consumption remains higher as compared to larger size power generating units, because certain amount of Specific Oil consumption remains fixed irrespective of the size of the generating unit. As most of the units of GSECL power stations are smaller in size, Specific Oil Consumption of these plants is generally high.

3.7.3. For true-up, the factors impacting SFC consumption of GSECL stations & reasons for deviation from norms are as below:

- **Ukai (3-5):** Unit -4 R&M activity (0.85 ml/kwh)
- **Wanakbori (1-6):** Start Stop due to RSD (53 Nos) & Higher forced outages (66 Nos)
- **Sikka (3-4):** Start Stop due to RSD (19 Nos) & Higher forced outages (27 Nos) (0.54 ml/kwh)
- **KLTPS 1-3:** Start Stop due to Higher forced outages (96 Nos) (5.28 ml/kwh)
- **KLTPS 4:** Start Stop due to Higher forced outages (27 Nos) (0.84 ml/kwh)



Table 14 : Specific oil consumption

In ml/KWh

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	1.00	1.32
2	Gandhinagar (3-4)	1.00	0.97
3	Gandhinagar 5*	3.50	0.37
4	Wanakbori 1-6 TPS	1.00	1.10
5	Wanakbori 7*	3.50	0.32
6	Sikka TPS	3.00	-
7	Sikka Extension (3-4)*	1.00	1.27
8	KLTPS 1-3	3.00	8.45
9	KLTPS 4	3.00	4.35
10	Ukai 6*	1.00	0.31

*PPA Governed Station

3.8. TRANSIT LOSS

3.8.1. Approved Transit loss for 2017-18 and Actual Transit loss for FY 2017-18 has been mentioned below:

Table 15 : Transit loss

Sr. No.	Power Station	FY 2017-18	
		Approved	GSECL (Actual)
1	Ukai (3-5)	0.80%	0.80%
2	Gandhinagar (3-4)	0.80%	0.80%
3	Gandhinagar 5*	0.80%	0.80%
4	Wanakbori 1-6 TPS	0.80%	0.80%
5	Wanakbori 7*	0.80%	0.80%
6	Sikka TPS	0.80%	0.00%
7	Sikka Extension (3-4)*	0.00%	0.80%
8	KLTPS 1-3	0.20%	0.20%
9	KLTPS 4	0.20%	0.20%
10	Ukai 6*	0.80%	0.80%

* PPA Governed Station.

3.9. NET GENERATION

3.9.1. Based on plant load factor and auxiliary consumption discussed in aforesaid sections, the gross generation & net generation for GSECL stations for FY 2017-18 has been mentioned below:

Table 16 : Station wise net generation for True-up

Sr. No.	Station	FY 2017-18		
		Gross Generation (MU)	Aux. Consumption (MU)	Net Generation (MU)
1	Ukai (3-5)	3,780.60	365.58	3,415.01



2	Gandhinagar (3-4)	2,291.78	242.78	2,049.00
3	Gandhinagar 5*	1,450.18	142.44	1,307.74
4	Wanakbori 1-6 TPS	6,224.50	565.59	5,658.92
5	Wanakbori 7*	1,479.25	134.21	1,345.04
6	Sikka TPS	-	-	-
7	Sikka Extension (3-4)*	2,677.50	258.42	2,419.09
8	KLTPS 1-3	1,003.91	142.95	860.96
9	KLTPS 4	293.86	64.07	229.79
10	Dhuvaran CCPP 1*	196.38	14.25	182.13
11	Dhuvaran CCPP 2	372.23	19.84	352.39
12	Dhuvaran CCPP 3*	29.42	7.65	21.76
13	Utran Extension*	257.59	15.55	242.04
14	Ukai 6*	2,988.47	177.52	2,810.96
15	Ukai Hydro	324.42	3.37	321.05
16	Kadana Hydro	313.03	2.73	310.31
Total		23,683.12	2,156.94	21,526.18

*PPA based stations

3.10. FUEL RELATED PARAMETERS

3.10.1. The table below summaries actual value of weighted average Gross Calorific Value of primary fuels and secondary fuel recorded by GSECL along with approved GCV for primary & secondary fuel, coal mix for FY 2017-18 is mentioned below:



Table 17 : Summary of fuel related parameters

Sr. No.	Station	Mix of Coal (%)			Wt. Av. GCV of Lignite Coal (Kcal/Kg)	Wt. Av. GCV of Coal (Kcal/Kg)	Wt. Av. GCV of Gas (Kcal/Scm)	Wt. Av. GCV of Oil (Kcal/kl)
		Indiginous	Washed	Imported				
1	Ukai (3-5)	37.99%	54.77%	7.24%		3,901	10,459	
2	Gandhinagar (3-4)	45.81%	46.38%	7.80%		3,690	10,420	
3	Gandhinagar 5*	34.55%	56.31%	9.14%		3,829	10,467	
4	Wanakbori 1-6 TPS	32.07%	64.15%	3.79%		3,864	10,386	
5	Wanakbori 7 TPS	55.18%	40.94%	3.88%		3,834	10,491	
6	Sikka TPS	0.00%	0.00%	0.00%		-	-	
7	Sikka Extension (3-4)*	0.00%	1.55%	98.45%		5,022	10,348	
8	KLTPS 1-3				2,618		10,261	
9	KLTPS 4				2,581		10,261	
10	Dhuvaran CCPP 1*					9,618		
11	Dhuvaran CCPP 2					9,596		
12	Dhuvaran CCPP 3*					9,486		
13	Utran Extension*					9,366		
14	Ukai 6*	10.72%	77.71%	11.57%		3,949	10,438	

*PPA based stations

3.10.2. The Fuel related parameters mentioned above have been used for computation of variable cost for GSECL stations.

3.10.3. The summary of actual coal prices for FY 2017-18 along with mix of coal for the year is shown in following table.



Table 18 : Summary of fuel prices for FY 2017-18

Sr. No.	Station	Wt. Av. Cost of Indigenous Coal (Rs./MT)	Wt. Av. Cost of Washed Coal (Rs./MT)	Wt. Av. Cost of Imported Coal (Rs./MT)	Wt. Av. Cost of Lignite Coal (Rs./MT)	Wt. Av. Cost of Gas (Rs./Scm)	Wt. Av. Cost of Oil (Rs./kl)
1	Ukai (3-5)	3,939	4,387	7,314			24,869
2	Gandhinagar (3-4)	4,237	4,749	6,748			26,755
3	Gandhinagar 5*	4,268	4,826	6,784			26,755
4	Wanakbori 1-6 TPS	4,176	4,212	7,256			26,664
5	Wanakbori 7*	4,176	4,216	7,282			26,664
6	Sikka TPS	-	-	-			-
7	Sikka Extension (3-4)*	-	5,149	6,998			28,996
8	KLTPS 1-3				1,472		32,818
9	KLTPS 4				1,462		32,818
10	Dhuvaran CCPP 1*					9.62	
11	Dhuvaran CCPP 2					9.81	
12	Dhuvaran CCPP 3*					23.85	
13	Utran Extension*					25.32	
14	Ukai 6*	3,983	4,405	7,374			25,103

*PPA based stations

3.10.4. The GSECL requests the Hon'ble Commission to approve the variable cost parameters as outlined above and any variation in the fuel mix, quality and rate will be affecting the variable cost accordingly.

**SECTION 4. TRUE UP OF FY 2017-18****4.1. PREAMBLE**

- 4.1.1. This section outlines the actual performance of GSECL for FY 2017-18. In line with the provisions of the GERC MYT regulations 2016, GSECL hereby submits a detailed Actual Performance for 2017-18 comparing with the figures approved by the Hon'ble Commission vide "MYT Order dated 31st March, 2017".
- 4.1.2. In line with the provisions under MYT Regulations, 2016 GSECL has filed this True Up Petition for the year FY 2017-18, wherein, GSECL is submitting actual performance for FY 2017-18 vis-à-vis its comparison with parameters approved for FY 2017-18 by the Hon'ble Commission.
- 4.1.3. For the purpose of True-Up all the expense heads have been categorized into Controllable and Uncontrollable factors as shown in the following sections. A head wise comparison has been made between the values approved by the Hon'ble Commission vide "MYT Order dated 31st March, 2017" and the actual values for various expenditures for FY 2017-18.
- 4.1.4. GSECL has worked out its Aggregate Revenue Requirement (ARR) for FY 2017-18 as a part of the True Up for FY 2017-18. GSECL has presented the actual cost components based on audited annual accounts for FY 2017-18. Further, since Sikka TPS Units 1 and 2 have been decommissioned on 1 April, 2017, the approved values of the ARR components for this plant as per the MYT Order dated 31 March, 2017 have been shown in the tables to match with the total approved values however, no gain/(loss) computation has been carried out for Sikka TPS 1-2.

4.2. COMPUTATION OF FUEL EXPENSES FOR FY 2017-18

- 4.2.1. Based on operating and fuel related parameters estimated by GSECL during FY 2017-18, plant wise fuel expenses arrived are tabulated below.

Table 19 : Fuel expenses for FY 2017-18

Sr. No.	Power Station	Net Generation (Actual) (MU)	Fuel Cost (Approved) (Rs. Crores)	Fuel Cost (Actual) (Rs. Crores)
1	Ukai (3-5)	3,415.01	1,169.64	1,125.44
2	Gandhinagar (3-4)	2,049.00	756.49	742.71
3	Gandhinagr 5*	1,307.74	456.73	460.07
4	Wanakbori 1-6 TPS	5,658.92	1,846.22	1,817.43
5	Wanakbori 7*	1,345.04	422.10	411.47
6	Sikka TPS	-	-	-
7	Sikka Extension (3-4)*	2,419.09	888.56	936.48
8	KLTPS 1-3	860.96	185.97	205.59
9	KLTPS 4	229.79	46.58	52.96
10	Dhuvaran CCPP 1*	182.13	36.99	41.66
11	Dhuvaran CCPP 2	352.39	72.39	78.21
12	Dhuvaran CCPP 3*	21.76	10.44	26.95
13	Utran Extension*	242.04	124.82	128.74
14	Ukai 6*	2,810.96	858.83	849.58



Sr. No.	Power Station	Net Generation (Actual) (MU)	Fuel Cost (Approved) (Rs. Crores)	Fuel Cost (Actual) (Rs. Crores)
Total			6,875.76	6,877.28

*PPA based stations

4.3. ENERGY CHARGES FOR FY 2017-18

4.3.1. Based on operating parameters and actual fuel cost, Energy Charges for FY 2017-18 for GSECL's power stations are mentioned below.

Table 20 : Energy charges for FY 2017-18

Sr. No.	Power Station	Approved (Rs/kWh)	Actual (Rs/kWh)
1	Ukai (3-5)	3.42	3.30
2	Gandhinagar (3-4)	3.69	3.62
3	Gandhinagr 5*	3.49	3.52
4	Wanakbori 1-6 TPS	3.26	3.21
5	Wanakbori 7*	3.14	3.06
6	Sikka TPS	-	-
7	Sikka Extension (3-4)*	3.67	3.87
8	KLTPS 1-3	2.16	2.39
9	KLTPS 4	2.03	2.30
10	Dhuvaran CCPP 1*	2.03	2.29
11	Dhuvaran CCPP 2	2.05	2.22
12	Dhuvaran CCPP 3*	4.80	12.38
13	Utran Extension*	5.16	5.32
14	Ukai 6*	3.06	3.02

* PPA Governed Station

Note: Approved cost has been computed based on actual fuel cost & approved operational parameters by the Commission

4.4. GAINS/ (LOSSES) FROM FUEL EXPENSES ON ACCOUNT OF EFFICIENCY

4.4.1. For the purpose of True Up and for determination of gains or losses on account of operational performance of the generating stations, GSECL has derived fuel expenses considering performance parameters such as auxiliary consumption, station heat rate, specific oil consumption and transit loss as approved by the Hon'ble Commission in "MYT Order dated 31st March, 2017" and considering the actual fuel related parameters such as GCV of fuel and price of fuels etc. recorded by GSECL. The fuel expenses so derived have been compared with the fuel expenses actually incurred with actual performance parameters of GSECL for identification of gains/ losses on account of efficiency of these performance parameters. Thus, based on the same, GSECL's gain/ (losses) is Rs. 54.95 Crores in fuel expenses on account of operational efficiencies during FY 2017-18. The same would be treated appropriately in line with the provisions of the MYT regulations.

Table 21 : Gains/ (losses) from fuel efficiency

Sr. No.	Power Station	Fuel Cost	Fuel Cost	Gain/(Loss)	Rs. Crores Gain/(Loss) due
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		with Approved Operational Parameters	Incurred by GSECL	due to Controllable Factor	to Uncontrollable Factor
1	Ukai (3-5)	1,169.64	1,125.44	44.20	
2	Gandhinagar (3-4)	756.49	742.71	13.78	
3	Gandhinagr 5*	456.73	460.07		
4	Wanakbori 1-6 TPS	1,846.22	1,817.43	28.79	
5	Wanakbori 7*	422.10	411.47		
6	Sikka TPS	-	-	-	
7	Sikka Extension (3-4)*	888.56	936.48		
8	KLTPS 1-3	185.97	205.59	(19.62)	
9	KLTPS 4	46.58	52.96	(6.38)	
10	Dhuvaran CCPP 1*	36.99	41.66		
11	Dhuvaran CCPP 2	72.39	78.21	(5.82)	
12	Dhuvaran CCPP 3*	10.44	26.95		
13	Utran Extension*	124.82	128.74		
14	Ukai 6*	858.83	849.58		
Total		6,875.76	6,877.28	54.95	-

* PPA Governed Station

4.5. CAPITAL EXPENDITURE

4.5.1. The actual capitalization for FY 2017-18 is as given below:

Table 22 : Actual capitalization for FY 2017-18

Sr. No.	Station	Particular	Rs. Crores
			CAPITALISATION
			FY 2017-18
			Actuals
1	Ukai (3-5)	Debt	(154.48)
		Equity	(66.21)
		Total	(220.68)
2	Gandhinagar (3-4)	Debt	17.11
		Equity	7.33
		Total	24.45
3	Gandhinagar 5*	Debt	-
		Equity	-
		Total	-
4	Wanakbori 1-6 TPS	Debt	203.77
		Equity	87.33
		Total	291.10
5	Wanakbori 7*	Debt	-
		Equity	-
		Total	-
6	Sikka 1-2 TPS	Debt	(473.94)
		Equity	(203.12)
		Total	(677.05)
7	Sikka Extension (3-4)*	Debt	123.05
		Equity	52.73



Sr. No.	Station	Particular	CAPITALISATION
			FY 2017-18
			Actuals
		Total	175.78
8	KLTPS 1-3	Debt	16.08
		Equity	6.89
		Total	22.97
9	KLTPS 4	Debt	-
		Equity	-
		Total	-
10	Dhuvaran CCPP 1*	Debt	0.24
		Equity	0.10
		Total	0.35
11	Dhuvaran CCPP 2	Debt	0.48
		Equity	0.21
		Total	0.69
12	Dhuvaran CCPP 3*	Debt	0.60
		Equity	0.26
		Total	0.85
13	Utran Gas*	Debt	(3.12)
		Equity	(1.34)
		Total	(4.45)
14	Utran Extension*	Debt	0.45
		Equity	0.19
		Total	0.65
15	Ukai 6*	Debt	14.33
		Equity	6.14
		Total	20.48
16	Ukai Hydro	Debt	1.48
		Equity	0.63
		Total	2.11
17	Kadana Hydro	Debt	0.63
		Equity	0.27
		Total	0.90
18	Total	Debt	(253.30)
		Equity	(108.56)
		Total	(361.86)

4.6. FIXED COST FOR FY 2017-18

4.6.1. Based on the Capital Cost and the consequent Capitalized Expenditure the funding of the capital expenditure through debt & equity, etc. the actual figures for fixed cost of GSECL for FY 2017-18 have been outlined thereof. As outlined under the Regulations, the fixed cost for GSECL has been categorized under the following heads:

- Depreciation
- Interest and Finance Charges
- Return on Equity



- Operation and Maintenance Expenses
- Interest on Working Capital
- Water Charges
- SLDC Charges
- Tax
- Non-Tariff Income

4.6.2. For FY 2017-18, GSECL has determined actual fixed cost for its generating stations on the basis of Gujarat Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2016, and annual audited accounts for FY 2017-18.



Table 23 : Actual fixed cost for GSECL for FY 2017-18

Sr. No.	Power Station	Rs. Crores										
		Depreciation (Actual)	Interest & Finance Charges (Actual)	Return on Equity (Actual)	Interest on Working Capital (Actual)	O&M Expenses (Actual)	Water Charges (Actual)	SLDC Charges (Actual)	Tax (Actual)	Total Fixed Cost (Actual)	Non-Tariff Income (Actual)	Net Fixed Charges
1	Ukai (3-5)	33.46	5.82	24.89	34.11	196.25	0.22	0.50	11.85	307.09	12.28	294.81
2	Gandhinagar (3-4)	31.96	-	20.89	26.17	115.77	43.05	0.49	8.16	246.49	20.43	226.06
3	Gandhinagr 5*	2.16	-	28.67	13.08	57.57	21.53	-	4.08	127.08	9.50	117.58
4	Wanakbori 1-6 TPS	67.60	16.79	73.52	68.43	213.95	47.97	0.91	24.48	513.65	24.74	488.91
5	Wanakbori 7*	2.13	-	26.17	10.91	16.59	10.43	0.15	4.08	70.47	4.02	66.45
6	Sikka TPS	-	-	-	-	-	-	-	-	-	-	-
7	Sikka Extension (3-4)*	179.68	178.37	142.59	38.75	103.53	3.80	0.42	9.71	656.86	10.63	646.22
8	KLTPS 1-3	33.13	2.80	49.82	9.59	110.75	0.53	0.16	4.18	210.95	3.48	207.48
9	KLTPS 4	35.65	16.01	28.76	3.45	14.79	0.01	0.05	1.46	100.19	0.01	100.18
10	Dhuvaran CCPP 1*	8.83	-	10.45	4.21	35.66	-	0.09	2.07	61.32	0.87	60.44
11	Dhuvaran CCPP 2	22.32	7.05	14.14	4.61	37.61	-	0.10	2.18	88.01	0.87	87.14
12	Dhuvaran CCPP 3*	78.77	75.41	64.80	48.97	3.28	-	0.27	7.31	278.80	-	278.80
13	Utran Extension*	68.06	44.33	57.36	28.40	44.71	1.43	0.27	7.28	251.83	0.61	251.21
14	Ukai 6*	152.88	121.51	123.40	30.92	51.97	-	0.36	9.71	490.76	28.03	462.73
15	Ukai Hydro	2.15	2.29	10.48	0.59	12.22	0.07	0.22	5.92	33.94	0.02	33.93
16	Kadana Hydro	5.14	-	28.55	1.82	29.90	-	0.18	4.70	70.29	0.82	69.46
Total		723.94	470.37	704.48	324.00	1,044.54	129.04	4.18	107.17	3,507.72	116.30	3,391.42

* PPA Governed Station



4.6.3. In "MYT Order dated 31st March, 2017", the Hon'ble Commission had approved fixed cost for GSECL's power stations for FY 2017-18 as mentioned below.

Table 24 : Approved fixed cost for GSECL for FY 2017-18

Sr. No.	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Water charges	SLDC Charges	MAT	Total Fixed Cost	Rs. Crores	
											Non-Tariff Income (Actual)	Net Fixed Charges
1	Ukai (3-5)	72.06	24.73	25.70	41.34	217.09	0.13	0.60	4.83	386.49	22.11	364.38
2	Gandhinagar (3-4)	55.81	11.90	17.30	22.33	86.65	7.01	0.50	2.39	203.88	15.47	188.41
3	Gandhinagar 5*	-	-	30.88	14.59	22.08	11.87	0.05	1.19	80.66	11.93	68.73
4	Wanakbori 1-6 TPS	101.36	17.25	73.98	67.10	226.73	35.76	0.81	7.17	530.16	46.29	483.87
5	Wanakbori 7*	-	-	28.03	11.35	18.33	8.18	0.05	1.19	67.13	6.75	60.38
6	Sikka TPS	17.22	0.35	9.74	13.89	80.09	2.28	0.16	1.37	125.11	6.20	118.91
7	Sikka Extension (3-4)*	172.90	197.24	137.53	29.25	90.77	1.19	0.23	2.84	631.95	9.60	622.35
8	KLTPS 1-3	65.83	1.08	48.47	8.52	108.60	0.43	0.17	1.22	234.33	4.84	229.48
9	KLTPS 4	36.03	19.26	29.20	3.36	18.60	0.13	0.02	0.43	107.03	1.65	105.38
10	Dhuvaran CCPP 1*	21.24	-	11.07	5.15	31.64	0.21	0.05	0.61	69.98	1.74	68.24
11	Dhuvaran CCPP 2	20.67	8.75	14.74	5.72	31.72	0.76	0.05	0.64	83.05	1.81	81.24
12	Dhuvaran CCPP 3*	76.43	87.63	65.36	13.10	65.89	-	0.17	2.14	310.72	4.32	306.40
13	Utran Extension*	66.47	50.99	57.55	19.19	52.50	3.64	0.14	2.13	252.61	5.69	246.92
14	Ukai 6*	141.13	141.16	122.46	29.66	81.22	0.10	0.34	2.84	518.92	12.71	506.21
15	Ukai Hydro	-	2.57	10.42	0.70	19.12	-	0.17	1.73	34.71	3.51	31.20
16	Kadana Hydro	15.63	-	28.60	1.26	23.02	-	0.15	1.38	70.04	3.06	66.98
Total		862.79	562.91	711.04	286.51	1,174.06	71.71	3.66	34.10	3,706.77	157.68	3,549.09

* PPA governed Station



4.7. GAINS/ (LOSSES) FROM FIXED COST COMPONENTS

4.7.1. GSECL has indicated the actual performance for FY 2017-18 for various cost components. The comparison of the actual value for fixed cost components for FY 2017-18 and the cost approved by the Hon'ble Commission has been done to arrive at the gains or losses for each of the element of the fixed cost of GSECL, which has been discussed in detail in subsequent paragraphs. As elaborated earlier, no gain/(loss) has been computed for Sikka TPS Units 1 and 2 as the plant is decommissioned on 1 April, 2017.

4.8. GAIN/ LOSSES FROM DEPRECIATION

4.8.1. Based on opening gross fixed assets as per the annual audited accounts and considering capital additions during the year, the actual depreciation for FY 2017-18 is Rs. 723.94 Crores as against Rs. 862.78 Crores approved by the Hon'ble Commission. Accordingly, based on the above classification of cost elements into controllable and uncontrollable elements in line with the provisions of the MYT regulations, GSECL has incurred a gain/ (loss) of Rs. 135.96 Crores due to variation in actual value of depreciation against the cost approved by the Hon'ble Commission.

4.8.2. The Hon'ble Commission in the MYT Order dated 31st March, 2017 has observed the following:

"Further, Regulation 39 of the GERC (MYT) Regulations, 2016 stipulates the methodology for the calculation of depreciation as under:

"The Generation Company or Transmission Licensee or SLDC or Distribution Licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective Business computed in the following manner:

(a) The approved original cost of the project/fixed assets shall be the value base for calculation of depreciation;

(b) Depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure I to these Regulations:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets:

Provided further that for a Generating Company or a Transmission Licensee or SLDC or a Distribution Licensee formed as a result of a Transfer Scheme, the depreciation on assets transferred under the Transfer Scheme shall be charged as per rates specified in these Regulations for a period of 12 years from the date of the Transfer Scheme, and thereafter depreciation will be spread over the balance useful life of the assets:

....."

In view of above, GSECL is hereby directed to calculate the depreciation from FY 2017-18 as per the aforesaid Regulation of the GERC (MYT) Regulations, 2016. For consideration of 12 years, GSECL shall consider 1st April, 2005 as the date of



commencement of 12 years period. GSECL shall align its mechanism for calculation of Depreciation with the stipulations of Regulations and the Commission shall consider depreciation calculated as per the MYT Regulations, 2016 for truing up from FY 2017-18.”

- 4.8.3. Accordingly, GSECL has calculated the Depreciation for FY 2017-18 in accordance with the provisions of the MYT Regulations, 2016 and the aforementioned directives of the Hon’ble Commission.
- 4.8.4. Overall, the depreciation of GSECL for the FY 2017-18 is within the values approved by the Hon’ble Commission and request the Hon’ble Commission to approve the same.
- 4.8.5. The comparison of the actual value for depreciation during FY 2017-18 with the value approved by the Hon’ble Commission is as outlined below.

Table 25 : Gain/ (losses) from depreciation for FY 2017-18

					Rs. Crore
Sr. No.	Power Station	Depreciation (Approved)	Depreciation (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Un-controllable Factor
1	Ukai (3-5)	72.06	33.46		38.60
2	Gandhinagar (3-4)	55.81	31.96		23.85
3	Gandhinagr 5*	-	2.16		
4	Wanakbori 1-6 TPS	101.36	67.60		33.76
5	Wanakbori 7*	-	2.13		
6	Sikka TPS	17.22	-		
7	Sikka Extension (3-4)*	172.90	179.68		
8	KLTPS 1-3	65.83	33.13		32.70
9	KLTPS 4	36.03	35.65		0.38
10	Dhuvaran CCPP 1*	21.24	8.83		
11	Dhuvaran CCPP 2	20.67	22.32		(1.65)
12	Dhuvaran CCPP 3*	76.43	78.77		
13	Utran Extension*	66.47	68.06		
14	Ukai 6*	141.13	152.88		
15	Ukai Hydro	-	2.15		(2.15)
16	Kadana Hydro	15.63	5.14		10.49
Total		862.78	723.94	-	135.96

* PPA based Station

4.9. GAIN/ LOSSES FROM INTEREST & FINANCE CHARGES

- 4.9.1. The Hon’ble Commission has classified the Interest and finance charges as “uncontrollable” expenses in the true up for previous years. Taking the above into consideration, GSECL has considered the gains/losses on account in Interest and Finance Charges into “Uncontrollable” factors.
- 4.9.2. GSECL has incurred total Interest & finance charges for FY 2017-18 as Rs. 470.37 Crores in comparison to the approved costs of Rs. 562.91 Crores leading to an uncontrollable gain/ (loss) of Rs. 34.79 Crores.



4.9.3. The comparison of the actual value for Interest and Finance Charges during FY 2017-18 is mentioned as below.

Table 26 : Gain/ (losses) from Interest & finance charges for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Interest & Finance Charges (Approved)	Interest & Finance Charges (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	24.73	5.82	-	18.91
2	Gandhinagar (3-4)	11.90	-	-	11.90
3	Gandhinagr 5*	-	-	-	-
4	Wanakbori 1-6 TPS	17.25	16.79	-	0.46
5	Wanakbori 7*	-	-	-	-
6	Sikka TPS	0.35	-	-	-
7	Sikka Extension (3-4)*	197.24	178.37	-	-
8	KLTPS 1-3	1.08	2.80	-	(1.72)
9	KLTPS 4	19.26	16.01	-	3.25
10	Dhuvaran CCPP 1*	-	-	-	-
11	Dhuvaran CCPP 2	8.75	7.05	-	1.70
12	Dhuvaran CCPP 3*	87.63	75.41	-	-
13	Utran Extension*	50.99	44.33	-	-
14	Ukai 6*	141.16	121.51	-	-
15	Ukai Hydro	2.57	2.29	-	0.28
16	Kadana Hydro	-	-	-	-
Total		562.91	470.37	-	34.79

* PPA based Station

4.10. GAIN/ LOSSES FROM RETURN ON EQUITY

4.10.1. The comparison of the actual value for Return on Equity (RoE) computed on basis of the opening equity for FY 2017-18 and additions to equity during the year on account of funding of capitalization in comparison to the RoE approved by the Hon'ble Commission in MYT Order dated 31st March, 2017 has resulted in uncontrollable loss of Rs. (2.64) Crore to GSECL as mentioned below.

Table 27 : Gain/ (losses) from Return on Equity for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Return on Equity (Approved)	Return on Equity (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	25.70	24.89	-	0.81
2	Gandhinagar (3-4)	17.30	20.89	-	(3.59)
3	Gandhinagr 5*	30.88	28.67	-	-
4	Wanakbori 1-6 TPS	73.98	73.52	-	0.46
5	Wanakbori 7*	28.03	26.17	-	-
6	Sikka TPS	9.74	-	-	-
7	Sikka Extension (3-4)*	137.53	142.59	-	-
8	KLTPS 1-3	48.47	49.82	-	(1.35)



Sr. No.	Power Station	Return on Equity (Approved)	Return on Equity (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
9	KLTPS 4	29.20	28.76	-	0.44
10	Dhuvaran CCPP 1*	11.07	10.45		
11	Dhuvaran CCPP 2	14.74	14.14	-	0.60
12	Dhuvaran CCPP 3*	65.36	64.80		
13	Utran Extension*	57.55	57.36		
14	Ukai 6*	122.46	123.40	-	
15	Ukai Hydro	10.42	10.48	-	(0.06)
16	Kadana Hydro	28.60	28.55	-	0.05
Total		711.03	704.48	-	(2.64)

* PPA based Station

4.10.2. The above variation is treated on account of uncontrollable factors in line with the provisions of the MYT Regulations and accordingly the treatment for sharing of gains has been proposed.

4.11. GAIN/ LOSSES FROM O&M EXPENSES

4.11.1. The Operation and Maintenance expenses have been classified as “controllable” in the true up for previous years. The Hon’ble Commission in the MYT Order dated 31st March 2017 (True up of FY 2015-16) as well as in the Order dated 31st March, 2018 for True up of FY 2016-17 has not approved the provision made towards the impact of 7th Pay Commission considering that these were not actual expenses since no actual payment was made to the employees. However, in these Orders, the Commission has ruled that the impact of 7th Pay Commission shall be allowed as uncontrollable factor in the true up of that year in which the actual payment is made. Accordingly, in the present Petition, GSECL has computed by Employee expenses excluding the provision for 7th Pay Commission of Rs. 77.30 Crore but including the actual payment made towards 7th Pay Commission of Rs. 33.75 Crore as well as the re-measurement of defined benefit plans of Rs. 121.58 Crore. Moreover, all Employee expenses pertaining to SSNNL and RE assets have been excluded while computing the Employee expenses. Accordingly, GSECL has categorized Employee expenses excluding the impact of 7th Pay Commission actually paid during the FY 2017-18, R&M expenses, and A & G expenses as controllable. The impact of 7th Pay Commission is claimed as an uncontrollable parameter.

Table 28 : Gain/ (losses) from O&M expenses for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	O&M Expenses (Approved)	O&M Expenses (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	217.09	196.25	27.88	(7.04)
2	Gandhinagar (3-4)	86.65	115.77	(24.70)	(4.42)
3	Gandhinagr 5*	22.08	57.57		(2.21)
4	Wanakbori 1-6 TPS	226.73	213.95	20.23	(7.45)
5	Wanakbori 7*	18.33	16.59		(0.53)



Sr. No.	Power Station	O&M Expenses (Approved)	O&M Expenses (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
6	Sikka TPS	80.09	-	-	-
7	Sikka Extension (3-4)*	90.77	103.53		(3.34)
8	KLTPS 1-3	108.60	110.75	1.00	(3.16)
9	KLTPS 4	18.60	14.79	4.16	(0.35)
10	Dhuvaran CCPP 1*	31.64	35.66		(0.92)
11	Dhuvaran CCPP 2	31.72	37.61	(4.91)	(0.98)
12	Dhuvaran CCPP 3*	65.89	3.28		(0.06)
13	Utran Extension*	52.50	44.71		(1.19)
14	Ukai 6*	81.22	51.97		(0.84)
15	Ukai Hydro	19.12	12.22	7.39	(0.49)
16	Kadana Hydro	23.02	29.90	(6.11)	(0.77)
Total		1,174.05	1,044.54	24.95	(33.75)

* PPA based Station

4.12. GAIN/ LOSSES FROM INTEREST ON WORKING CAPITAL

4.12.1. The Hon'ble Commission has considered the gains/losses arising from Interest on Working Capital as Uncontrollable in the previous year true ups. The Working Capital has been computed as per provisions of GERC MYT Regulations, 2016. Proposed sharing of gains/losses from IWC are as follows:

Table 29 : Gain/ (losses) from Interest on working capital for 2017-18

Rs. Crores					
Sr. No.	Power Station	Interest on Working Capital (Approved)	Interest on Working Capital (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	41.34	34.11		7.23
2	Gandhinagar (3-4)	22.33	26.17		(3.84)
3	Gandhinagr 5*	14.59	13.08		
4	Wanakbori 1-6 TPS	67.10	68.43		(1.33)
5	Wanakbori 7*	11.35	10.91		
6	Sikka TPS	13.89	-		
7	Sikka Extension (3-4)*	29.25	38.75		
8	KLTPS 1-3	8.52	9.59		(1.07)
9	KLTPS 4	3.36	3.45		(0.09)
10	Dhuvaran CCPP 1*	5.15	4.21		
11	Dhuvaran CCPP 2	5.72	4.61		1.11
12	Dhuvaran CCPP 3*	13.10	48.97		
13	Utran Extension*	19.19	28.40		
14	Ukai 6*	29.66	30.92		
15	Ukai Hydro	0.70	0.59		0.11
16	Kadana Hydro	1.26	1.82		(0.56)
Total		286.51	324.00	-	1.57



4.12.2. As per the First Amendment to the GERC MYT Regulations, 2016, dated 2nd December, 2016, GSECL has considered the weighted average of 1-year SBI MCLR for FY 2017-18 plus 250 basis points i.e. 10.50%, as the interest rate to compute the interest on working capital.

4.13. GAIN/ LOSSES FROM SLDC CHARGES

4.13.1. The Hon'ble Commission has considered the gains/losses arising from SLDC Charges as Uncontrollable in its previous year true ups. Proposed sharing of gains/losses from SLDC Charges are as follows:

Table 30 : Gain/ (losses) from SLDC charges for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	SLDC Charges (Approved)	SLDC Charges (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	0.60	0.50	-	0.10
2	Gandhinagar (3-4)	0.50	0.49	-	0.01
3	Gandhinagr 5*	0.05	-	-	-
4	Wanakbori 1-6 TPS	0.81	0.91	-	(0.10)
5	Wanakbori 7*	0.05	0.15	-	-
6	Sikka TPS	0.16	-	-	-
7	Sikka Extension (3-4)*	0.23	0.42	-	-
8	KLTPS 1-3	0.17	0.16	-	0.01
9	KLTPS 4	0.02	0.05	-	(0.03)
10	Dhuvaran CCPP 1*	0.05	0.09	-	-
11	Dhuvaran CCPP 2	0.05	0.10	-	(0.05)
12	Dhuvaran CCPP 3*	0.17	0.27	-	-
13	Utran Extension*	0.14	0.27	-	-
14	Ukai 6*	0.34	0.36	-	-
15	Ukai Hydro	0.17	0.22	-	(0.05)
16	Kadana Hydro	0.15	0.18	-	(0.03)
Total		3.66	4.18	-	(0.14)

* PPA based Station

4.14. GAIN/ LOSS FROM WATER CHARGES

4.14.1. The Hon'ble Commission has considered the gains/losses arising from Water Charges as Uncontrollable in its previous years true ups. Proposed sharing of gains/losses from Water Charges are as follows:

Table 31 : Gain/ (losses) from Water charges for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Water Charges (Approved)	Water Charges (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	0.13	0.22	-	(0.09)
2	Gandhinagar (3-4)	7.01	43.05	-	(36.04)
3	Gandhinagr 5*	11.87	21.53	-	-



Sr. No.	Power Station	Water Charges (Approved)	Water Charges (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
4	Wanakbori 1-6 TPS	35.76	47.97	-	(12.21)
5	Wanakbori 7*	8.18	10.43		
6	Sikka TPS	2.28	-		
7	Sikka Extension (3-4)*	1.19	3.80		
8	KLTPS 1-3	0.43	0.53	-	(0.10)
9	KLTPS 4	0.13	0.01	-	0.12
10	Dhuvaran CCPP 1*	0.21	-		
11	Dhuvaran CCPP 2	0.76	-	-	0.76
12	Dhuvaran CCPP 3*	-	-		
13	Utran Extension*	3.64	1.43		
14	Ukai 6*	0.10	-	-	
15	Ukai Hydro	-	0.07	-	(0.07)
16	Kadana Hydro	-	-	-	-
Total		71.69	129.04	-	(47.63)

* PPA based Station

4.15. GAIN/ LOSS FROM TAXES

4.15.1. The Hon'ble Commission has considered the gains/losses arising from Taxes as Uncontrollable in its previous year true ups. Proposed sharing of gains/losses from Taxes are as follows:

Table 32 : Gain/ (losses) from Taxes for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Tax (Approved)	Tax (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	4.83	11.85	-	(7.02)
2	Gandhinagar (3-4)	2.39	8.16	-	(5.77)
3	Gandhinagr 5*	1.19	4.08	-	(2.89)
4	Wanakbori 1-6 TPS	7.17	24.48	-	(17.31)
5	Wanakbori 7*	1.19	4.08	-	(2.89)
6	Sikka TPS	1.37	-		
7	Sikka Extension (3-4)*	2.84	9.71		(6.87)
8	KLTPS 1-3	1.22	4.18	-	(2.96)
9	KLTPS 4	0.43	1.46	-	(1.03)
10	Dhuvaran CCPP 1*	0.61	2.07	-	(1.46)
11	Dhuvaran CCPP 2	0.64	2.18	-	(1.54)
12	Dhuvaran CCPP 3*	2.14	7.31		(5.17)
13	Utran Extension*	2.13	7.28	-	(5.15)
14	Ukai 6*	2.84	9.71	-	(6.87)
15	Ukai Hydro	1.73	5.92	-	(4.19)
16	Kadana Hydro	1.38	4.70	-	(3.32)
Total		34.10	107.17	-	(74.44)



* PPA based Station

4.15.2. The actual tax expense for FY 2017-18 is Rs. 107.17 Crore. Moreover, GSECL has paid an additional tax of Rs. 138.75 Crore pertaining to prior periods FY 2012-13 & 2013-14 as per the demand of the Commissioner of Income Tax. However, GSECL has challenged this demand for tax with the Income Tax Appellate Tribunal (ITAT). Accordingly, this additional tax will be claimed by GSECL based on the Judgment of the ITAT in the matter.

4.15.3. GSECL hereby requests the Hon'ble Commission to approve the tax expense for the FY 2017-18.

4.16. GAIN/ LOSS FROM NON-TARIFF INCOME

4.16.1. The Hon'ble Commission has considered the gains/losses arising from Non-tariff income as Uncontrollable in its previous year true ups. Proposed sharing of gains/losses from Non-tariff income is as mentioned below.

Table 33 : Gain/ (losses) from Non-tariff income for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Non-Tariff Income (Approved)	Non-Tariff Income (Actual)	Gain/(Loss) due to Controllable Factor	Gain/(Loss) due to Uncontrollable Factor
1	Ukai (3-5)	22.11	12.28	-	(9.83)
2	Gandhinagar (3-4)	15.47	20.43	-	4.96
3	Gandhinagr 5*	11.93	9.50	-	
4	Wanakbori 1-6 TPS	46.29	24.74	-	(21.55)
5	Wanakbori 7*	6.75	4.02	-	
6	Sikka TPS	6.20	-	-	
7	Sikka Extension (3-4)*	9.60	10.63	-	
8	KLTPS 1-3	4.84	3.48	-	(1.36)
9	KLTPS 4	1.65	0.01	-	(1.64)
10	Dhuvaran CCPP 1*	1.74	0.87	-	
11	Dhuvaran CCPP 2	1.81	0.87	-	(0.94)
12	Dhuvaran CCPP 3*	4.32	-	-	
13	Utran Extension*	5.69	0.61	-	
14	Ukai 6*	12.71	28.03	-	
15	Ukai Hydro	3.51	0.02	-	(3.49)
16	Kadana Hydro	3.06	0.82	-	(2.24)
Total		157.68	116.30	-	(36.10)

* PPA based Station

4.17. SHARING OF GAINS/ (LOSSES)

4.17.1. GERC MYT Regulations, 2016, specifies the Mechanism for treatment of Gains and Losses on account of Uncontrollable and Controllable expenses. The methodology approved by the Hon'ble Commission for sharing of such gains/ losses is as follows.



“23. Mechanism for pass through of gains or losses on account of uncontrollable factors”

“23.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.”

“23.2 The Generating Company or Transmission Licensee or SLDC or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.”

23.3 Nothing contained in this Regulation 23 shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.”

24 Mechanism for sharing of gains or losses on account of controllable factors:

24.1 The approved aggregate gain to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

(a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6;

(b) The balance amount, which will amount to two-thirds of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee..

24.2 The approved aggregate loss to the Generating Company or Transmission Licensee or SLDC or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

(a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 21.6; and

(b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or SLDC or Distribution Licensee.”

- 4.17.2. Based on above methodology, the Petitioner has determined plant wise Gains/ losses incurred by the GSECL due to variation in the value of the actual cost parameters in comparison with those approved by the Hon'ble Commission. The table below summarizes plant wise total gains / (losses) incurred by GSECL on account of various controllable and uncontrollable expenses.



4.17.3. **Controllable Gain/ (Losses) on account of Efficiency Parameters:** Due to the difference between the actual efficiency parameters and the approved efficiency parameters, GSECL has achieved gain/ (losses) of Rs. 79.90 Crores. Based on the mechanism specified as per MYT Regulations, loss of Rs. 26.63 Crores shall be passed on to the consumers.

Table 34 : Plant wise Controllable Gains/ Losses of GSECL for FY 2017-18

Rs. Crores					
Sr. No.	Power Station	Gain/(Loss) due to Controllable Factors		Total Gains/ (Losses) due to Controllable factors	Total Gains/ (Losses) to be passed through (1/3rd of gains/ losses)
		O&M Expenses	Fuel Cost		
1	Ukai (3-5)	27.88	44.20	72.09	24.03
2	Gandhinagar (3-4)	(24.70)	13.78	(10.92)	(3.64)
3	Gandhinagr 5*	-	-	-	-
4	Wanakbori 1-6 TPS	20.23	28.79	49.02	16.34
5	Wanakbori 7*	-	-	-	-
6	Sikka TPS	-	-	-	-
7	Sikka Extension (3-4)*	-	-	-	-
8	KLTPS 1-3	1.00	(19.62)	(18.62)	(6.21)
9	KLTPS 4	4.16	(6.38)	(2.22)	(0.74)
10	Dhuvaran CCPP 1*	-	-	-	-
11	Dhuvaran CCPP 2	(4.91)	(5.82)	(10.73)	(3.58)
12	Dhuvaran CCPP 3*	-	-	-	-
13	Utran Extension*	-	-	-	-
14	Ukai 6*	-	-	-	-
15	Ukai Hydro	7.39	-	7.39	2.46
16	Kadana Hydro	(6.11)	-	(6.11)	(2.04)
Total		24.95	54.95	79.90	26.63

* PPA Governed Station

4.17.4. **Uncontrollable Gain/ (Losses):** GSECL has achieved gain/ (losses) of Rs. (22.38) Crores.



Table 35 : Plant wise Uncontrollable Gains/ Losses of GSECL for FY 2017-18

Sr. No	Power Station	Gain/(Loss) due to Uncontrollable Factors									Rs. Crores	
		O&M	Depreciation	Interest & Finance Charges	ROE	Interest on Working Capital	Water Charges	SLDC Charges	MAT	Non-Tariff Income	Total Gains/ (Losses) due to Uncontrollable factors	Total Gains/ (Losses) to be passed through
1	Ukai (3-5)	(7.04)	38.60	18.91	0.81	7.23	(0.09)	0.10	(7.02)	(9.83)	41.67	41.67
2	Gandhinagar (3-4)	(4.42)	23.85	11.90	(3.59)	(3.84)	(36.04)	0.01	(5.77)	4.96	(12.95)	(12.95)
3	Gandhinagar 5*	(2.21)	-	-	-	-	-	-	(2.89)	-	(5.10)	(5.10)
4	Wanakbori 1-6 TPS	(7.45)	33.76	0.46	0.46	(1.33)	(12.21)	(0.10)	(17.31)	(21.55)	(25.27)	(25.27)
5	Wanakbori 7*	(0.53)	-	-	-	-	-	-	(2.89)	-	(3.42)	(3.42)
6	Sikka TPS	-	-	-	-	-	-	-	-	-	-	-
7	Sikka Extension (3-4)*	(3.34)	-	-	-	-	-	-	(6.87)	-	(10.21)	(10.21)
8	KLTPS 1-3	(3.16)	32.70	(1.72)	(1.35)	(1.07)	(0.10)	0.01	(2.96)	(1.36)	21.00	21.00
9	KLTPS 4	(0.35)	0.38	3.25	0.44	(0.09)	0.12	(0.03)	(1.03)	(1.64)	1.04	1.04
10	Dhuvaran CCPP 1*	(0.92)	-	-	-	-	-	-	(1.46)	-	(2.39)	(2.39)
11	Dhuvaran CCPP 2	(0.98)	(1.65)	1.70	0.60	1.11	0.76	(0.05)	(1.54)	(0.94)	(0.99)	(0.99)
12	Dhuvaran CCPP 3*	(0.06)	-	-	-	-	-	-	(5.17)	-	(5.22)	(5.22)
13	Utran Extension*	(1.19)	-	-	-	-	-	-	(5.15)	-	(6.34)	(6.34)
14	Ukai 6*	(0.84)	-	-	-	-	-	-	(6.87)	-	(7.71)	(7.71)
15	Ukai Hydro	(0.49)	(2.15)	0.28	(0.06)	0.11	(0.07)	(0.05)	(4.19)	(3.49)	(10.12)	(10.12)
16	Kadana Hydro	(0.77)	10.49	-	0.05	(0.56)	-	(0.03)	(3.32)	(2.24)	3.63	3.63
Total		(33.75)	135.96	34.79	(2.64)	1.57	(47.63)	(0.14)	(74.44)	(36.10)	(22.38)	(22.38)

* PPA Governed Station



4.18. NET ENTITLEMENT FOR FY 2017-18

4.18.1. Based on the above estimated gains / (losses) on account of controllable and uncontrollable factors, the Gap/ Surplus of GSECL for FY 2017-18 has been worked out as given below:

Table 36: Net entitlement for FY 2017-18

Rs. Crores				
Sr. No.	Power Station	Gain/(Losses) due to controllable factor	Gain/(Losses) due to uncontrollable factor	Total Gain/(losses) to be passed through
a	b	c	d	e = c/3 + d
1	Ukai (3-5)	72.09	41.67	65.70
2	Gandhinagar (3-4)	(10.92)	(12.95)	(16.59)
3	Gandhinagr 5*	-	(5.10)	(5.10)
4	Wanakbori 1-6 TPS	49.02	(25.27)	(8.93)
5	Wanakbori 7*	-	(3.42)	(3.42)
6	Sikka TPS	-	-	-
7	Sikka Extension (3-4)*	-	(10.21)	(10.21)
8	KLTPS 1-3	(18.62)	21.00	14.79
9	KLTPS 4	(2.22)	1.04	0.30
10	Dhuvaran CCPP 1*	-	(2.39)	(2.39)
11	Dhuvaran CCPP 2	(10.73)	(0.99)	(4.57)
12	Dhuvaran CCPP 3*	-	(5.22)	(5.22)
13	Utran Extension*	-	(6.34)	(6.34)
14	Ukai 6*	-	(7.71)	(7.71)
15	Ukai Hydro	7.39	(10.12)	(7.65)
16	Kadana Hydro	(6.11)	3.63	1.59
Total		79.90	(22.38)	4.26

* PPA governed Station

4.18.2. GSECL proposes to pass on total entitlement of the fixed cost to the next Financial Year. GSECL requests the Hon'ble Commission to allow plant wise gap/(surplus) to be passed on to the fixed charges in the FY 2019-20 for passing on the gain/(loss) to the beneficiaries.

SECTION 5. UNABSORBED DEPRECIATION FOR GTPS UNITS 1&2

5.1.1. The Units 1 and 2 of Gandhinagar TPS have been decommissioned on 3 September, 2016. In anticipation of the expected decommissioning, GSECL has charged Depreciation at a higher rate for these Units in its Audited Accounts for FY 2011-12 to FY 2016-17 and accordingly claimed this higher depreciation in the respective True up Petitions. However, the Hon'ble Commission has not approved the depreciation for these Units as claimed but approved at the regulated rates. Therefore, there is a disallowance of depreciation for FY 2011-12 to FY 2016-17 for GTPS Units 1 and 2 as shown in the following table:

Table 37 : Depreciation for GTPS units 1 and 2 disapproved by Commission

Particulars	(Rs. Crore)		
	Depreciation as per Books of Accounts (for GTPS Units 1-4)	Depreciation approved by GERC (for GTPS Units 1-4)	Disapproved Depreciation (for GTPS Units 1-2)*
	A	B	C = A-B
FY 2011-12	78.11	71.02	7.09
FY 2012-13	108.00	73.48	34.52
FY 2013-14	110.64	75.25	35.39
FY 2014-15	118.41	78.61	39.80
FY 2015-16	117.16	81.81	35.35
FY 2016-17	55.10	49.11	5.99
Total	587.42	429.28	158.14

5.1.2. GSECL has now completed the sale process of the assets pertaining to GTPS Units 1 and 2. In view of the same, GSECL has computed the unabsorbed depreciation for GTPS Units 1 and 2 to be claimed in this petition as follows:

Table 38: Unabsorbed depreciation for GTPS units 1 and 2

Particulars	Legend	Amount (Rs. Crore)
Opening GFA of GTPS 1-2 as on 1.4.2016	A	455.65
Residual value for GTPS 1 and 2	B	23.33
Disapproved Depreciation	C	158.14
Depreciation yet to be claimed from GERC	D = B + C	181.47
Less: Total Sale proceeds	E	61.21
Net Unabsorbed Depreciation to be claimed in FY 2019-20	F = D - E	120.26

5.1.3. GSECL requests the Hon'ble Commission to approve the above unabsorbed depreciation for GTPS Units 1 and 2 and allow recovery of the same in 12 equal instalments in FY 2019-20.



SECTION 6. TARIFF DETERMINATION OF BHAVNAGAR LIGNITE THERMAL POWER STATION (BLTPS) UNITS 1&2 FOR FY 2019-20

6.1. BACKGROUND

6.1.1. Bhavnagar Energy Company Ltd. (BECL) vide the GoG notification dated 27 August, 2018 is merged with GSECL. Accordingly, the Assets and Liabilities is transferred to GSECL. The effective date of transfer is 1 April, 2018 as per the notification. The date of commissioning for Unit 1 is 16 May, 2016 and Unit 2 is 27 March, 2017. GSECL has computed the fixed cost and variable charges for FY 2019-20 for Bhavnagar Lignite Thermal Power station (BLTPS) for FY 2019-20 based on the PPA for BLTPS between GUVNL and GSECL approved by the Hon'ble Commission. The working of the fixed cost and variable cost components is elaborated below.

6.2. FIXED COST FOR FY 2019-20

6.2.1. Based on the Capital Cost as per the approved PPA and the consequent Capitalized Expenditure the funding of the capital expenditure through debt & equity at 70-30 ratio, etc. the fixed cost of BLTPS for FY 2019-20 have been outlined thereof. As outlined under the Regulations, the fixed cost has been categorized under the following heads:

- Depreciation
- Interest and Finance Charges
- Return on Equity
- Operation and Maintenance Expenses
- Interest on Working Capital
- Water Charges
- SLDC Charges
- Tax
- Non-Tariff Income

Table 39: Fixed Cost for BLTPS (1-2) for FY 2019-20

Description	(Rs. Crores)
	2019-20
Depreciation	190.87
Interest on Loan	158.31
Return on Equity	151.83
Interest on Working Capital	29.80
O&M Cost	159.50
SLDC Charges	0.24
Income Tax	32.72
Total	723.27

6.2.2. The working of the individual fixed cost components is shown below:



- 6.2.3. **Depreciation:** Depreciation is computed on the PPA approved GFA at 5.28% as under

Table 40: Depreciation for FY 2019-20

(Rs. Crores)	
Particulars	2019-20
GFA in Beginning of Year	3,615.00
Capital Addition	-
Deduction	-
Closing GFA	3,615.00
Average GFA	3,615.00
Rate of Depreciation	5.28%
Depreciation	190.87

- 6.2.4. **Interest Charges:** The normative opening loan for FY 2016-17 is computed at 70-30 debt-equity ratio. The depreciation for FY 2016-17 to FY 2018-19 is computed at 5.28% and considered as loan repayment during respective years. Based on this the opening loan for FY 2019-20 is computed. The interest rate of 8.50% is considered for computing interest expenses as under:

Table 41: Interest expenses for FY 2019-20

(Rs. Crores)	
Particulars	2019-20
Opening Loans	1,957.88
Loan Additions during the Year	-
Repayment during the Year	190.87
Closing Loans	1,767.01
Average Loans	1,862.45
Wt Avg Rate of Interest on Loan	8.50%
Interest on Loan	158.31
Total Interest & Financial Charges	158.31

- 6.2.5. **Return on Equity:** The return on equity is computed at a normative debt-equity ratio of 70-30 and applying rate of 14% as under:

Table 42: Return on Equity for FY 2019-20

(Rs. Crores)	
Particulars	2019-20
Opening Equity	1084.50
Additions during the year	0.00
Closing Equity	1084.50
Average Equity	1084.50
Rate of Return on Equity	14%
Return on Equity	151.83

- 6.2.6. **Interest on Working Capital:** The interest on working capital is computed based on the norms specified in the MYT Regulations, 2016 and considering the interest rate



of 10.65% which is the 1-year SBI MCLR as on 1 April, 2018 i.e. 8.15% plus 250 basis points. This rate is computed as per the First Amendment to the MYT Regulations, 2016 dated 2nd December, 2016. The interest on working capital is computed as follows:

Table 43: Interest on working capital for FY 2019-20

Particulars	(Rs. Crores)
	2019-20
Lignite Cost (1 1/2 months)	100.09
Sec Fuel Cost (1 Months)	2.18
O&M Expenses (1 Month)	13.29
Maintenance Spares	36.15
Receivable (1 Months)	128.09
Total Working Capital	279.81
Rate of Interest	10.65%
Interest on Working Capital	29.80

6.2.7. **O&M Expenses:** O&M expenses are computed as per the norms specified for new lignite based stations in the MYT Regulations, 2016:

Table 44: O&M expenses for FY 2019-20

Particulars	(Rs. Crores)
	2019-20
O & M cost	159.50

6.2.8. **SLDC Fees and Charges:** SLDC fees and charges are computed as follows:

Table 45: SLDC Fees and Charges for FY 2019-20

Particulars	(Rs. Crores)
	2019-20
SLDC Fees & Charges	0.24

6.2.9. **Income Tax:** Income tax is computed by applying the MAT rate of 21.5488% on the Return on Equity as follows:

Table 46: Income Tax for FY 2019-20

Particulars	(Rs. Crores)
	2019-20
Income Tax	32.72

6.3. ENERGY CHARGES FOR FY 2019-20

6.3.1. Based on operating & fuel related parameters considered in the PPA approved by the Hon'ble Commission, table below indicates energy charges for FY 2019-20:



Table 47: Energy Charges for FY 2019-20

Particulars	Units	2019-20
Gross Generation	MUs	3,514
Auxiliary Consumption	MUs	386
Net Generation	MUs	3,127
Capacity	MW	500
Availability Factor	%	80.00%
Plant Load Factor	%	80.00%
Auxiliary Consumption	%	11.00%
Station Heat Rate	kcal/kWh	2,623
Sp. Oil Consumption	ml/kWh	1.00
Sp. Consumption of Limestone	Kg/KWh	0.26
Gross Calorific Value of Lignite	kcal/kg	2,900
Calorific Value of Oil	kcal/l	10,283
Overall Heat	G Cal	9,216,173
Heat from Oil	G Cal	36,130
Heat from Lignite	G Cal	9,180,042
Transit losses	%	0.80%
Lignite	%	100.00%
Actual Lime Consumption	MT	913,536
Actual Oil Consumption	kl	3,514
Actual Lignite Consumption	MT	3,165,532
A) Indigenous Lignite	MT	3,191,060
Specific Lignite Consumption	kg/kWh	0.90
Price of Lignite	Rs/MT	2,193.74
Price of Oil	Rs/kl	37,207
Price of Lime	Rs/MT	1,102.5
Lignite Cost	Rs Crores	700
Oil Cost	Rs Crores	13.07
Lime Cost	Rs Crores	100.72
Total Fuel Cost	Rs Crores	813.83
Fuel Cost/ Gross Generation	Rs/kWh	2.32
Fuel Cost/ Net Generation	Rs/kWh	2.60

6.3.2. Based on the above, GSECL requests the Hon'ble Commission to approve the tariff for BLTPS Units 1 and 2 for FY 2019-20.

**SECTION 7. DETERMINATION OF TARIFF FOR FY 2019-20****7.1. TARIFF FOR FY 2019-20**

7.1.1. GSECL has not proposed Mid-term Review of ARR for FY 2019-20 to FY 2020-21.

7.1.2. Based on the Truing up for FY 2017-18 as discussed in the earlier sections, the Fixed cost for FY 2019-20 are as tabulated below. Further, GSECL has considered the Variable Charge for FY 2019-20 based on Approved Variable Charges for FY 2019-20 in the MYT Order dated 31st March, 2017.

7.1.3. The Fixed and Variable cost of GSECL's Generating Plants for FY 2019-20 are estimated as under:

Table 48 : Approved Fixed Cost of GSECL plants for FY 2019-20

											Rs. Crores	
Sr. No.	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Water Charges	Tax	SLDC Fees & Charges	Total Fixed Cost	Less: Non-Tariff Income	Net Fixed Charges
1	Ukai (3-5)	74.23	35.79	27.47	29.93	174.13	0.10	3.47	0.60	345.72	15.87	329.86
2	Gandhinagar (3-4)	56.15	2.07	17.58	22.47	96.85	7.01	2.39	0.50	205.02	12.50	192.52
3	Gandhinagr 5*	-	-	30.88	14.70	24.68	11.87	1.19	0.05	83.37	11.93	71.45
4	Wanakbori 1-6 TPS	122.72	23.88	91.78	67.24	253.41	35.76	7.17	0.81	602.77	46.29	556.49
5	Wanakbori 7*	-	-	28.03	11.49	20.48	8.18	1.19	0.05	69.42	6.75	62.68
6	Sikka Extension (3-4)	172.90	161.10	137.53	29.29	106.80	1.19	2.84	0.23	611.88	9.60	602.27
7	KLTPS 1-3	66.50	0.01	49.03	8.80	121.38	0.43	1.22	0.17	247.54	4.84	242.70
8	KLTPS 4	36.28	12.39	29.40	3.35	20.79	0.13	0.43	0.02	102.79	1.65	101.16
9	Dhuvaran CCPP 1*	21.24	-	11.07	5.24	35.37	0.21	0.61	0.05	73.79	1.74	72.05
10	Dhuvaran CCPP 2	23.14	7.90	16.92	5.90	35.45	0.76	0.64	0.05	90.76	1.81	88.96
11	Dhuvaran CCPP 3*	76.43	71.64	65.36	13.12	73.64	-	2.14	0.17	302.50	4.32	298.18



Sr. No.	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Water Charges	Tax	SLDC Fees & Charges	Total Fixed Cost	Less: Non-Tariff Income	Net Fixed Charges
12	Utran Extension*	66.54	37.58	57.60	19.22	58.68	3.64	2.13	0.14	245.53	5.69	239.83
13	Ukai 6*	141.13	112.02	122.46	29.95	106.80	0.10	2.84	0.34	515.64	12.71	502.94
14	Ukai Hydro	-	2.53	10.42	0.74	21.37	-	1.73	0.17	36.96	3.51	33.45
15	Kadana Hydro	15.81	-	28.76	1.32	25.73	-	1.38	0.15	73.15	3.06	70.09
16	Wanakbori 8 TPS*	235.75	274.82	187.53	55.68	145.25	-	-	-	899.03	-	899.02
17	Dhuvaran STPS *	-	-	-	-	-	-	-	-	-	-	-
Total		1,108.83	741.72	911.84	318.45	1,320.80	69.39	31.37	3.50	4,505.90	142.26	4,363.64

*PPA based stations



Table 49 : Proposed revised Fixed Cost of GSECL plants for FY 2019-20

Sr. No.	Power Station	Fixed Charges for FY 2019-20	Total Gain/(losses) to be passed through	Rs. Crores
				Net Fixed Charges for FY 2019-20
1	Ukai (3-5)	329.86	65.70	264.16
2	Gandhinagar (3-4)	192.52	(16.59)	209.11
3	Gandhinagr 5*	71.45	(5.10)	76.55
4	Wanakbori 1-6 TPS	556.49	(8.93)	565.42
5	Wanakbori 7*	62.68	(3.42)	66.10
6	KLTPS 1-3	242.70	14.79	227.91
7	KLTPS 4	101.16	0.30	100.86
8	Dhuvaran CCPP 1*	72.05	(2.39)	74.44
9	Dhuvaran CCPP 2	88.96	(4.57)	93.53
10	Utran Extension*	239.83	(6.34)	246.17
11	Ukai Hydro	33.45	(7.65)	41.10
12	Kadana Hydro	70.09	1.59	68.50
13	Ukai 6*	502.94	(7.71)	510.65
14	Dhuvaran CCPP 3*	298.18	(5.22)	303.40
15	Sikka 3&4*	602.27	(10.21)	612.48
16	Wanakbori 8 TPS*	899.02	-	899.02
17	Dhuvaran STPS *	-	-	-
Total		4,363.64	4.26	4,359.39

*PPA based stations

Table 50 : Approved Energy Charges of GSECL plants for FY 2019-20

Sr. No.	Power Station	2019-20 (Rs/kWh)
1	Ukai (3-5)	2.821
2	Gandhinagar (3-4)	3.308
3	Gandhinagr 5*	3.912
4	Wanakbori 1-6 TPS	3.269
5	Wanakbori 7*	3.093
6	Sikka Extension (3-4)*	2.425
7	KLTPS 1-3	1.496
8	KLTPS 4	1.469
9	Dhuvaran CCPP 1*	3.899
10	Dhuvaran CCPP 2	4.066
11	Dhuvaran CCPP 3*	2.256
12	Utran Extension*	4.345
13	Ukai 6*	2.516
14	Wanakbori 8*	2.941
15	Dhuvaran STPS*	-

*PPA based stations

7.1.4. GSECL requests Hon'ble Commission to approve revised Fixed Costs for FY 2019-20 as mentioned above.



- 7.1.5. GSECL requests Hon'ble Commission to approve the unabsorbed depreciation of GTPS Units 1 and 2 and allow recovery of the same in 12 equal instalments in FY 2019-20.
- 7.1.6. GSECL requests the Hon'ble Commission to approve the fixed charges and determine the tariff for BLTPS Units 1 and 2 for FY 2019-20.



SECTION 8. COMPLIANCE OF DIRECTIVES

DIRECTIVES AND THEIR COMPLIANCE BY GSECL:

DIRECTIVE	COMPLIANCE TO THE DIRECTIVE
5.1 <u>Compliance of Directives issued by the Commission</u>	
5.2 Earlier Directives	
<p><u>Directive 1: Completion report of R&M works of WTPS-1.</u> GSECL shall submit the completion report of R&M works of WTPS-1. <u>Compliance:</u> C&I Up-Gradation work of Wanakbori TPS Unit No. 1 is completed on 11.03.2017. Work of Unit No. 1 was carried out during shutdown period from 01.12.2016 to 11.03.2017. <u>Commission Comments:</u> The Commission noted the compliance.</p>	<p><u>COMPLIANCE:</u> Noted by Hon'ble Commission.</p>
<p><u>Directive 4: Actual Performance Parameters</u> GSECL shall submit month wise, at quarterly intervals, the actual performance parameters like PAF, PLF, SHR, Aux. Consumption, SFC, Transit loss etc. actual gross generation, actual net generation and coal stock position (both imported and indigenous) for each station to the Commission and also place the said information on its website. <u>Compliance:</u> Performance Parameters and Coal stock Position month wise are provided along with the petition. <u>Commission Comments:</u> GSECL shall continue to submit the report as per directive.</p>	<p><u>COMPLAINCE:</u> Performance Parameter and Coal stock Position month wise at quarterly intervals are attached as ANNEXURE-I and ANNEXURE-II. [For 1st to 4th Qtr of FY 2017-18] AND [For 1st Qtr of FY 2018-19]</p>
5.3 Directives issued in the MYT Order dated 31st March, 2017	
<p><u>5.3.1 Calculation of Depreciation</u> The Commission directs the Petitioner to calculate depreciation for true-up from FY 2017-18 as per Regulation 39 of GERC (MYT) Regulations, 2016. <u>Compliance:</u> GSECL is calculating depreciation from FY 2017-18 as per Regulation 39 of GERC (MYT) Regulations, 2016. <u>Commission Comments:</u> The Commission noted the submission.</p>	<p><u>COMPLIANCE:</u> Noted by Hon'ble Commission.</p>



<p>5.3.2 Deviation of Capital Expenditure</p> <p>GSECL is directed to submit a prior intimation to the Commission with proper justification for any variation of more than 10% between approved and actual CAPEX.</p> <p>Compliance: As directed, if there is any deviation in Capital Expenditure, GSECL will intimate to the Commission.</p> <p>Commission Comments: The Commission noted the submission.</p>	<p>COMPLIANCE:</p> <p>Noted by Hon'ble Commission.</p>
<p>5.3.3 Lignite Cost of KLTPS</p> <p>It is observed by the Commission that in FY 2016-17 lignite price for KLTPS has exorbitantly increased. GSECL shall take up the matter with appropriate authority to procure the lignite at a rate which is at par or lesser than the equally placed lignite thermal power station in the state.</p> <p>Compliance: GSECL has requested GMDC to reduce Lignite price. However, GMDC has not responded for the same.</p> <p>Commission Comments: GSECL shall follow up with the GMDC and expedite.</p>	<p>COMPLIANCE:</p> <p>As GMDC Panandhro mine was exhausted, GMDC started supplying lignite to KLTPS from Mata no Madh mine from 1st August 2016. The basic price of lignite from Mata no Madh mine was higher. As per guideline issued by Industries and Mine Department GoG dated 15.02.2012, Pricing of lignite is decided by formula "Cost + 15% or Market Price – 25% discount whichever is lower". GSECL vide letter dated 10.8.2016 requested GMDC to furnish the detail calculation for the pricing. GUVNL was also asked for their concurrence. On receipt of detail calculations from GMDC and after auditing, GUVNL vide letter dated 22.09.2016 approved the basic rate @Rs. 854/MT and other charges as applicable. (copy of letter with calculation sheet by GUVNL is attached as ANNEXURE-III)</p> <p>Prior to 01.07.2017(Implementation of GST), Excise duty @6% and Clean energy Cess @Rs.400/MT was charged on assessable value and over and above 22.5% (20+2.5) VAT was levied. So the final end cost of lignite was Rs.1915.28/MT considering the basic price of lignite as Rs. 854/MT. After implementation of GST w.e.f 01.07.2017, excise duty @6% abolished, GST Compensation Cess @Rs. 400/MT introduced in place of Clean energy Cess and GST @5% charged on assessable value before GST Compensation Cess. Hence the end cost of lignite revised to Rs. 1552.52/MT considering the same basic price of lignite instead of Rs. 1915.26 per MT. Hence lignite price is reduced by Rs. 362.76 per MT.</p>
<p>5.3.4 Procurement of coal from Western Coal</p>	<p>COMPLIANCE:</p>



<p style="text-align: center;"><u>Fields</u></p> <p>GSECL should take up the matter with appropriate authority to maximize coal procurement from Western Coal Fields, so as to reduce the fuel cost by saving on freight charges.</p> <p><u>Compliance:</u> Ministry of Power and Ministry of Coal have approved rationalization of coal linkage of 12 Lakh MT (5 LMT-GTPS + 7 LMT-WTPS) from SECL to WCL for GSECL Power Stations. WCL was insisting for 50% coal on notified price and 50% on cost plus basis. However in the month of November-2016, WCL agreed to supply coal on Notified price and signed MoU to supply coal at notified price to GSECL.</p> <p>Further, Coal India has approved supply of 30 Lakh MT from WCL for GSECL power Stations in addition to 12 Lakh MT coal on 28.04.2017 to reduce the cost of power to the consumer of State. Therefore, additional 42 Lakh MT coal would be available from WCL in place of SECL. MoU is signed between GSECL and WCL on 05.05.17 for supply of coal under Rationalization.</p> <p><u>Commission Comments:</u> The Commission noted the submission.</p>	<p>Noted by Hon'ble Commission.</p>
<p>5.3.5 <u>Green Cess on Coal Cost</u></p> <p>GSECL is advised to take up the matter with appropriate authority to rationalize the Green Cess imposed on procurement of coal for charging the Green Cess in the ratio of RPO fulfillment by the state/entity.</p> <p>It is also observed by the Commission that Green Cess is imposed by the Government of India uniformly across the coal quality. GSECL is advised to take up the matter with appropriate authority to get the necessary amendment so as to reduce the overall cost of fuel.</p> <p><u>Compliance:</u> Green Cess is levied by Central Government and it is uniform across India for coal quantity supplied by Coal Company to Power Utilities.</p> <p><u>Commission Comments:</u> The Commission reiterates that GSECL shall approach the Central Government for levy of Green Cess on the basis of Renewable energy generation in the State.</p>	<p><u>COMPLIANCE:</u></p> <p>Clean Energy Cess which was being collected under Central Excise regime is now abolished with effect from 01.07.2017 after the introduction of Goods and Service Tax. Now, GST compensation cess @ Rs. 400 / MT is being levied on Coal with effect from 01.07.2017. The concept of Compensation Cess is now completely different from Clean Energy Cess. It is levied to compensate the revenue loss occurred to the States because of implementation of GST Act, 2017. As GST revenue will flow to the State where the coal is consumed, the Coal producing States will have revenue loss and to compensate the same Compensation Cess is levied. It may also be noted that as per Goods and Services Tax (Compensation to States) Act, 2017, Compensation Cess would be charged for a period of 5 years only from the date of its implementation.</p> <p>Thus the Clean Energy Cess has already been abolished w.e.f 1-07-2017 and Compensation</p>



		Cess has been levied with totally different purpose. Hence the matter of Green Cess cannot be referred to Central Government.
<p>5.3.6 Fuel Supply Arrangements</p> <p>GSECL is directed to initiate efforts for optimizing fuel supply arrangements and submit the detailed report related to existing FSA with details related to take or pay liabilities, practice for procuring imported fuel, and present arrangement and action required for optimization of fuel supply arrangement by 30th June, 2017.</p> <p>Compliance:</p> <p>GSECL has initiated the actions for optimization of coal cost and transferred the domestic coal to the own cheaper power Generating station to reduce the cost of Generation as a part of implementation of flexibility as per guideline issued by CEA and Ministry of power.</p> <p>Further, GSECL has signed the supplementary agreement on 13.04.2017 for implementation of Flexibility in Utilization of Domestic Coal with SECL and WCL, so that the coal ACQ shall be considered company as a whole instead of power station wise. Coal penalty/incentive shall be calculated for GSECL as a whole instead of power station wise.</p> <p>For supply of imported coal, GSECL has Long Term supply Agreement with M/s APIL.</p> <p>Commission Comments:</p> <p>The Commission noted the submission.</p>		<p>COMPLIANCE:</p> <p>Noted by Hon'ble Commission.</p>
5.4 Fresh Directives		
<p>5.4.1 Scrapping of Old Units</p> <p>GSECL is directed to expedite the disposal of decommissioned generating units.</p>		<p>COMPLIANCE:</p> <p>The status of disposal of decommissioned generating units (as on 31.07.2018) is as under:</p>
Sr. No.	Unit	Present Disposal Status
01	GTPS 1 & 2 (2 X 120 MW)	The sale order is awarded to M/s. Ghansiram Gokalchand, Ship Breakin Yard, Bhavnagar on Dtd. 08.01.2018. Approx. 35% work of dismantling is completed till date.
02	STPS 1 & 2 (2 X 120 MW)	The E auction is completed on 06.06.2018 & the issuance of sale order is under approval of board of Directors of GSECL.
03	Utran CCPP – I (1 X 135 MW)	E auction under progress



04	UTPS 1 & 2 (2 X 120 MW)	Valuation under progress
<u>5.4.2 Tying up gas supply</u> GSECL should explore the possibility of tying up gas supply with overseas suppliers at competitive price through global tenders by following prudent practice; as per rules and regulations.		<u>COMPLIANCE:</u> As approved by GUVNL vide letter dated 14.03.2018, GSECL has imported 1 nos. of part cargo of LNG having quantity of 37.5 MMSCM during the period from 23.03.2018 to 30.04.2018.(copy of letter is attached as ANNEXURE-IV).



ANNEXURE - I:

ANNEXURE-I													
PERFORMANCE PARAMETER FOR THE MONTH OF APRIL '17 to March '18													
Sr. No.	Power Station	PAF (%)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	45.88%	73.52%	96.27%	98.04%	98.66%	98.14%	93.21%	97.09%	100.29%	89.14%	92.65%	92.52%
2	Ukai Extn. 6	101.64%	93.76%	14.28%	0.00%	43.67%	93.53%	101.94%	101.81%	100.03%	94.24%	95.85%	60.97%
3	Gandhinagar (3-4)	97.45%	98.15%	95.54%	98.79%	97.37%	95.49%	98.71%	92.48%	86.79%	93.63%	84.46%	80.93%
4	Gandhinagar 5	101.84%	100.62%	99.78%	87.70%	16.02%	101.96%	100.31%	100.60%	101.03%	100.82%	100.37%	98.00%
5	Wanakbori 1-6	96.74%	98.85%	98.15%	97.06%	83.98%	80.53%	79.01%	82.36%	91.37%	87.01%	72.50%	74.80%
6	Wanakbori 7	102.13%	101.67%	98.52%	102.16%	101.23%	100.27%	100.82%	100.98%	100.05%	101.03%	100.28%	99.11%
7	Sikka Extn. (3-4)	104.96%	106.50%	83.28%	69.44%	89.83%	67.72%	88.97%	85.10%	68.50%	86.67%	78.84%	83.59%
8	KLTPS 1-3	79.38%	91.79%	81.37%	79.49%	71.47%	59.56%	81.44%	51.23%	64.92%	33.38%	50.54%	41.66%
9	KLTPS 4	56.16%	16.01%	51.81%	73.25%	41.17%	30.18%	53.35%	0.00%	72.55%	49.26%	79.73%	65.91%
10	Dhuvaran CAPP 1	14.63%	0.00%	29.58%	100.63%	100.63%	88.81%	96.08%	96.94%	100.48%	100.34%	83.80%	72.64%
11	Dhuvaran CAPP 2	20.39%	97.76%	93.93%	99.93%	99.93%	65.03%	39.37%	98.49%	99.93%	99.33%	93.19%	91.84%
12	Utran Extension	100.08%	97.77%	99.32%	100.00%	100.00%	66.02%	75.02%	98.77%	100.00%	100.00%	80.73%	63.61%
13	Ukai Hydro	97.27%	97.32%	96.91%	96.84%	97.20%	95.98%	93.97%	97.12%	96.09%	96.92%	95.93%	96.99%
14	Kadana Hydro	93.62%	96.54%	96.35%	84.57%	89.72%	86.58%	91.83%	98.84%	94.21%	92.75%	87.78%	94.64%

Sr. No.	Power Station	PLF (%)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	42.31%	64.11%	79.63%	33.54%	45.09%	86.82%	72.90%	88.24%	83.38%	82.59%	87.73%	84.74%
2	Ukai Extn. 6	91.71%	82.61%	12.71%	0.00%	34.92%	84.29%	94.61%	95.67%	86.61%	87.88%	92.13%	58.30%
3	Gandhinagar (3-4)	47.78%	62.88%	43.79%	12.94%	66.25%	69.35%	74.62%	78.90%	70.33%	76.81%	74.84%	69.91%
4	Gandhinagar 5	93.88%	91.73%	79.06%	28.94%	13.54%	92.00%	94.07%	91.84%	85.49%	91.05%	93.47%	93.65%
5	Wanakbori 1-6	57.91%	68.26%	54.92%	0.00%	7.14%	61.57%	62.76%	75.60%	75.51%	78.03%	66.52%	70.27%
6	Wanakbori 7	84.95%	88.61%	81.70%	17.42%	45.52%	89.42%	88.37%	95.06%	88.70%	94.65%	96.74%	96.32%
7	Sikka Extn. (3-4)	78.76%	85.14%	56.17%	2.71%	31.94%	60.53%	75.01%	75.98%	53.85%	74.74%	69.12%	71.26%
8	KLTPS 1-3	70.81%	81.37%	72.69%	6.86%	40.01%	55.89%	78.38%	50.60%	59.99%	32.79%	48.97%	42.04%
9	KLTPS 4	52.38%	16.54%	55.55%	13.39%	31.36%	31.63%	57.00%	0.00%	75.09%	51.82%	83.56%	70.90%
10	Dhuvaran CAPP 1	11.77%	0.00%	0.82%	0.00%	14.35%	60.49%	64.80%	31.12%	38.41%	8.48%	2.66%	18.29%
11	Dhuvaran CAPP 2	15.60%	66.71%	63.19%	49.16%	31.69%	12.98%	0.11%	36.70%	33.22%	58.14%	46.22%	39.80%
12	Utran Extension	0.28%	10.53%	7.02%	0.00%	1.19%	28.51%	12.31%	8.69%	3.16%	7.78%	0.00%	14.40%
13	Ukai Hydro	31.62%	26.20%	10.08%	5.75%	4.30%	3.95%	8.42%	15.78%	13.45%	0.62%	17.62%	8.86%
14	Kadana Hydro	4.24%	0.75%	0.82%	28.05%	33.52%	43.99%	12.64%	9.78%	11.62%	12.66%	14.53%	4.20%

Sr. No.	Power Station	SHR as Fired (Kcal/Kwh)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	2708	2691	2585	2603	2642	2595	2593	2556	2567	2553	2559	2536
2	Ukai Extn. 6	2388	2538	2408	0	2415	2393	2359	2342	2352	2354	2351	2350
3	Gandhinagar (3-4)	2512	2551	2526	2556	2512	2536	2512	2530	2535	2557	2531	2542
4	Gandhinagar 5	2472	2502	2496	2541	2572	2508	2485	2498	2508	2517	2508	2510
5	Wanakbori 1-6	2619	2573	2628	2520	2697	2617	2609	2606	2572	2519	2517	2511
6	Wanakbori 7	2453	2458	2456	2510	2479	2461	2451	2441	2444	2436	2436	2445
7	Sikka Extn. (3-4)	2472	2452	2458	2825	2654	2566	2517	2513	2540	2506	2486	2483
8	KLTPS 1-3	3321	3272	3260	3363	3212	3173	3173	3194	3173	3177	3216	3317
9	KLTPS 4	3109	3153	2969	3022	2997	2967	2932	0	2905	2889	2899	3029
10	Dhuvaran CAPP 1	2051	0	3677	0	2215	2132	2106	2136	2061	2147	2270	2118
11	Dhuvaran CAPP 2	2003	2013	2009	2045	2100	2141	6388	2081	2073	2058	2097	2080
12	Utran Extension	2596	1859	1859	0	2432	1832	1822	1845	2037	1843	0	1822
13	Ukai Hydro	-	-	-	-	-	-	-	-	-	-	-	-
14	Kadana Hydro	-	-	-	-	-	-	-	-	-	-	-	-

Sr. No.	Power Station	Aux. Consumption (%)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	10.09	10.11	9.94	11.43	11.21	9.94	9.71	9.26	9.26	9.06	9.07	9.20
2	Ukai Extn. 6	5.27	5.54	9.16	0.00	8.28	5.96	5.66	5.65	5.78	5.69	5.70	6.49
3	Gandhinagar (3-4)	11.30	10.84	11.25	13.30	10.72	10.64	10.53	10.43	10.22	9.99	10.12	10.60
4	Gandhinagar 5	9.62	9.61	10.17	13.39	12.99	9.73	9.82	9.84	9.81	9.30	9.33	9.41
5	Wanakbori 1-6	9.15	8.93	9.12	0.00	14.23	9.29	9.21	8.98	9.09	8.74	8.81	8.68
6	Wanakbori 7	8.49	8.51	9.12	12.34	10.61	9.26	9.17	8.83	9.17	8.90	8.90	8.94
7	Sikka Extn. (3-4)	9.26	9.06	9.93	37.29	12.68	10.26	9.46	9.15	9.39	9.01	9.39	9.47
8	KLTPS 1-3	13.41	13.30	14.03	25.43	14.92	13.49	13.09	14.91	14.00	15.08	15.04	16.45
9	KLTPS 4	23.23	32.59	22.18	44.92	29.99	26.34	20.37	0.00	17.04	20.04	17.24	19.06
10	Dhuvaran CAPP 1	8.97	0.00	116.31	0.00	10.61	5.11	5.08	5.76	4.95	9.46	23.23	8.09
11	Dhuvaran CAPP 2	6.60	4.48	4.82	5.40	6.01	9.78	499.67	4.82	4.82	4.80	5.19	5.40
12	Utran Extension	89.22	5.30	6.92	0.00	23.41	3.63	4.91	5.74	11.58	6.03	0.00	4.55
13	Ukai Hydro	0.76	0.81	0.65	1.45	1.71	1.87	1.16	0.74	1.18	1.45	0.83	1.13
14	Kadana Hydro	1.83	9.34	9.10	0.78	0.76	0.56	0.91	0.95	0.92	0.91	0.82	0.88

Sr. No.	Power Station	SFC (Kg./Kwh)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	1.43	4.39	0.78	3.16	3.39	1.15	1.68	0.49	0.43	0.63	0.56	0.60
2	Ukai Extn. 6	0.01	0.44	0.00	0.00	1.97	0.68	0.01	0.00	0.36	0.29	0.31	0.00
3	Gandhinagar (3-4)	1.68	1.10	1.08	4.20	0.73	1.40	0.59	0.66	0.80	0.66	0.51	1.19
4	Gandhinagar 5	0.00	0.00	0.69	3.23	7.66	0.02	0.03	0.25	0.49	0.01	0.01	0.22
5	Wanakbori 1-6	1.77	0.94	1.24	0.00	10.34	0.99	0.93	1.98	1.51	0.19	0.23	0.34
6	Wanakbori 7	0.43	0.00	0.44	5.59	2.01	0.01	0.46	0.00	0.00	0.00	0.00	0.00
7	Sikka Extn. (3-4)	0.16	0.00	0.63	23.30	8.17	2.14	1.30	1.24	0.47	0.92	0.77	1.18
8	KLTPS 1-3	4.49	3.41	6.06	38.33	8.32	5.27	7.06	16.66	7.63	11.55	12.18	15.85
9	KLTPS 4	3.78	10.27	5.26	16.38	16.63	11.64	2.96	0.00	2.67	2.24	0.85	0.00
10	Dhuvaran CAPP 1	-	-	-	-	-	-	-	-	-	-	-	-
11	Dhuvaran CAPP 2	-	-	-	-	-	-	-	-	-	-	-	-
12	Utran Extension	-	-	-	-	-	-	-	-	-	-	-	-
13	Ukai Hydro	-	-	-	-	-	-	-	-	-	-	-	-
14	Kadana Hydro	-	-	-	-	-	-	-	-	-	-	-	-

Sr. No.	Power Station	Actual Gross Generation (Mus)											
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
1	Ukai (1-5)	185.83	290.96	349.75	152.24	204.63	381.31	330.85	387.56	378.40	374.85	359.61	384.57
2	Ukai Extn. 6	330.15	307.29	45.77	0.00	129.90	303.45	351.96	344.41	322.19	326.90	309.54	216.86
3	Gandhinagar (3-4)	144.48	196.50	132.41	40.44	207.01	209.71	233.17	238.61	219.76	240.01	211.23	218.46
4	Gandhinagar 5	141.95	143.33	119.53	45.21	21.16	139.11	146.98	138.87	133.57	142.26	131.90	146.31
5	Wanakbori 1-6	525.38	639.91	498.21	0.01	66.94	558.57	588.38	685.86	707.82	731.46	563.22	658.77
6	Wanakbori 7	128.44	138.44	123.53	27.22	71.12	135.21	138.08	143.74	138.58	147.88	136.52	150.50
7	Sikka Extn. (3-4)	283.55	316.71	202.21	10.08	118.81	217.91	279.05	273.51	200.33	278.02	232.25	265.08
8	KLTPS 1-3	109.61	130.17	112.53	10.98	63.99	86.52	125.37	78.33	95.96	52.46	70.75	67.24
9	KLTPS 4	28.29	9.23	30.00	7.47	17.50	17.08	31.81	0.00	41.90	28.91	42.11	39.56
10	Dhuvaran CAPP 1	9.03	0.00	0.63	0.00	11.38	46.43	51.40	23.89	30.47	6.73	1.91	14.51
11	Dhuvaran CAPP 2	12.63	55.81	51.16	41.13	26.52	10.51	0.10	29.71	27.80	48.64	34.93	33.30
12	Utran Extension	0.76	29.35	18.93	0.00	3.32	76.89	34.29	23.45	8.80	21.68	0.00	40.13
13	Ukai Hydro	69.43	59.45	22.13	13.05	9.77	8.68	19.11	34.65	30.52	1.42	36.12	20.11
14	Kadana Hydro	7.39	1.35	1.43	50.51	60.35	76.65	22.77	17				



Petition for True Up for FY 2017-18 and Tariff for FY 2019-20

ANNEXURE-I																						
PERFORMANCE PARAMETER FOR THE MONTH OF APRIL-MAY-JUNE-2018																						
Sr. No.	Power Station	PAF (%)			PLF (%)			SHR as Fired (Kcal/Kwh)			Auxi. Consumption (%)			SFC (Kg./Kwh)			Actual Gross Generation (Mus)			Net Generation (Mus)		
		April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June	April	May	June
1	Ukai (3-5)	96.02	100.06	94.55	90.74	97.38	87.66	2524	2520	2519	9.13	9.20	9.48	0.24	0.06	0.48	398.51	441.93	384.99	362.15	401.28	348.49
2	Ukai Extn. 6	0.00	76.11	0.00	0.00	75.28	0.00	0	2310	0	0.00	6.25	0.00	0.00	0.75	0.00	0.00	280.04	0.00	0.00	262.55	0.00
3	Gandhinagar (3-4)	94.73	99.18	96.20	84.91	89.38	55.14	2528	2521	2544	10.32	10.49	10.93	0.57	0.00	0.57	256.77	279.28	166.75	230.26	249.97	148.53
4	Gandhinagar 5	101.52	101.24	100.64	94.45	96.76	91.81	2506	2503	2509	9.31	9.30	9.54	0.00	0.00	0.00	142.80	151.18	138.81	129.51	137.12	125.57
5	Wanakbori 1-6	85.78	96.25	89.20	81.93	90.65	69.90	2533	2550	2550	8.70	8.71	9.21	0.78	0.27	0.95	743.23	849.79	634.13	678.58	775.80	575.71
6	Wanakbori 7	97.29	97.73	99.05	95.10	94.90	88.43	2452	2459	2464	9.01	9.09	9.11	0.00	0.00	0.00	143.79	148.28	133.70	130.84	134.80	121.53
7	Sikka Extn. (3-4)	91.08	69.70	90.11	81.50	60.22	63.29	2498	2525	2530	9.30	9.76	9.66	0.04	1.22	0.53	293.41	224.02	227.84	266.12	202.16	205.82
8	KLTPS 1-3	33.19	46.29	38.87	34.03	47.09	38.94	3346	3283	3331	17.44	15.27	16.22	17.39	12.01	14.73	52.68	75.32	60.28	43.49	63.82	50.51
9	KLTPS 4	38.07	69.30	60.01	40.80	74.21	65.58	3053	2996	2949	23.84	19.33	21.14	3.90	0.58	0.00	22.03	41.46	35.41	16.78	33.45	27.93
10	Dhuvaran CCPP 1	80.89	68.61	58.70	43.72	37.26	24.76	2119	2114	2081	5.84	6.38	7.27	-	-	-	33.57	29.55	19.01	31.60	27.67	17.63
11	Dhuvaran CCPP 2	94.89	80.23	59.40	14.22	18.27	12.52	2062	2065	2149	8.10	7.43	9.47	-	-	-	11.51	15.28	10.14	10.58	14.15	9.18
12	Dhuvaran CCPP 3	100.07	53.48	93.60	34.61	15.72	2.68	1792	1844	2023	3.32	6.16	20.28	-	-	-	93.72	43.98	7.26	90.60	41.27	5.79
13	Utran Extension	97.90	88.33	98.23	24.51	21.71	10.75	1772	1809	1787	3.59	3.80	4.59	-	-	-	66.10	60.49	28.98	63.73	58.19	27.65
14	Ukai Hydro	96.90	96.38	96.32	18.77	16.00	4.56	-	-	-	0.84	0.96	2.04	-	-	-	41.21	36.32	10.01	40.86	35.97	9.81
15	Kadana Hydro	95.42	95.52	91.14	3.08	2.26	4.81	-	-	-	0.97	0.90	0.75	-	-	-	5.37	4.07	8.38	5.31	4.03	8.32



ANNEXURE – II:

ANNEXURE-II				
Monthly Coal Stock Position(MT) details of 1st to 4th Quarter of 2017-18				
	TPS	Indigenous	Imported	TOTAL
April 17 (As on 30.04.17)	UTPS	130177	0	130177
	GTPS	183520	0	183520
	WTPS	179865	0	179865
	STPS	24335	48658	72992
	GSECL	517897	48658	566555
May 17 (As on 31.05.17)	UTPS	143543	2383	145926
	GTPS	81984	21020	103004
	WTPS	187095	0	187095
	STPS	18835	45185	64019
	GSECL	431458	68587	500045
June 17 (As on 30.06.17)	UTPS	165812	0	165812
	GTPS	95921	13173	109094
	WTPS	191913	13877	205790
	STPS	15335	81663	96997
	GSECL	468981	108712	577693
July 17 (As on 31.07.17)	UTPS	363046	0	363046
	GTPS	229585	1433	231018
	WTPS	440275	13877	454152
	STPS	15335	77912	93247
	GSECL	1048241	93222	1141463
August 17 (As on 31.08.17)	UTPS	271112	0	271112
	GTPS	164238	0	164238
	WTPS	486223	13727	499950
	STPS	15035	76353	91387
	GSECL	936608	90079	1026687
September 17 (As on 30.09.17)	UTPS	63128	2851	65978
	GTPS	31396	12425	43821
	WTPS	147664	2382	150046
	STPS	13635	29316	42951
	GSECL	255823	46972	302795
October 17 (As on 31.10.17)	UTPS	61827	1121	62948
	GTPS	71114	0	71114
	WTPS	69072	928	70000
	STPS	13435	34022	47457
	GSECL	215447	36071	251518
November 17 (As on 30.11.17)	UTPS	19026	8181	27208
	GTPS	21976	8064	30040
	WTPS	51453	0	51453
	STPS	13335	52831	66166
	GSECL	105790	69076	174866
December 17 (As on 31.12.17)	UTPS	18132	1435	19567
	GTPS	37566	0	37566
	WTPS	18035	5498	23533
	STPS	13335	50447	63782
	GSECL	87068	57380	144448
January 18 (As on 31.01.18)	UTPS	35922	15923	51845
	GTPS	46866	11732	58598
	WTPS	46852	442	47294
	STPS	13335	23683	37018
	GSECL	142976	51780	194756
February 18 (As on 28.02.18)	UTPS	32658	1938	34595
	GTPS	40197	0	40197
	WTPS	33782	4726	38508
	STPS	12635	65024	77658
	GSECL	119272	71688	190959
March 18 (As on 31.03.18)	UTPS	53982	5115	59097
	GTPS	68473	0	68473
	WTPS	48484	18712	67196
	STPS	11805	39782	51587
	GSECL	182744	63609	246354



ANNEXURE-II				
Monthly Coal Stock Position(MT) details of 1st Quarter of 2018-19				
	TPS	Indigenous	Imported	TOTAL
April 18 (As on 30.04.18)	UTPS	149404	22638	172043
	GTPS	34992	8939	43931
	WTPS	26826	40504	67330
	STPS	11805	57792	69597
	GSECL	223027	129873	352901
	TPS	Indigenous	Imported	TOTAL
May 18 (As on 31.05.18)	UTPS	27864	8286	36150
	GTPS	34202	13600	47802
	WTPS	31085	10837	41922
	STPS	11805	71467	83272
	GSECL	104955	104191	209146
	TPS	Indigenous	Imported	TOTAL
June 18 (As on 30.06.18)	UTPS	86830	1526	88356
	GTPS	30753	4199	34952
	WTPS	66550	2579	69129
	STPS	11805	45918	57723
	GSECL	195939	54222	250160



SECTION 9. PRAYER

GSECL respectfully prays to the Hon'ble Commission;

- 9.1.1. To admit this petition for True Up of FY 2017-18 and Determination of Tariff for FY 2019-20.
- 9.1.2. To approve the gains/ losses for the True Up of FY 2017-18 and allow sharing of such gains/ losses as prescribed in the MYT Regulations, 2016.
- 9.1.3. To approve the operational and financial parameters of GSECL for FY 2017-18 considering the vintage and constraints of the old machines, and consider the same for recovery of full fixed cost.
- 9.1.4. To approve the Station operating parameters viz. PAF, Auxiliary Consumption, Station Heat Rate, Transit Loss, Specific Oil Consumption and actual fuel rate for each of the station of GSECL for FY 2017-18 for recovery of variable cost considering the vintage and constraints of the old machines as well as site specific constraints.
- 9.1.5. To approve reimbursement of Tax on Income earned through the sale of power for all power stations including PPA governed stations.
- 9.1.6. To approve Fixed Cost and Tariff for FY 2019-20.
- 9.1.7. To approve unabsorbed depreciation for Gandhinagar TPS Units 1 and 2.
- 9.1.8. To approved fixed cost and determine tariff for BLTPS Units 1 & 2 for FY 2019-20.
- 9.1.9. To grant any other relief as the Hon'ble Commission may consider appropriate.
- 9.1.10. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
- 9.1.11. Pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

Signature of the Petitioner

Gujarat State Electricity Corporation Limited

Dated: 26.11.2018

Place: VADODARA



Declaration:

Declaration that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any orders in relation thereto.

Place: VADODARA

Date: 26.11.2018

Signature of the Petitioner

GUJARAT STATE ELECTRICITY CORPORATION LIMITED



**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR**

Filing No. _____

Case No. _____

IN THE MATTER OF	Filing of Petition for True Up of FY 2017-18 and Determination of Tariff for FY 2019-20 under GERC MYT Regulations, 2016 and Section 62 of the Electricity Act, 2003
AND	
IN THE MATTER OF	Gujarat State Electricity Corporation Limited, Vidyut Bhavan, Race Course, Vadodara 390007 Phone No. :0265 6612003; Fax: 0265 2344537 E-mail: gmf.gsecl@gebmail.com Petitioner
AND	
IN THE MATTER OF	Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhavan, Race Course, Vadodara 390007 Phone No. 0265 6613221; Fax: 0265 2337918; E-mail: coacom@gebmail.com Respondent

Affidavit verifying the Application

I, Rajesh Mithalal Bhadang, son of Shri Mithalal Bhadang, aged about 52 years, residing at D-9, Ashirwad Duplex, Near Nisarg Complex, Diwalipura, Vadodara do solemnly affirm and say as follows:

I am General Manager (Finance & Accounts) of the Gujarat State Electricity Corporation Limited, the Petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit.

The Statements made hereinabove are true to my knowledge and belief, which I believe them to be true.

Solemnly affirmed at Vadodara on this ___ day of November 2018, that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

(R.M.Bhadang)
General Manager (F & A)
GSECL-Vadodara

Place: Vadodara.
Dated: .11.2018



SECTION 10. TARIFF FILING FORMATS

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Note: The forms which are not applicable are excluded