



SECTION 2. EXECUTIVE SUMMARY

2.1. PREAMBLE

2.1.1. This section highlights the summary of Petition for True Up for FY 2020-21 and Determination of Aggregate Revenue Requirement & Tariff for FY 2022-23.

2.2. TRUE UP OF FY 2020-21

2.2.1. GSECL has worked out its True up for FY 2020-21 based on the audited accounts and the principles adopted by the Hon'ble Commission in its previous Orders.

2.2.2. Tables below summarize the results of True up of FY 2020-21 of GSECL Stations. For the purpose of True Up, GSECL compared the actual cost for FY 2020-21 with the cost approved by the Hon'ble Commission in the *"MYT Order of 31st March, 2017 for all power plants except BLTPS for which approved in True-up Order of 26th March, 2020 is considered"*.

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 2020-21 (RS. CRORE)

Sr.No.	Power Station	Depreciation (Actual)	Interest & Finance charges (Actual)	Return on Equity (Actual)	O&M expenses (Actual)	Water Charges (Actual)	SLDC charges (Actual)	MAT (Actual)	Interest on working capital (Actual)	Total fixed cost (Actual)	Non tariff income (Actual)	Net fixed charges
1	Ukai (3-5)	44.88	-	23.14	191.49	-	0.40	17.51	32.30	309.72	3.78	305.94
2	Gandhinagar (3-4)	35.30	-	24.27	106.28	45.02	0.28	12.05	24.25	247.46	9.99	237.47
3	Gandhinagar 5*	2.16	-	28.67	53.00	22.51	0.14	6.03	11.56	124.07	8.34	115.73
4	Wanakbori 1-6 TPS	99.28	25.89	91.91	202.96	32.09	0.83	36.16	74.50	563.63	19.37	544.26
5	Wanakbori 7 TPS*	2.15	-	26.16	14.72	6.71	0.14	6.03	11.47	67.36	19.80	47.57
6	Sikka Extn. (3-4)*	175.03	149.65	137.28	129.34	5.28	0.33	14.35	27.77	639.02	5.03	633.99
7	KLTPS 3	29.51	0.77	54.15	77.28	0.43	0.11	2.15	4.22	168.64	1.84	166.80
8	KLTPS 4	36.35	9.87	29.65	24.14	-	0.05	2.15	3.53	105.74	0.14	105.60
9	BLTPS*	238.71	165.31	152.19	86.70	13.72	0.33	14.35	22.77	694.08	2.51	691.57
10	Dhuvaran CCPP 1*	9.73	-	10.48	44.44	-	0.07	3.06	4.11	71.89	0.59	71.30
11	Dhuvaran CCPP 2	13.08	3.76	14.53	35.68	2.05	0.07	3.23	4.67	77.08	0.60	76.48
12	Dhuvaran CCPP 3*	78.77	73.64	67.02	35.04	-	0.25	10.79	14.35	279.86	0.31	279.55
13	Utran Extension*	68.21	33.44	57.51	48.71	6.95	0.25	10.75	13.71	239.54	0.78	238.76
14	Ukai 6*	155.59	105.23	125.79	39.25	-	0.33	14.35	25.94	466.48	4.63	461.84
15	Wanakbori 8 TPS*	219.06	287.40	180.24	40.86	33.69	0.34	22.96	40.71	825.26	1.00	824.26
16	Ukai Hydro	2.31	2.38	10.64	20.44	-	0.20	8.75	0.61	45.33	0.25	45.08
17	Kadana Hydro	5.49	-	28.87	21.00	-	0.16	6.95	1.06	63.53	0.45	63.08
Total		1,215.59	857.34	1,062.51	1,171.34	168.46	4.28	191.63	317.53	4,988.67	79.40	4,909.28

* PPA governed stations



- 2.2.4. Based on actual operating & fuel related parameters during FY 2020-21, table below indicates actual audited energy charges for GSECL's stations for FY 2020-21 along with the approved ones:

TABLE 2 : ENERGY CHARGES FOR GSECL'S PLANTS FOR FY 2020-21 (IN Rs/KWH)

Sr.No.	Power Station	Approved	Actual
1	Ukai (3-5)	3.84	3.80
2	Gandhinagar (3-4)	4.08	4.01
3	Gandhinagar 5*	3.74	3.81
4	Wanakbori 1-6 TPS	4.19	4.18
5	Wanakbori 7 TPS*	3.85	3.82
6	Sikka Extn. (3-4)*	3.40	3.52
7	KLTPS 3	3.05	3.08
8	KLTPS 4	2.80	3.40
9	BLTPS*	2.79	3.67
10	Dhuvaran CCPP 1*	2.66	2.91
11	Dhuvaran CCPP 2	2.94	3.27
12	Dhuvaran CCPP 3*	2.90	2.82
13	Utran Extension*	2.83	2.67
14	Ukai 6*	3.21	3.25
15	Wanakbori 8 TPS*	3.27	3.14

* PPA governed stations

- 2.2.5. The detailed comparison of various cost components with the values approved by the Hon'ble Commission vide "MYT Order of 31st March, 2017 for all power plants except BLTPS for which approved in True-up Order of 26th March 2020 is considered" 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 need to be shared with the Consumers as per the mechanism prescribed by the Hon'ble Commission in the GERC MYT Regulations, 2016.

TABLE 3 : GAINS / (LOSSES) ON ACCOUNT OF CONTROLLABLE FACTORS FOR FY 2020-21 (RS. CRORE)

Gains/(losses) due to controllable factors					
Sr.No.	Power Station	O&M expense	Fuel cost	Total gains/(losses) due to controllable factors	Total gains/(losses) to be passed through (1/3rd of gains/(losses)
1	Ukai (3-5)	(7.40)	7.13	(0.27)	(0.09)
2	Gandhinagar (3-4)	(3.89)	4.15	0.25	0.08
3	Gandhinagar 5*	-	-	-	-
4	Wanakbori 1-6 TPS	64.95	2.12	67.07	22.36
5	Wanakbori 7 TPS*	-	-	-	-
6	Sikka Extn. (3-4)*	-	-	-	-
7	KLTPS 3	(32.52)	(1.32)	(33.84)	(11.28)
8	KLTPS 4	(2.16)	(15.33)	(17.49)	(5.83)
9	BLTPS*	-	-	-	-
10	Dhuvaran CAPP 1*	-	-	-	-
11	Dhuvaran CAPP 2	1.80	(10.78)	(8.98)	(2.99)
12	Dhuvaran CAPP 3*	-	-	-	-
13	Utran Extension*	-	-	-	-
14	Ukai 6*	-	-	-	-
15	Wanakbori 8 TPS*	-	-	-	-
16	Ukai Hydro	2.15	-	2.15	0.72
17	Kadana Hydro	6.20	-	6.20	2.07
Total		29.13	(14.03)	15.09	5.03

* PPA governed stations



TABLE 4 : GAINS/(LOSSES) ON ACCOUNT OF UNCONTROLLABLE FACTORS FOR FY 2020-21 (RS. CRORE)

Gain/(loss) due to uncontrollable factors										
Sr.No.	Power Station	Depreciation	Interest & Finance charges	Return on Equity	Water Charges	SLDC charges	MAT	Interest on working capital	Non tariff income	Total gain/(losses) to be passed through
1	Ukai (3-5)	35.95	36.94	9.72	0.10	0.20	(14.04)	(2.00)	(7.61)	59.26
2	Gandhinagar (3-4)	20.97	0.08	(6.60)	(38.01)	0.22	(9.66)	(1.73)	(2.51)	(37.25)
3	Gandhinagar 5*	-	-	-	-	-	-	-	-	-
4	Wanakbori 1-6 TPS	28.08	(7.77)	3.74	3.67	(0.02)	(28.99)	(7.51)	(26.92)	(35.73)
5	Wanakbori 7 TPS*	-	-	-	-	-	-	-	-	-
6	Sikka Extn. (3-4)*	-	-	-	-	-	-	-	-	-
7	KLTPS 3	(6.21)	(0.77)	(36.97)	(0.28)	(0.05)	(1.73)	(1.10)	0.15	(46.96)
8	KLTPS 4	0.09	(0.74)	(0.12)	0.13	(0.03)	(1.72)	(0.18)	(1.51)	(4.08)
9	BLTPS*	-	-	-	-	-	-	-	-	-
10	Dhuvaran CCPP 1*	-	-	-	-	-	-	-	-	-
11	Dhuvaran CCPP 2	11.84	4.35	3.96	(1.29)	(0.02)	(2.59)	1.33	(1.21)	16.36
12	Dhuvaran CCPP 3*	-	-	-	-	-	-	-	-	-
13	Utran Extension*	-	-	-	-	-	-	-	-	-
14	Ukai 6*	-	-	-	-	-	-	-	-	-
15	Wanakbori 8 TPS*	-	-	-	-	-	-	-	-	-
16	Ukai Hydro	(2.31)	0.15	(0.22)	-	(0.03)	(7.02)	0.15	(3.26)	(12.54)
17	Kadana Hydro	10.41	-	(0.03)	-	(0.01)	(5.57)	0.29	(2.61)	2.48
Total		98.82	32.24	(26.51)	(35.69)	0.26	(71.33)	(10.76)	(45.49)	(58.46)

* PPA governed stations

2.2.6. Based on the above estimated gains / (losses) on account of controllable and uncontrollable factors, the Revenue (Gap) / Surplus of GSECL for FY 2020-21 has been worked out as given below:



TABLE 5 : NET ENTITLEMENT FOR FY 2020-21 (RS. CRORE)

Sr.No.	Power Station	Gains/(losses) due to controllable factors (Fixed Charges)	Gains/(losses) due to uncontrollable factors (Fixed Charges)	Total gains/(losses) to be passed through (Fixed Charges) e= c/3 + d	Total gains/(losses) to be passed through at actual PAF (Fixed Charges)	Gains/(losses) due to controllable factors (Fuel Cost)	Total gains/(losses) to be passed through (Fuel Cost) h= g/3	Total gains/(losses) to be passed through I = f + h
a	b	c	d	e= c/3 + d	f	g	h= g/3	I = f + h
1	Ukai (3-5)	(7.40)	59.26	56.79	56.79	7.13	2.38	59.17
2	Gandhinagar (3-4)	(3.89)	(37.25)	(38.55)	(38.55)	4.15	1.38	(37.16)
3	Gandhinagar 5*	-	-	-	-	-	-	-
4	Wanakbori 1-6 TPS	64.95	(35.73)	(14.08)	(14.08)	2.12	0.71	(13.37)
5	Wanakbori 7 TPS*	-	-	-	-	-	-	-
6	Sikka Extn. (3-4)*	-	-	-	-	-	-	-
7	KLTPS 3	(32.52)	(46.96)	(57.80)	(57.80)	(1.32)	(0.44)	(58.24)
8	KLTPS 4	(2.16)	(4.08)	(4.80)	(2.77)	(15.33)	(5.11)	(7.88)
9	BLTPS*	-	-	-	-	-	-	-
10	Dhuvaran CCPP 1*	-	-	-	-	-	-	-
11	Dhuvaran CCPP 2	1.80	16.36	16.96	15.72	(10.78)	(3.59)	12.13
12	Dhuvaran CCPP 3*	-	-	-	-	-	-	-
13	Utran Extension*	-	-	-	-	-	-	-
14	Ukai 6*	-	-	-	-	-	-	-
15	Wanakbori 8 TPS*	-	-	-	-	-	-	-
16	Ukai Hydro	2.15	(12.54)	(11.83)	(11.42)	-	-	(11.42)
17	Kadana Hydro	6.20	2.48	4.55	4.55	-	-	4.55
	Total	29.13	(58.46)	(48.75)	(47.55)	(14.03)	(4.68)	(52.23)

* PPA governed stations



2.3. DETERMINATION OF ARR & TARIFF FOR FY 2022-23

2.3.1. As directed by the Hon'ble Commission, GSECL has projected the Fixed and variable cost for FY 2022-23 on the basis of GERC MYT Regulations, 2016. The basis of such projections has been dealt in detail in subsequent sections of the petition.

2.3.2. The Fixed and Variable cost of GSECL's Generating Plants for FY 2022-23 is estimated as under:

TABLE 6 : PROPOSED FIXED COST OF GSECL PLANTS FOR FY 2022-23 (RS. CRORE)

Sr. No.	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Tax	SLDC Fees & Charges	Water Charges	Total Fixed Cost	Less: Non-Tariff Income	Net Fixed Charges
1	Ukai (3-5)	46.33	-	25.00	37.07	262.61	17.51	0.40	-	388.92	3.78	385.14
2	Gandhinagar (3-4)	36.52	0.00	26.09	28.69	152.10	12.05	0.28	33.72	289.46	9.99	279.47
3	Gandhinagar 5*	2.16	-	28.67	13.07	61.66	6.03	0.14	16.86	128.58	8.34	120.25
4	Wanakbori 1-6 TPS	112.04	28.80	105.75	80.99	281.51	36.16	0.83	53.67	699.75	19.37	680.38
5	Wanakbori 7 TPS*	2.16	0.23	26.34	12.78	21.32	6.03	0.14	10.37	79.39	19.80	59.59
6	Sikka Extn. (3-4)*	165.78	119.13	140.06	38.56	146.73	14.35	0.33	4.91	629.84	5.03	624.81
7	KLTPS 3	30.25	0.00	55.15	5.07	51.70	2.15	0.11	0.21	144.65	1.84	142.81
8	KLTPS 4	36.35	2.37	29.65	4.18	20.97	2.15	0.05	-	95.73	0.14	95.59
9	BLTPS*	195.57	128.87	155.57	26.67	188.44	14.35	0.33	11.10	720.90	2.51	718.39
10	Dhuvaran CCPP 1*	9.77	0.00	10.55	4.61	51.61	3.06	0.07	0.19	79.87	0.59	79.27
11	Dhuvaran CCPP 2	13.09	0.96	14.55	5.28	52.34	3.23	0.07	0.22	89.74	0.60	89.14
12	Dhuvaran CCPP 3*	78.79	57.46	67.05	15.83	5.20	10.79	0.25	0.73	236.10	0.31	235.79
13	Utran Extension*	68.27	19.48	57.56	15.58	54.91	10.75	0.25	2.63	229.43	0.78	228.65
14	Ukai 6*	156.81	75.31	127.08	29.20	57.54	14.35	0.33	-	460.63	4.63	455.99
15	Wanakbori 8 TPS*	221.44	246.97	182.20	50.71	171.60	22.96	0.34	42.18	938.40	1.00	937.41
16	Ukai Hydro	2.41	2.48	10.99	0.62	15.45	8.75	0.20	-	40.91	0.25	40.65
17	Kadana Hydro	5.58	-	29.09	1.15	31.35	6.95	0.16	-	74.28	0.45	73.83
	Total	1,183.33	682.06	1,091.36	370.08	1,627.04	191.63	4.28	176.78	5,326.56	79.40	5,247.16

* PPA governed stations



2.4. ENERGY CHARGES FOR FY 2022-23

2.4.1. GSECL has determined Station wise per unit charges for the FY 2022-23 as mentioned below table:

TABLE 7 : STATION WISE ENERGY CHARGES FOR FY 2022-23

Sl. No:	Power Station	FY 2022-23
		Rs/KWh
1	Ukai (3-5)	4.00
2	Gandhinagar (3-4)	4.35
3	Gandhinagar 5*	3.93
4	Wanakbori 1-6 TPS	4.22
5	Wanakbori 7 TPS*	4.13
6	Sikka Extn. (3-4)*	4.42
7	KLTPS 3	3.05
8	KLTPS 4	2.86
9	BLTPS*	2.79
10	Dhuvaran CCPP 1*	2.66
11	Dhuvaran CCPP 2	2.94
12	Dhuvaran CCPP 3*	2.90
13	Utran Extension*	2.83
14	Ukai 6*	3.23
15	Wanakbori 8 TPS*	3.41
16	Ukai Hydro	0.00
17	Kadana Hydro	0.00

* PPA governed stations

2.4.2. GSECL requests the Hon'ble Commission to approve ARR & Energy charges for the FY 2022-23. Further, GSECL requests Hon'ble Commission to approve the Tariff for FY 2022-23 & Energy Charges as mentioned above and detailed in subsequent sections.

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 2020-21 vis-à-vis parameters approved in "MYT Order of 31st March, 2017 for all power plants except BLTPS for which approved in True-up Order of 26th March 2020 is considered". In this section, GSECL has also provided reasons for deviation in the parameters from the approved figures, if any. GSECL has projected the performance & fuel related parameters for GSECL Power plants for FY 2022-23.
- 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 8 : 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	1,470	
KLTPS	3	75	31/03/1997
	4	75	20/12/2009
	Sub Total	150	
Dhuvaran	7 - Gas	106.617	28/01/2004
	8 - Gas	112.45	01/11/2007
	Sub Total	219.067	
Utran Extension	GT -1	374.571	08/11/2009
Sikka TPS 3&4	3	250	14/09/2015
	4	250	28/12/2015