GUJARAT ELECTRICITY REGULATORY COMMISSION

Tariff Order

Truing up for FY 2012-13 and

Determination of Tariff for FY 2014-15

For

Gujarat State Electricity Corporation Limited (GSECL)

Case No. 1374 of 2013

29th April 2014

6th Floor, GIFT ONE, Road 5C, GIFT CITY
Gandhinagar-382335 (Gujarat), INDIA
Phone: +91-79-23602000 Fax: +91-79-23602054/55
E-mail: gerc@gercin.org : Website www.gercin.org

सत्यमेव जयते

GUJARAT ELECTRICITY REGULATORY COMMISSION
(GERC)

GANDHINAGAR

Tariff Order

Truing up for FY 2012-13 and

Determination of Tariff for FY 2014-15

For

Gujarat State Electricity Corporation Limited (GSECL)

Case No. 1374 of 2013

29th April 2014

CONTENTS

LIST OF TABLES

LIST OF ANNEXURES

ABBREVIATIONS

ABT	Availability Based Tariff
Act	Electricity Act, 2003
AOH	Annual Overhauling
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
BHEL	Bharat Heavy Electricals Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
COH	Capital Overhauling
CUF	Capacity Utilization Factor
CV	Calorific Value
DGVCL	Dakshin Gujarat Vij Company Limited
Discoms	Distribution Companies
ESP	Electro Static Precipitator
FPPPA	Fuel and Power Purchase Price Adjustment
FY	Financial Year
GCV	Gross Calorific Value
GEB	Gujarat Electricity Board
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GFA	Gross Fixed Assets
GoG	Government of Gujarat
GSECL	Gujarat State Electricity Corporation Limited
GUVNL	Gujarat Urja Vikas Nigam Limited
HSD	High Speed Diesel
IPP	Independent Power Producer
K.Cal	Kilo Calorie
kV/KV	Kilo Volt
kWh	Kilo Watt Hour
LE	Life Extension
LSHS	Low Sulphur Heavy stock
LTSA	Long Term Service Agreement
MAT	Minimum Alternate Tax
MGVCL	Madhya Gujarat Vij Company Limited
MoU	Memorandum of Understanding
MW	Mega Watt
MYT	Multi-Year Tariff
NCV	Net Calorific Value
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturer
PGVCL	Paschim Gujarat Vij Company Limited
PAF	Plant Availability Factor
PG test	Performance Guarantee Test
PLF	Plant Load Factor
PPA	Power Purchase Agreement
Ps	Paise

R&M	Renovation and Modernization
RE	Revised Estimates
RLA	Residual Life Assessment
ROE	Return on Equity
Rs.	Rupees
RSD	Re-start Duration
Scm	Standard cubic meter
SHR	Station Heat Rate
SLDC	State Load Despatch Centre
TPS	Thermal Power Station
UGVCL	Uttar Gujarat Vij Company Limited
UI	Unscheduled Interchange
Wt. Av.	Weighted Average
WTPS	Wanakbori Thermal Power Station

Before the Gujarat Electricity Regulatory Commission at Gandhinagar

Case No. 1374 of 2013

Date of the Order: 29/04/2014

CORAM

Shri Pravinbhai Patel, Chairman

Dr. M.K. Iyer, Member

ORDER

1. Background and Brief History

1.1 Background

The Gujarat State Electricity Corporation Limited (hereinafter referred to as “GSECL” or “petitioner”) has filed its petition on 29.11.2013 under section 62 of the Electricity Act, 2003 read with Gujarat Electricity Regulatory Commission GERC (MYT) Regulations, 2011, for the True-up of FY 2012-13 and determination of tariff for the FY 2014-15.

The Commission admitted the petition on 04.12.2013.

1.2 Gujarat State Electricity Corporation Limited (GSECL)

The Government of Gujarat unbundled and restructured the Gujarat Electricity Board with effect from 1st April, 2005. The Generation, Transmission and Distribution businesses of the erstwhile Gujarat Electricity Board were transferred to seven successor companies. The seven successor companies are listed below:

i. Gujarat State Electricity Corporation Limited (GSECL) – A Generation Company
ii. Gujarat Energy Transmission Corporation Limited (GETCO) – A Transmission Company

Four Distribution Companies:

iii. Dakshin Gujarat Vij Company Limited (DGVCL)
iv. Madhya Gujarat Vij Company Limited (MGVCL)
v. Uttar Gujarat Vij Company Limited (UGVCL)
vi. Paschim Gujarat Vij Company Limited (PGVCL)and
vii. Gujarat Urja Vikas Nigam Limited (GUVNL) – A Holding Company and is also responsible for purchase of electricity from various sources and supply to Distribution Companies.

The Government of Gujarat vide notification dated 3rd October, 2006 notified the final opening balance sheets of the transferee companies as on 1st April, 2005, containing the value of assets and liabilities, which stand transferred from the erstwhile Gujarat Electricity Board to the transferee companies including Gujarat State Electricity Corporation Limited (GSECL). Assets and liabilities (gross block, loans and equity) as on the date mentioned in the notification have been considered by the Commission in line with the Financial Restructuring Plan (FRP) as approved by the Government of Gujarat.

1.3 Commission's Order for the Second control period

Gujarat State Electricity Corporation Limited filed its petition under the Multi-Year Tariff framework for the control period FY 2011-12 to FY 2015-16, on 30th December, 2010 in accordance with the Gujarat Electricity Regulatory Commission (Multi-Year Tariff Framework) Regulations, 2007 notified by GERC. However, the Commission issued the new MYT Regulations notified as GERC (Multi-Year Tariff), 2011 on 22nd March, 2011.

As per Regulation 1.4 (a) of the GERC (Multi-Year Tariff) Regulations, 2011, which reads as under: *"These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from 1st April, 2011 and onwards.",* the Commission considered the petition as per the new Regulation.

The Commission, in exercise of the powers vested in it under sections 61, 62 and 64 of the Electricity Act 2003 and all other powers enabling it in this behalf and after taking into consideration the submissions made by GSECL, the objections by various stakeholders, response of GSECL, issues raised during the public hearing and all other relevant material, issued the Multi-Year Tariff order on 11th April, 2011 for the control period comprising FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15 and FY 2015-16 based on the GERC (MYT) Regulations, 2011.

1.4 Admission of the Current Petition and Public Hearing Process

The GSECL submitted the current petition for "Truing up" of FY 2012-13 and determination of Tariff for FY 2014-15 on 29th November, 2013. The Commission admitted the petition (Case no. 1374 of 2013) on 5th December, 2013.

In accordance with section 64 of the Electricity Act, 2003, the Commission directed GSECL to publish its application in the abridged form to ensure public participation. The Public Notice was published in the following newspapers on 11th December, 2013 inviting objections / suggestions from its stakeholders on the ARR petition filed by it.

Sl. No.	Name of the Newspaper	Language	Date of publication
1	Indian Express	English	11.12.2013
2	Sandesh	Gujarat	11.12.2013

The petitioner has also placed the public notice and the petition on the website (www.gsecl.in) for inviting objections and suggestions on its petition.

The interested parties / stakeholders were asked to file their objections / suggestions on the petition on or before 10th January, 2014.

The Commission received objections / suggestions from 4 consumer / consumer organizations. The Commission examined the objections / suggestions received and scheduled the public hearing for GSECL on 11th February, 2014 at the Commission's Office at Gandhinagar and subsequently a communication was sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The public hearing was conducted in Commission's Office in Gandhinagar as scheduled.

The names of the stakeholders who filed their objections and the objectors who participated in the public hearing for presenting their objections are given below:

Sl. No.	Name of Stakeholders	Participated in the Public Hearing
1	CERS - Consumer Education and Research Society	Yes
2	Shri Amarsinh Chavda	No
3	UUWA - Utilities Users' Welfare Association	Yes
4	GUVNL- Gujarat Urja Vikas Nigam Ltd.	Yes

A short note on the main issues raised by the objectors in the submissions with respect to the petition along with the response of GSECL and the Commission's views on the response are briefly given in chapter 3.

1.5 Contents of this Order

This order is divided into **six** chapters as under:

1. The **first** chapter provides a background of the petitioner, the petition and details of the public hearing process and the approach adopted for this order.
2. The **second** chapter outlines the summary of GSECL's petition.
3. The **third** chapter provides a brief account of the public hearing process, including the objections raised by various stakeholders, GSECL's response and the Commission's views on the response.
4. The **fourth** chapter deals with the "Truing up" for FY 2012-13.
5. The **fifth** chapter deals with the Determination of tariff for the FY 2014-15.
6. The **sixth** chapter deals with the compliance of directives.

1.6 Approach of this Order

The GERC (Multi-Year Tariff) Regulations, 2011 provide for "Truing up" of the previous year, and determination of tariff for the ensuing year. The Commission had approved the ARR for the five years of the control period FY 2011-12 to FY 2015-16 in the MYT order dated 11th April, 2011.

The GSECL has approached the Commission with the present petition for "Truing up" of the FY 2012-13 and determination of tariff for the FY 2014-15.

In this order, the Commission has considered the “Truing up” for FY 2012-13 and the determination of Tariff for the FY 2014-15.

The Commission has undertaken “Truing up” of the FY 2012-13 including computation of gains and losses of the stations other than PPA based stations based on the submissions of the petitioner and the audited annual accounts.

While “Truing up” of FY 2012-13 and determination of Tariff for FY 2014-15 the Commission has been primarily guided by the following principles:

1. Controllable parameters have been considered at the level approved under the MYT order, unless the Commission considers there are valid reasons for revision of the same.
2. Uncontrollable parameters have been revised based on the actual performance observed.
3. The Truing up for the FY 2012-13 has been considered based on the GERC (MYT) Regulations, 2011. For the determination of the ARR for FY 2014-15, the Commission has considered the ARR for FY 2014-15 as approved in the MYT order dated 11th April, 2011.
4. For the Ukai-6 station, Dhuvaran CCPP-3 and Sikka 3&4 stations which were not covered in the MYT order, the ARR for FY 2014-15 have been considered based on the parameters as per the GERC (MYT) Regulations, 2011.

2. A Summary of GSECL's Petition

2.1 Actuals for FY 2012-13 submitted by GSECL

GSECL in its petition submitted the actual values of operational parameters and costs for each of the generating stations owned and operated by it for FY 2012-13. The Operational Parameters pertain to plant availability, Plant Load Factor, Station Heat Rate (SHR), auxiliary consumption, specific oil consumption, transit loss of coal, gross and net generation. The costs cover both variable and fixed costs.

GSECL has also mentioned that for the PPA based stations, all the parameters are based on the provisions of PPAs. For the thermal power stations of GSECL where the availability factor is less than 80%, such availability factor is proposed to be the neutralization level for full fixed costs recovery as has been approved earlier by the Commission. In all other cases, a PAF of 80% is proposed as the normative level for full Fixed Cost recovery as per the GERC (MYT) Regulations.

GSECL has submitted the Operational Parameters and costs for the approval of the Commission. The approved parameters and costs would be the basis for billing GUVNL- the sole purchaser of power from GSECL.

2.2 A Summary of fixed and variable costs claimed by GSECL

The fixed costs as claimed by GSECL for FY 2014-15 are given in Table 2.1 and energy charges in Table 2.2 below:

Table 2.1: Proposed Fixed Cost for FY 2014-15

(Rs. Crore)

Sl. No.	Power Station	Net Fixed Charges
1	Ukai (1-5)	334
2	Gandhinagar (1-4)	265
3	Gandhinagar 5*	100
4	Wanakbori 1-6 TPS	471
5	Wanakbori 7*	98
6	Sikka TPS	121
7	KLTPS 1-3	220
8	KLTPS 4	121
9	Dhuvaran (Gas 1)*	55
10	Dhuvaran (Gas 2)	65
11	Utran Gas*	54
12	Utran Extension*	266
13	Ukai Hydro	25
14	Kadana Hydro	59
15	Ukai-6**	568.80

Sl. No.	Power Station	Net Fixed Charges
16	Dhuvaran CCPP-3**	370.28
17	Sikka 3&4**	602.56
18	**Total**	**3795.64**

** PPA based stations*
*** Provisionally approved*

Table 2.2: Proposed Energy Charge for FY 2014-15

(Rs. kWh)

Sl. No.	Power station	Energy Charges
1	Ukai (1-5)	1.70
2	Gandhinagar (1-4)	2.37
3	Gandhinagar 5*	2.13
4	Wanakbori 1-6 TPS	2.11
5	Wanakbori 7*	2.02
6	Sikka TPS	2.76
7	KLTPS 1-3	1.18
8	KLTPS 4	1.11
9	Dhuvaran (Gas 1)*	2.41
10	Dhuvaran (Gas 2)	2.39
11	Utran Gas*	2.37
12	Utran Extension*	2.07
13	Ukai-6**	1.76
14	Dhuvaran CCPP-3**	2.29
15	Sikka 3&4**	3.26

**PPA based stations*
*** Provisionally approved*

2.3 Request of GSECL

GSECL respectfully prays to the Commission;

1. To admit this Petition for True-up of FY 2012-13 and determination of ARR for FY 2014-15.
2. To approve the gains/ losses for the True-up for FY 2012-13 and allow sharing of such gains/ losses as prescribed in the GERC (MYT) Regulations, 2011.
3. To approve the operational and financial parameters of GSECL for FY 2012-13 considering the vintage and constraints of the old machines, and consider the same for recovery of full fixed cost and kindly approve PAF for WTPS (1-6) at 80%.
4. To approve the financial parameters and separate water charges at actuals for FY 2012-13 as proposed by GSECL.
5. 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 2012-13 for recovery

of variable cost considering the vintage and constraints of the old machines as well as site specific constraints.

6. To approve reimbursement of Tax on Income earned through the sale of power for all power stations including PPA governed stations.
7. To approve ARR for Ukai-6, Dhuvaran CCPP-3 and Sikka 3 & 4 plants for FY 2014-15.
8. To provide impact of points raised on Tariff Order dated 30.03.2013 in section 5.
9. To grant any other relief as the Commission may consider appropriate.
10. The Petitioner craves leave of the Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
11. Pass any other order as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

3. Brief outline of Objections raised, response from GSECL and Commission's view

3.1 Public Response to the Petition

In response to the Public Notice inviting objections / suggestions from stakeholders on the petition filed by GSECL for True-up for FY 2012-13 and determination of tariff for FY 2014-15, three consumers / organizations, viz. (i) Consumer Education and Research Society (ii) Shri Amarsinh Chavda and (iii) Gujarat Urja Vikas Nigam Limited (GUVNL) have filed their objections / suggestions in writing. Another Organisation the "Utility Users' Welfare Association", Ahmedabad has requested for extension of time to file the objections, but it has not filed any objection though the time extension was granted to it.

The Commission has considered the objections / suggestions raised by the above mentioned stakeholders and the response of GSECL on the same.

The details of the submissions made by the objectors, response of the Petitioner and the views of the Commission are summarized in the following sections.

3.2 Objector 1: Consumer Education and Research Society

Objection 1: Poor Plant Load Factor

PLF has reduced by almost 50% in 2013 compared to that of 2011. The GSECL should not keep its plants idle and purchase power from outside sources. Its claim that most of generating plants are old and operating since 30 years and are uneconomical cannot be accepted. The GSECL should take lessons from Private Company who has increased capacity of two nos. of 30 year old plants from 110 MW to 120 MW.

Response of GSECL:

The generation from Thermal Power Stations is being carried out in line with the schedule given by SLDC. It can be observed that most of the stations have achieved higher PAF but could not be operated as per dispatch given by SLDC.

PLF achieved by GSECL as a whole is 58.28%, and approved PLF has been achieved by GTPS-V, WTPS-VII, Ukai (H), and Kadana (H) units/stations. The PLF of remaining coal based plants could not be achieved due to Backing Down and

Reserve Shut Down (RSD) as per requirement of Grid, and for Gas based power plants, non-availability of adequate quantity of cheaper Gas has resulted in lower PLF. The reason for Poor PLF is low despatch given by SLDC based on merit order dispatch. The PAF for all the Power Stations except WTPS-1-6 and KLTPS is in line with approved PAF and GSECL as a whole has PAF of 83.77% which is an all-time high.

Commission's View:

The response of GSECL is noted.

Objection 2: Poor Technical Performance

There has been poor performance of KLTPS, Sikka and Gandhinagar 1-4 plants. Due to lack of preventive and timely maintenance the stage has come where Petitioner has raised its hands for poor performance of these plants and is in process of scrapping them.

The poor performance of above plants in spite of repeated directives from the Commission is objectionable. Ultimately Poor Performance of plant and backing down has put heavy burden on consumers and therefore any loss due to uncontrollable factor should be rejected by the Commission.

Response of GSECL:

The main reason for deprived technical performance is running of machines at partial/low load instead of full/rated capacity (at rated cycle parameters) because of low schedule, Backing Down and RSD as issued by SLDC based on system requirements despite of availability of machines for Generating at rated capacity.

Hence, loss due to above reasons is uncontrollable for petitioner. Even though machines of GTPS 1-4, Sikka 1-2, KLTPS 1-3 and KLTPS-4 are old, it can be observed that GTPS 1-4 and Sikka 1-2 have achieved higher PAF and lower SHR. Sp. Oil Consumption of Sikka 1-2 is also lower. As the Aux. Consumption is measured in terms of % of units generated, it is slightly high as the generation is reduced due to low/partial load operation. For KLTPS 1-3, performance is almost achieved in case of PAF and SHR even though the turbine rotor blade of KLTPS Unit no. 3 was shaven off due to which the unit could not be operated more than 60 MW. Forced outages in KLTPS Unit No. 1-3 due to bottom ash conveyer chain problem caused higher Sp. Oil Consumption as well as high Aux. Consumption. Whereas in case of KLTPS-4, the unit has undergone frequent boiler tube leakages and shut downs thereof have caused under performance. Further, the design of KLTPS-4 is having an Auxiliary consumption of 16% which is further deteriorated due to these outages.

Commission's View:

The controllable technical performance parameters such as Station Heat Rate, Auxiliary consumption, specific oil consumption were approved by the Commission, according to the GERC (MYT) Regulations 2011, and the same are considered for Truing up also.

Objection 3: Poor Quality of Coal

The Coal received in the stations is of inferior quality. Last year Rs. 160.69 Crore were recovered from consumers through FPPPA charges. This amounts to unfair trade practice under Consumer Protection Act. The Petitioner should pay for the quality of coal received in terms of calorific value of coal at its power plants and not as per MOU signed with Coal India Ltd.

It has been noticed that GSECL has approached Competition Commission of India for this unfair trade practice and the Commission has passed the order in favour of GSECL. The Commission therefore should direct GSECL to refund this illegal amount to consumers by reduction in tariff for FY 2014-15.

The details of cost of Coal/Ton signed with Coal India Ltd. and cost of Coal/Ton received by Petitioner with efforts made by GSECL to claim this difference in cost from M/s Coal India Ltd may be demanded from the GSECL.

Response of GSECL:

The GSECL has not recovered Rs. 160.69 Crore from the consumers.

In respect to coal quality, it is to submit that the GSECL has long term Fuel Supply Agreement (FSA) with South Eastern Coal fields Limited (SECL) and Western Coal Fields Limited (WCL) which are subsidiary companies of M/s Coal India Limited (CIL). As per the FSAs, Coal companies supply the quantity allocation to Power station without any quality assurance. Also the Joint Sampling as per FSA is only at Loading end. The GSECL has to make monthly advance payment to Coal companies as per the Monthly Scheduled Quantity of respective Power Stations as per FSA.

There is no Specific Grade/Band mentioned in the FSA. SECL supplies G3 to G11 Band (A to F Grade) coal, while WCL supplies G8 to G9 Band (D to E grade) coal, which may differ with the unloading end sample and for which the GSECL has no mechanism to pay for the received quality coal as per FSA. The GSECL had raised the issue many times before CIL as well as before Ministry of Coal, but no positive response regarding payment as per quality of coal received.

Therefore, the GSECL had approached the Competition Commission of India (CCI) for the quality issue with SECL. The Commission has passed the Order in favour considering representation by the GSECL, but there is no financial benefit in favour of the GSECL. However, it is to indicate that CIL has now approached the Competition Appellate Tribunal and hence the matter is sub-judice. Further, as the GSECL has not availed the said amount from consumers, the issue of refunding the same to the consumers does not arise.

The GSECL has to make payment of base price of coal declared by coal companies as notified by CIL from time to time and other charges to the coal companies as per the provision of FSA. There is no mechanism provided under the FSA to claim difference in cost due to difference of grade/Band slippage.

Commission's View:

The objection and the response of GSECL are noted. Further action may be taken on this after the decision of the Competition Appellate Tribunal. GSECL shall continue its efforts to obtain coal of proper grade to its generating stations.

Objection 4: Fuel Cost of New Plants

GSECL has submitted proposals for approval of tariff for Ukai-6, Dhuvaran-3 and Sikka 3-4 Plants.

The SHR of all Coal/Gas/Lignite based thermal plants is calculated at 100% Maximum Continuous Rating (MCR) and therefore Petitioner's demand to link Station Heat Rate with PLF cannot be accepted. The SHR of 500 MW is always less than 2300 Kcal/kWh and therefore Petitioner's demand of SHR at 2425 Kcal/kWh should be rejected.

If Petitioner operates its plants at PLF below 50% then its demand for higher auxiliary consumption from 6.0% to 8.5% cannot be accepted.

Therefore, both the demands which operate plant inefficiently and put burden on consumers should be rejected by the Commission.

Response of GSECL:

It is correct that SHR of all Coal/Lignite/Gas based plants are being calculated at 100% MCR and performance parameters are also adopted considering operation of said plants at 100% MCR. Under the scenario of frequent Backing Down and low load operation thereof, the 100% MCR is not possible. The deterioration in performance parameters on partial load/lower load operation is a known phenomenon. As far as Sikka Unit No. 3 & 4 are concerned, the technology / design is adopted based on the imported coal. Further, as per the GERC (Terms and Conditions of Tariff) Regulations, the norms of SHR were 2450 and 2500 Kcal/kWh for 500 MW and 250 MW respectively, and hence adoption of better SHR by GSECL should be appreciated. Further, looking at the performance during the present operation of Ukai Unit No. 6, the Unit runs at lower load and hence, Auxiliary Consumption will be naturally higher.

Commission's View:

The objection and the response of the GSECL are noted.

Objection 5: High Fuel Cost of Sikka 3-4 Plants

The GSECL has demanded approval for Fuel Cost for Sikka 3-4 Plants which are to be commissioned by 31.03.2014. The Petitioner has planned to use imported coal for these plants. Obviously the cost of imported coal being high, the fuel cost has jumped to Rs. 3.26/kWh. Under above circumstances these plants will remain idle due to merit order purchase of power.

The Respondent requests the Commission not to approve this fuel cost and direct petitioner to explore possibility of getting indigenous coal and preferably blending of coal to cut down Fuel Cost per Unit.

Response of GSECL:

Sikka Units No. 3 & 4 are designed for imported coal with GCV @ 5300 Kcal/Kg. When these units were envisaged, many units of even private players were under consideration / installation / commissioning on imported coal design as the price of imported coal was much lower at that time as well as exchange rate of dollar was much lower than prevailing rate. Due to fast hike in price of dollar as well as cost of

Imported Coal, the entire scenario has changed for which the GSECL should not be held responsible.

The tariff is calculated under the prevailing rates and hence, it is requested to approve the same. In any case, the Units of Sikka No. 3 & 4 shall operate only if they get dispatch as per Merit Order.

Commission's View:

Since these units are designed to burn coal of calorific value of 5300 Kcal/Kg, the GSECL has to import coal and source indigenous coal of this grade, if available.

Objection 6: Fixed Cost to be limited with PLF

The Respondent objects to Incentive/Fixed Cost claimed by petitioner for PAF being more than 80%. Logically it is not correct to link incentive with PAF but it should be linked with PLF so that Petitioner operates its plants at full capacity to claim incentives.

CERC has come out with new Tariff Regulations for next five years where it has linked incentives with PLF.

Response of GSECL:

The petitioner has filed this Petition as per GERC (MYT) Regulations and has followed/complied MYT order dated 11.04.2011. The calculations of Fixed Charges are as per the Regulations issued by the Commission where in fixed cost is linked with PAF. The linking of fixed cost with PLF as proposed by the Respondent is not as per the prevailing GERC (MYT) Regulations 2011.

Commission's View:

The incentive shall be considered as per the existing Regulations.

Objection 7: Proposed Energy Charges for FY 2014-15

It is surprising to know that the energy charges quoted by Petitioner are very low compared to actual charges of 2012-13.

It means that Energy cost has increased due to low operation of plants which were running most inefficiently.

Response of GSECL:

The claim of energy charges for FY 2014-15 is proposed as approved vide MYT order dated 11.04.2011 as per fuel parameters approved. However actual energy charges shall be applicable on actual fuel cost as approved by the Commission vide fuel cost adjustment from time to time.

Commission's View:

The response of the GSECL is noted.

Objection 8: Recovery of Rs. 224 Crore as Revenue Gap for 2012-13

Petitioner has converted all controllable factors into uncontrollable factors and demanded recovery of Rs. 224 Crore as revenue gap for 2012-13.

Therefore, the burden of losses due to Controlled and Uncontrolled parameters amounting to Rs. 224 Crore should be rejected as this amount has increased due to inefficiency of petitioner.

Response of GSECL:

Reasons for considering fuel expenses, capital expenditure and O&M expenses as uncontrollable are submitted as under:

a. Fuel Expenses are uncontrollable up to the extent of variation in Fuel prices as well as transportation charges which are not in the control of the GSECL. However, variation in fuel expenses due to variation in operational parameters is Controllable.
b. Capital Expenditure is uncontrollable up to extent of delay in funding and so is the rate of Interest.
c. O&M expenses is uncontrollable up to the extent of the impact of employee cost which is a statutory requirement and is beyond the control of GSECL. Increment and increase in dearness allowance, water charges, increase in R&M due to emergency repairs on account of aging of equipments and inflationary impact on the overall cost.

Hence, the petitioner has requested to allow all the above parameters as uncontrollable to a certain extent only.

Commission's View:

The Controllable and uncontrollable expenses are considered by the Commission as per Regulations and after prudence check.

3.3 Objector 2: Shri Amarsinh Chavda

Objection 1: T&D Losses

T&D losses are more due to corruption in DISCOMs.

Response by GSECL:

This does not pertain to GSECL and pertain to GETCO and DISCOMs.

Commission's View:

The Commission agrees with the response of the GSECL.

Objection 2: Low Quality material

The material used is of low quality.

Response by GSECL:

Material used by GSECL is of standard quality as huge equipments are used for Generation purpose.

Commission's View:

The response of GSECL is noted.

Objection 3: Closing of Generating Stations

Generating stations remain closed. The cost from these stations is around Rs. 3.50/kWh while in TPL the cost is Rs. 10/kWh. These closed stations should be used to supply cheap power to TPL.

Response by GSECL:

The generation from Thermal Power Stations is being carried out in line with the dispatch instructions given by SLDC and for other issue it is to inform that power trading to TPL is not within scope of the petitioner.

Commission's View:

The response of GSECL is noted.

Objection 4: Not Enough Power for Agriculture:

GUVNL has surplus power and it sells power to other states and gets huge profit, while the farmers in the state are not supplied enough power. Agriculture should be given enough power supply.

Response by GSECL:

The subject does not pertain to the GSECL.

Commission's View:

The Distribution companies supply power for agriculture for specified hours of supply as per directive of the State Government.

3.4 Objector 3: Gujarat Urja Vikas Nigam Limited (GUVNL)

Objection 1: Truing Up of FY 2012-13

The Petitioner has categorized O&M Expenses like employee expenses and insurance expenses as uncontrollable and O&M Expenses like R&M and Administrative & General expenses as controllable parameters. Accordingly the Petitioner has indicated a net loss of Rs. 192 Crore comprising of Rs. 53 Crore towards loss due to controllable factors (1/3rd of Rs. 158 cores) and Rs. 139 Crore due to uncontrollable factors.

The Commission in its order dated 30.03.2013 for truing up for the FY 2011-12 have considered the variation due to O&M Expenses as controllable in accordance with the provisions under Regulation 23 of GERC (MYT) Regulations 2011.

Response of GSECL:

In respect to Para No. 1 regarding O&M Expenses like R&M and A&G expenses as controllable parameter and Employee expenses and Insurance expenses as uncontrollable factors, it is to submit that Employee Cost purely depends upon Government Decisions like Dearness Allowance for which % of D.A. is not predictable. Also leave salary, LTC, Medical, HBA, TA-DA Arrears, Increments, etc. may vary year to year as per employees' demand and cannot be predicted. Hence, the same are considered as Uncontrollable factors. However the Commission may approve the same as deem fit.

Commission's View:

The Commission has considered the O&M expenses in the True-up as per Regulations and prudence check.

Objection 2: Tariff Determination of FY 2014-15

As regard the Tariff for Dhuvaran CCPP 3 and Sikka 3-4 for FY 2014-15, it is submitted that the Commission while determining tariff for Ukai 6 for FY 2013-14 in the Order dated 30.03.2013, had considered the same as first year of operation and accordingly considered the opening balance of the parameters for determining the Fixed Costs of Ukai 6 as Nil (zero).

In similar lines, since Dhuvaran CCPP 3 and Sikka 3-4 have not yet been commercially operationalized, the Projects have not been capitalized and no Fixed Cost has been paid during FY 2013-14. Thus, FY 2014-15 shall become the first year of operation after achieving COD.

Therefore, Commission may adopt similar approach while determining tariff for

Dhuvaran CCPP 3 and Sikka 3-4 for FY 2014-15 as adopted in the Order dated 02.06.2012 and 30.03.2013 i.e. the opening balance of the parameters for determining the Fixed Costs of Dhuvaran CCPP 3 and Sikka 3-4 for FY 2014-15 must be considered as Nil (i.e. zero).

Response of GSECL:

In respect to Para No. 2 regarding Tariff for Dhuvaran CCPP 3 and Sikka 3-4 for FY 2014-15, opening balance to consider as Nil [i.e. Zero] as COD is not achieved, it is submitted that it is calculated in line with CERC approval of Tariff and capital cost for new units. However, the Commission may decide the issue as may deem fit.

Commission's View:

The Commission has considered the provisional tariff in respect of Dhuvaran CCPP 3 and Sikka 3-4 based on the information submitted by GSECL in its Petition and approved parameters.

4. Truing up for FY 2012-13

4.1 Generating Stations of GSECL

GSECL owns and operates the following generating stations, as on 1st April 2013:

- Four coal based thermal generating stations at Ukai, Gandhinagar, Wanakbori and Sikka;
- One lignite based thermal station at Panandhro (KLTPS)
- One thermal station, with gas fired units at Dhuvaran;
- One gas fired station at Utran;
- Two major hydel stations at Ukai and Kadana and two mini hydel stations at Panam and Ukai LBC.
- Windmills
- Two Solar Power stations each of 1 MW

The details of the stations existing as on 1st April, 2013, along with their capacities and dates of commissioning, are given in the Table below:

Table 4.1: Capacity, CoD and Age of GSECL generating Stations as on 1st April 2013

Units	Name of station	Unit No.	Capacity of the Unit (MW)	Date of Commissioning	Age on 01.04.13 (Years)
Ukai (1-5)	Ukai	1	120	29/03/1976	37
		2	120	23/06/1976	37
		3	200	21/01/1979	34
		4	200	11/9/1979	34
		5	210	30/01/1985	28
		Sub Total	850		
Gandhinagar (1-4)	Gandhinagar	1	120	13/03/1977	36
		2	120	10/4/1977	36
		3	210	20/03/1990	23
Gandhinagar 5*		4	210	20/07/1991	22
		5	210	17/03/1998	15
		Sub Total	870		
Wanakbori 1-6 TPS	Wanakbori	1	210	23/03/1982	31
		2	210	15/01/1983	30
		3	210	15/03/1984	29
		4	210	9/3/1986	27
Wanakbori 7 TPS*		5	210	23/09/1986	27
		6	210	18/11/1987	25
		7	210	31/12/1998	14
		Sub Total	1470		
Sikka TPS	Sikka	1	120	26/03/1988	25
		2	120	31/03/1993	20
		Sub Total	240		

Units	Name of station	Unit No.	Capacity of the Unit (MW)	Date of Commissioning	Age on 01.04.13 (Years)
KLTPS 1-3	KLTPS	1	70	29/03/1990	23
		2	70	25/03/1991	22
KLTPS 4		3	75	31/03/1997	16
		4	75	20/12/2009	4
		Sub Total	290		
Dhuvaran (Gas 1)*	Dhuvaran	7-Gas	106.617	28/01/2004	9
Dhuvaran (Gas 2)		8-Gas	112.45	1/11/2007	5
		Sub Total	219.067		
Utran (Gas)*	Utran	GT - 1	30	17/12/1992	20
		GT - 2	30	28/12/1992	20
		GT - 3	30	7/5/1993	20
		STG	45	17/7/1993	20
		Sub Total	135		
Utran Extension*	Utran Extension	GT - 1	375	8/11/2009	4
Sub Total of GSECL (Coal + Lignite)			**3720**		
Sub Total of GSECL (Gas)			**729**		
Total GSECL (Thermal)			**4449**		
Ukai Hydro	Ukai Hydro	1	75	8/7/1976	37
		2	75	13/12/1974	39
		3	75	22/04/1975	38
		4	75	4/3/1976	38
		Sub Total	300		
	Ukai LBC	1	2.5	8/12/1987	26
		2	2.5	19/02/1988	25
		Sub Total	5		
Kadana Hydro	Kadana Hydro	1	60	31/03/1990	23
		2	60	2/9/1990	23
		3	60	3/1/1998	15
		4	60	27/5/1998	15
		Sub Total	240		
	Panam	1	1	24/03/1994	19
		2	1	31/03/1994	19
		Sub Total	2		
Sub Total GSECL (Hydro)			**547**		
	Wind Mills		10	01/04/2009	4
Solar Plants	Plant at GTPS		1	27/03/2012	1
	Plant at Sanand		1	29/03/2012	1
Total GSECL as a whole			**5008**		

*PPA based stations

4.2 Operating Performance Parameters

The fuel cost of a generation station depends on: (i) performance parameters, such as PLF, Station Heat Rate, Auxiliary Consumption, Secondary Fuel Oil Consumption and Transit Loss of coals which are controllable, and (ii) cost parameters, such as Gross Calorific Value of the fuel, type of fuel and price of fuel, which are not within the control of the utility.

GSECL has submitted the actual operating performance on Plant Availability Factor (PAF), Plant Load Factor (PLF), Station Heat Rate, Coal transit loss, Auxiliary Consumption and Specific Oil Consumption etc. for FY 2012-13 for all the stations. The Commission has taken up the truing up of the annual performance parameters for FY 2012-13. The same is discussed in the following sections.

4.2.1 Plant Availability Factor (PAF)

Petitioner's Submission

GSECL has submitted the actuals of plant availability of different stations for FY 2012-13. The PAF (i) approved in the MYT Order dated 11th April, 2011; (ii) the actuals, as furnished by GSECL in the petition for the period, are given in the Table below:

Table 4.2: Plant Availability Factors for FY 2012-13

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	75.00	81.57
2	Gandhinagar (1-4)	79.00	82.83
3	Gandhinagar 5*	80.00	97.51
4	Wanakbori 1-6 TPS	85.00	82.76
5	Wanakbori 7 TPS*	80.00	99.97
6	Sikka TPS	75.00	77.47
7	KLTPS 1-3	75.00	72.13
8	KLTPS 4	80.00	57.30
9	Dhuvaran (Gas 1)*	80.00	90.23
10	Dhuvaran (Gas 2)	85.00	89.98
11	Utran (Gas)*	80.00	85.08
12	Utran extension *	80.00	87.51
13	Ukai Hydro	80.00	87.56
14	Kadana Hydro	80.00	70.82

*PPA based stations

It is observed from the above Table that the stations – Wanakbori 1-6 and KLTPS I-3 have achieved marginally lower PAF than approved by the Commission in the Tariff Order dated 11th April, 2011.

In the case of KLTPS –4 and Kadana Hydro, the PAF achieved are much lower than those approved.

GSECL has submitted the following in respect of PAF in general:

- PAF for Wanakbori TPS 1-6 Units may be considered at 80%, instead of keeping the same at 85% on par with new stations, ,since these machines are aged and it is also essential to carry on need based R&M because of failure of certain auxiliaries, boilers tubes, etc.
- For the thermal power stations of GSECL, where the availability factor is less than 80%, such availability factor is proposed to be the neutralisation level for full fixed costs recovery, as has been earlier approved by the Commission. In all other cases, a PAF of 80% is proposed as the normative level for full Fixed Cost recovery, as per Terms and conditions of tariff.
- **Hydro Stations Availability:** The neutralisation level for full fixed cost recovery by GSECL will be the availability of machines, irrespective of actual operations during peak hours, subject to a ceiling of 80% availability of machines, as approved by the Commission earlier.
- The operations of the hydro stations of GSECL are solely dependent on the instructions issued by Govt. of Gujarat (Irrigation Dept.) – which, in turn, are based primarily on the irrigation requirements of the state. Thus, GSECL has no control over the generation from these plants.
- For all the PPA governed stations of GSECL (viz., Gandhinagar - 5, Wanakbori - 7, Dhuvaran Gas -1, Utran and Utran Extension), which are relatively newer plants, GSECL had proposed 80% availability factor, as per PPA and provisions of the terms & conditions of the Regulations.
- GSECL has further submitted the following reasons for the deviation of PAF for FY 2012-13 for the Stations where PAF was low:
    - Wanakbori 1-6: forced outage of 113 days (from 26.09.12 to 17.01.13) of Unit No. 2, due to turbine problem
    - KLPTS 1-3: The load on Unit No. 3 is restricted to 60 MW, since two stages of turbine rotor are shaved off and bottom ash conveyer chain problems in Units Nos. 1 to 3;
    - KLPTS 4: High auxiliary power consumption, boiler tube leakages;
    - Kadana Hydro: Planned outage of Unit No. 2 from 01.04.2012 to 16.08.2012 and Unit No. 3 from 24.04.2012 to 31.03.2013 in the year 2012-13 for capital overhauling / major repairing;
- It is, therefore, requested that for all the stations of GSECL, other than PPA governed Stations, the availability required may be relaxed and approved, as proposed by GSECL.

Commission's Analysis

The Commission has analysed the submissions made by the petitioner regarding plant availability factor. The Commission has found that the PAF is marginally lower than the approved one in case of Wanakbori 1-6 and KLTPS 1-3 and substantially lower in the case of KLTPS-4 and Kadana Hydro.

The Plant Availability Factor is considered as controllable. Hence for Truing up purpose, the PAF, as approved in the MYT Order, has been considered.

The PAF approved for Truing up purpose for FY 2012-13 for each station is given in the Table below:

Table 4.3: Plant Availability Factors approved for Truing up for FY 2012-13

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13	Approved for Truing up purpose for FY 2012-13
1	Ukai (1-5)	75.00	81.57	75.00
2	Gandhinagar (1-4)	79.00	82.83	79.00
3	Gandhinagar 5*	80.00	97.51	80.00
4	Wanakbori 1-6 TPS	85.00	82.76	85.00
5	Wanakbori 7 TPS*	80.00	99.97	80.00
6	Sikka TPS	75.00	77.47	75.00
7	KLTPS 1-3	75.00	72.13	75.00
8	KLTPS 4	80.00	57.30	80.00
9	Dhuvaran (Gas 1)*	80.00	90.23	80.00
10	Dhuvaran (Gas 2)	85.00	89.98	85.00
11	Utran (Gas)*	80.00	85.08	80.00
12	Utran extension *	80.00	87.51	80.00
13	Ukai Hydro	80.00	87.56	80.00
14	Kadana Hydro	80.00	70.82	80.00

*PPA based stations

For the stations, where actual PAF is less than the approved one, the fixed charges are to be reduced proportionately.

4.2.2 Plant Load Factor (PLF)

Petitioner's Submission

GSECL has submitted the actuals of Plant Load Factor of different stations for FY 2012-13. The PLF (i) approved in the MYT Order 11th April, 2011, and (ii) the actuals, as furnished by GSECL in the petition for the period, are given in the Table below:

Table 4.4: Plant Load Factors for FY 2012-13

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	75.00	72.14
2	Gandhinagar (1-4)	79.00	40.52
3	Gandhinagar 5*	85.00	88.02
4	Wanakbori 1-6 TPS	85.00	67.40
5	Wanakbori 7 TPS*	85.00	86.51
6	Sikka TPS	68.00	37.17
7	KLTPS 1-3	75.00	72.34
8	KLTPS 4	75.00	60.94
9	Dhuvaran (Gas 1)*	80.00	38.89
10	Dhuvaran (Gas 2)	80.00	49.39
11	Utran (Gas)*	80.00	32.81
12	Utran extension *	80.00	17.27
13	Ukai Hydro	13.00	24.53
14	Kadana Hydro	6.00	12.09

*PPA based stations

The Petitioner has mentioned that for earning incentives, the PLF has to be 80%, as per terms and conditions of tariff and as clarified by the Commission

The reasons for deviation of PLFs from the approved ones are mentioned as follows:

- Backing down/ Reserve Shut Down (RSD) in the case of Ukai 1-5, Gandhinagar 1-4, Sikka TPS, Dhuvaran Gas-1, Dhuvaran Gas-2, Utran Gas and Utran Extension.
- Forced outage of 113 days (from 26.09.12 to 17.01.13) of Unit No. 2 due to turbine problem, in the case of Wanakbori 1-6.
- In the case of KLTPS 1-3, the load on Unit No. 3 is restricted to 60 MW, since two stages of turbine rotor are shaved off, bottom ash chain problems in Units No. 1 to 3.

Commission's Analysis

The Commission has analysed the submissions made by the petitioner. It is observed that the majority of the stations, viz., Ukai 1-5, Gandhinagar (1-4), Wanakbori 1-6, Sikka TPS, KLTPS 1-3, KLTPS 4, Dhuvaran Gas 1, Dhuvaran Gas 2, Utran (Gas) and Utran Extension stations achieved lower PLF for the FY 2012-13 than that approved in the Tariff Order. The Commission has taken note of the above and considered the PLF during FY 2012-13 for Truing up purpose, as given in the Table below:

Table 4.5: PLF considered for FY 2012-13 for Truing up

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13	Considered for Truing up purpose for FY 2012-13
1	Ukai (1-5)	75.00	72.14	72.14
2	Gandhinagar (1-4)	79.00	40.52	40.52
3	Gandhinagar 5*	85.00	88.02	88.02
4	Wanakbori 1-6 TPS	85.00	67.40	67.40
5	Wanakbori 7 TPS*	85.00	86.51	86.51
6	Sikka TPS	68.00	37.17	37.17
7	KLTPS 1-3	75.00	72.34	72.34
8	KLTPS 4	75.00	60.94	60.94
9	Dhuvaran (Gas 1)*	80.00	38.89	38.89
10	Dhuvaran (Gas 2)	80.00	49.39	49.39
11	Utran (Gas)*	80.00	32.81	32.81
12	Utran extension *	80.00	17.27	17.27
13	Ukai Hydro	13.00	24.53	24.53
14	Kadana Hydro	6.00	12.09	12.09

*PPA based stations

4.2.3 Auxiliary Consumption

Petitioner's Submission

GSECL has submitted the actuals of auxiliary consumption of different stations for FY 2012-13. The auxiliary consumption (i) approved in the MYT Order dated 11th April, 2011, and (ii) the actuals, as furnished by GSECL in the Petition for the period, are given in Table below:

Table 4.6: Auxiliary Consumption for FY 2012-13

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	9.00	9.22
2	Gandhinagar (1-4)	10.00	11.08
3	Gandhinagar 5*	9.00	9.58
4	Wanakbori 1-6 TPS	9.00	9.17
5	Wanakbori 7 TPS*	9.00	9.29
6	Sikka TPS	11.00	12.58
7	KLTPS 1-3	12.00	13.22
8	KLTPS 4	12.00	19.48
9	Dhuvaran (Gas 1)*	3.00	5.90
10	Dhuvaran (Gas 2)	3.00	4.35
11	Utran (Gas)*	4.00	6.73
12	Utran extension *	3.00	3.40
13	Ukai Hydro	0.70	0.58
14	Kadana Hydro	1.19	1.13

*PPA based stations

GSECL has further submitted that the consumption of gas booster compressors at Dhuvaran Gas-1 and Utran Gas, measured through exclusive energy meter, is to be considered as per actuals, as approved earlier by the Commission.

GSECL also brought out the following reasons in its petition for deviation of the auxiliary consumption for the stations, where auxiliary consumption was high during the FY 2012-13:

- Backing down/ Reserve Shut Down (RSD) in the case of Ukai 1-5, Gandhinagar 1-4, Gandhinagar 5, Wanakbori 1-6, Wanakbori – 7, Sikka TPS, Dhuvaran Gas-1, Dhuvaran Gas-2, Utran Gas and Utran Extension.

- In the case of KLTPS 1-3, the load on Unit No. 3 is restricted to 60 MW, since two stages of turbine rotor are shaved off, and bottom ash conveyer chain problems in Units No. 1 to 3

- In the case of KLTPS 4, design auxiliary consumption is higher than 16%. Forced outages were due to boiler tube leakages

Commission's Analysis

It is observed that the actual auxiliary consumption is more than the approved one for all the stations, except for the Hydro stations. The Commission has taken note of the submissions made by the petitioner with regard to the actual auxiliary consumption.

The Commission approves the auxiliary consumption for various stations, as approved in the MYT order for FY 2012-13, for truing up purpose, since this is a controllable parameter. In the case of Dhuvaran Gas (I) and Utran Gas stations where gas boosters are installed, the Commission has considered the auxiliary consumption of gas booster, as provided by GSECL separately, vide Letter dated 02.01.2014, for the truing up of FY 2012-13, in addition to auxiliary consumption approved in the MYT Order.

The auxiliary consumption approved for different stations, for the purpose of Truing up for FY 2012-13, is as given in the Table below:

Table 4.7: Auxiliary Consumption approved for FY 2012-13 for Truing up

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11.04.2011	Actuals for FY 2012-13	Approved for Truing up purpose for FY 2012-13
1	Ukai (1-5)	9.00	9.22	9.00
2	Gandhinagar (1-4)	10.00	11.08	10.00
3	Gandhinagar 5*	9.00	9.58	9.00
4	Wanakbori 1-6 TPS	9.00	9.17	9.00
5	Wanakbori 7 TPS*	9.00	9.29	9.00
6	Sikka TPS	11.00	12.58	11.00
7	KLTPS 1-3	12.00	13.22	12.00
8	KLTPS 4	12.00	19.48	12.00
9	Dhuvaran (Gas 1)*	3.00	5.90	3.00+0.376**
10	Dhuvaran (Gas 2)	3.00	4.35	3.00
11	Utran (Gas)*	4.00	6.73	4.00+1.576 **
12	Utran extension *	3.00	3.40	3.00
13	Ukai Hydro	0.70	0.58	0.70
14	Kadana Hydro	1.19	1.13	1.19

* PPA based stations
** indicates actual gas boosters consumption in percentage

4.2.4 Station Heat Rate (SHR)

Petitioner's Submission

GSECL has furnished the actual SHR attained for different stations during FY 2012-13.

The station heat rate (i) approved by the Commission in the MYT Order of 11th April, 2011 and (ii) the actuals as furnished by GSECL in the petition for the period are given in the Table below:

Table 4.8: Station Heat Rate for FY 2012-13

(Kcal/kWh)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	2765	2741
2	Gandhinagar (1-4)	2782	2708
3	Gandhinagar 5*	2460	2535
4	Wanakbori 1-6 TPS	2625	2642
5	Wanakbori 7 TPS*	2460	2455
6	Sikka TPS	3035	3002
7	KLTPS 1-3	3300	3303
8	KLTPS 4	3000	3022
9	Dhuvaran (Gas - 1)*	1950	1972
10	Dhuvaran (Gas -2)	1950	1955
11	Utran (Gas)*	2150	2276
12	Utran extension *	1850	1828

*PPA based stations

In the True-up Petition, GSECL has stated the following reasons for exceeding the Station Heat Rate for certain stations during FY 2012-13.

- Partial operation due to Backing down/ Reserve Shut Down (RSD) in the case of Gandhinagar-5, Wanakbori 1-6, Dhuvaran Gas-1, Dhuvaran Gas-2, Utran Gas and Utran Extension.
- Forced outages due to boiler tube leakages in the case of KLTPS 4.

Commission's Analysis

The Commission observes that for PPA governed stations, the SHR is approved as per the respective PPA terms. In the case of KLTPS 1-3, the actual heat rate is marginally higher than the one considered in the Tariff Order for FY 2012-13. In the case of Ukai, Gandhinagar 1-4 and Sikka TPS, the actual heat rate is less than the one approved in the MYT Order. For the other stations, such as Wanakbori 1-6, KLTPS-4 and Dhuvaran Gas 2, the actual heat rates are more than the approved ones. The Commission has noted the reasons submitted by the petitioner for these stations and found that the main reason put forward is backing down /reserve shutdown (RSD), except in the case of KLTPS - 4. The higher heat rate in KLTPS-4 is due to forced outages on account of boiler tube leakages.

For the purpose of truing up for FY 2012-13, the Commission approves the SHR, as approved in the MYT Order dated 11th April, 2011 for FY 2012-13, as given in the Table below:

Table 4.9: Station Heat Rate approved for FY 2012-13 for Truing up

(Kcal/kWh)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13	Approved for Truing up purpose for FY 2012-13
1	Ukai (1-5)	2765	2741	2765
2	Gandhinagar (1-4)	2782	2708	2782
3	Gandhinagar -5*	2460	2535	2460
4	Wanakbori 1-6 TPS	2625	2642	2625
5	Wanakbori - 7 TPS*	2460	2455	2460
6	Sikka TPS	3035	3002	3035
7	KLTPS 1-3	3300	3303	3300
8	KLTPS - 4	3000	3022	3000
9	Dhuvaran (Gas - 1)*	1950	1972	1950
10	Dhuvaran (Gas- 2)	1950	1955	1950
11	Utran (Gas)*	2150	2276	2150
12	Utran extension *	1850	1828	1850

*PPA based stations

4.2.5 Secondary Fuel Oil Consumption (Specific Oil Consumption)

Petitioner's Submission

GSECL has furnished the actuals of secondary fuel oil consumption for different stations during the FY 2012-13. The secondary fuel oil consumption (i) approved by the Commission in the MYT Order dated 11th April, 2011 and (ii) the actuals as furnished by GSECL in the petition for the period are given in the Table below:

Table 4.10: Secondary Fuel Oil Consumption FY 2012-13

(ml/kWh)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	2.00	1.08
2	Gandhinagar (1-4)	1.50	1.56
3	Gandhinagar 5*	3.50	0.30
4	Wanakbori 1-6 TPS	1.00	0.84
5	Wanakbori 7 TPS*	3.50	0.03
6	Sikka TPS	4.00	2.43
7	KLTPS 1-3	3.00	4.89
8	KLTPS 4	3.00	3.35

*PPA based stations

GSECL, in its Petition, has mentioned the reasons for higher specific oil consumption for FY 2012-13 for the following stations:

- Gandhinagar 1-4: Backing Down & RSD
- KLTPS 1-3: Forced outages due to bottom ash chain problem
- KLTPS - 4: Forced outages due to boiler tube leakages
- It has also been submitted by GSECL that the Specific Oil Consumption is calculated in terms of percentage of total calorific requirement (heat 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. Since most of the units of GSECL power stations are smaller in size, specific oil consumption of these plants is generally high.

The CEA and various other agencies have outlined different norms for Specific Oil Consumption for units of 210 MW and lower capacity. CEA also recognises the fact that Specific Oil Consumption is directly affected by the PLF of the power plant. Lower the PLF, higher the Specific Oil Consumption, and vice versa. Since the GSECL stations are also running at low load, additional oil support is required in such cases to sustain the flame. Also, because of higher number of starts/stops, due to RSD, specific oil consumption increases.

Commission's Analysis

For PPA governed stations, the secondary fuel oil consumption is approved, as per the respective PPAs.

In the case of Ukai 1-5, Wanakbori 1-6 and Sikka TPS, the actual secondary fuel oil consumption is less than what was approved by the Commission in the Tariff Order for FY 2012-13.

In the case of Gandhinagar 1-4, the secondary fuel oil consumption was higher than what was approved in the MYT order for FY 2012-13, due to backing down of units. In the case of KLTPS 1-3, the higher consumption is reported to be due to forced outages, as a result of bottom ash conveyer problem, and in the case of KLTPS -4, it has been because of forced outages due to boiler tube leakages. However, the Commission has considered the specific oil consumption, as approved in the MYT order FY 2012-13, for all Non-PPA stations.

Accordingly, the secondary fuel oil consumption, approved for FY 2012-13 for various stations, is as given in the Table below:

Table 4.11: Secondary Fuel Oil Consumption approved for FY 2012-13

(ml/kWh)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13	Approved for Truing up purpose for FY 2012-13
1	Ukai (1-5)	2.00	1.08	2.00
2	Gandhinagar (1-4)	1.50	1.56	1.50
3	Gandhinagar 5*	3.50	0.30	3.50
4	Wanakbori 1-6 TPS	1.00	0.84	1.00
5	Wanakbori -7 TPS*	3.50	0.03	3.50
6	Sikka TPS	4.00	2.43	4.00
7	KLTPS 1-3	3.00	4.89	3.00
8	KLTPS - 4	3.00	3.35	3.00

*PPA based stations

4.2.6 Transit Loss

Petitioner's Submission

GSECL furnished the actuals for transit loss of coal for different stations for the FY 2012-13.

The transit loss (i) approved by the Commission in the MYT Order 11th April, 2011 and (ii) the actuals as furnished by GSECL in the petition for the period are given in the Table below:

Table 4.12: Transit Loss for FY 2012-13

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actuals for FY 2012-13
1	Ukai (1-5)	0.80	0.80
2	Gandhinagar (1-4)	0.80	0.80
3	Gandhinagar 5*	0.80	0.80
4	Wanakbori 1-6 TPS	0.80	0.80
5	Wanakbori -7 TPS*	0.80	0.80
6	Sikka TPS	0.80	0.80
7	KLTPS 1-3	0.20	0.20
8	KLTPS -4	0.20	0.20

*PPA based stations

Commission's Analysis

The transit loss of coal, as submitted in the petition, is the same as approved in the MYT Order for FY 2012-13. Hence, the same is approved, as given in the Table below:

Table 4.13: Transit Loss approved for FY 2012-13 for Truing up

(%)

Sl. No.	Power Station	Approved for FY 2012-13 in the MYT Order dated 11th April, 2011	Actual as submitted in petition for FY 2012-13	Approved for Truing up purpose for FY 2012-13
1	Ukai (1-5)	0.80	0.80	0.80
2	Gandhinagar (1-4)	0.80	0.80	0.80
3	Gandhinagar 5*	0.80	0.80	0.80
4	Wanakbori 1-6 TPS	0.80	0.80	0.80
5	Wanakbori - 7 TPS*	0.80	0.80	0.80
6	Sikka TPS	0.80	0.80	0.80
7	KLTPS 1-3	0.20	0.20	0.20
8	KLTPS - 4	0.20	0.20	0.20

*PPA based stations

The transit loss is to be considered only in the case of indigenous coal, washed coal and Lignite, but not on imported coal, as mentioned in the MYT Order dated 11th April, 2011.

4.2.7 A Summary of Performance Parameters Approved for FY 2012-13

The performance parameters approved for different stations for the FY 2012-13, after analysis in the preceding paras for the purpose of Truing up for the FY 2012-13, are listed in the Table below:

Table 4.14: Performance Parameters approved for Truing up purpose for FY 2012-13

Sl. No.	Power Station	PAF	PLF	Auxiliary consumption	SHR	Specific Oil Consumption
		%	%	%	Kcal/kWh	ml/kWh
1	Ukai (1-5)	75.00	72.14	9.00	2765	2.00
2	Gandhinagar (1-4)	79.00	40.52	10.00	2782	1.50
3	Gandhinagar 5*	80.00	88.02	9.00	2460	3.50
4	Wanakbori 1-6 TPS	85.00	67.40	9.00	2625	1.00
5	Wanakbori - 7 TPS*	80.00	86.51	9.00	2460	3.50
6	Sikka TPS	75.00	37.17	11.00	3035	4.00
7	KLTPS 1-3	75.00	72.34	12.00	3300	3.00
8	KLTPS - 4*	80.00	60.94	12.00	3000	3.00
9	Dhuvaran (Gas - 1)*	80.00	38.89	3.376**	1950	-
10	Dhuvaran (Gas - 2)	85.00	49.39	3.00	1950	-
11	Utran (Gas)*	80.00	32.81	5.576***	2150	-
12	Utran extension *	80.00	17.27	3.00	1850	-
13	Ukai Hydro	80.00	24.53	0.70	-	-
14	Kadana Hydro	80.00	12.09	1.19	-	-

* PPA governed stations
** Includes actual gas boosters consumption for Dhuvaran (Gas-1) at 0.376%
*** Includes actual gas boosters consumption for Utran (Gas) at 1.576%

4.3 Gross and Net Generation

The gross and net generation of different generating stations, as per actuals, as furnished by GSECL and as approved for truing up purpose for the FY 2012-13, are given in the Table below:

Table 4.15: The Gross and Net Generation for FY 2012-13 for Truing up purpose

Sl. No	Power Station	As per actuals submitted by GSECL				As approved by the Commission			
		Gross Generation (MU)	Auxiliary Consumption (%)	Auxiliary Consumption (MU)	Net Generation (MU)	Gross Generation (MU)	Auxiliary Consumption (%)	Auxiliary Consumption (MU)	Net Generation (MU)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Ukai (1-5)	5372	9.22	495	4877	5372	9.00	483	4889
2	Gandhinagar (1-4)	2342	11.08	260	2083	2342	10.00	234	2108
3	Gandhinagar 5*	1619	9.58	155	1464	1619	9.00	146	1473
4	Wanakbori 1-6 TPS	7439	9.17	682	6757	7439	9.00	670	6769
5	Wanakbori - 7*	1591	9.29	148	1444	1591	9.00	143	1448
6	Sikka TPS	782	12.58	98	683	782	11.00	86	696
7	KLTPS 1-3	1362	13.22	180	1182	1362	12.00	163	1199
8	KLTPS - 4	400	19.48	78	322	400	12.00	48	352
9	Dhuvaran (Gas -1)*	363	5.90	21	342	363	3.00+0.376	12	351
10	Dhuvaran (Gas- 2)	487	4.35	21	465	487	3.00	15	472
11	Utran Gas*	388	6.73	26	362	388	4.00+1.576	22	366
12	Utran Extension*	567	3.40	19	548	567	3.00	17	550
13	Ukai Hydro	655	0.58	4	652	655	0.70	5	650
14	Kadana Hydro	256	1.13	3	253	256	1.19	3	253
	Total	**23625**		**2191**	**21434**	**23625**		**2047**	**21576**

*PPA governed stations

4.4 Cost Parameters

The cost parameters include: GCV of fuel, mix of fuel and price of fuel. GSECL generating stations run on coal, lignite, oil and gas as base fuels. For some coal-based stations, a mix of indigenous, washed and imported coal is used.

GSECL has submitted the details of actual Wt. Av. GCV, mix of coal and Wt. Av. price of fuel for different stations, as discussed below:

4.4.1 Wt. Av. Gross Calorific Value (GCV) of fuels

GSECL has furnished the actuals of Wt. Av. Gross Calorific Values of different fuels (as fed into the boiler in the case of usage of mix of coal) for FY 2012-13, as given in the Table below:

Table 4.16: Weighted Average Gross Calorific Value (GCV) of Fuels for Different Stations for FY 2012-13

Sl. No.	Power Stations	Weighted Average GCV of lignite or mix of coal (Kcal /kg)	Weighted average of GCV of secondary Fuel (Kcal /litre)	Weighted Average GCV of Gas (Kcal/SCM)
1	Ukai (1-5)	3816	10402	-
2	Gandhinagar (1-4)	4073	10526	-
3	Gandhinagar - 5*	4052	10509	-
4	Wanakbori 1-6 TPS	3733	10543	-
5	Wanakbori -7 TPS*	3737	10543	-
6	Sikka TPS	4053	10362	-
7	KLTPS 1-3	2816	10286	-
8	KLTPS - 4	2816	10286	-
9	Dhuvaran (Gas -1)*	-	-	9639
10	Dhuvaran (Gas -2)	-	-	9716
11	Utran (Gas)*	-	-	9627
12	Utran extension *	-	-	9545

* PPA Governed Stations

4.4.2 Mix of Coal

GSECL has furnished the actuals of percentage of the mix of different types of coal used for the stations during the FY 2012-13, as given in the Table below:

Table 4.17: The Mix of Different Types of Coal for FY 2012-13

Sl. No.	Power Stations	Indigenous Coal (%)	Washed Coal (%)	Imported Coal (%)
1	Ukai (1-5)	22.31	77.69	0.00
2	Gandhinagar (1-4)	17.46	70.81	11.74
3	Gandhinagar – 5*	7.16	86.25	6.59
4	Wanakbori 1-6	25.84	74.16	0.00
5	Wanakbori - 7*	25.87	74.13	0.00
6	Sikka	25.45	56.63	17.92

*PPA governed stations

4.4.3 Wt. Av. Prices of Fuel

GSECL has furnished the actuals of weighted average price per unit of different fuels for different stations, for FY 2012-13, as per the Table below:

Table 4.18: Weighted Average Price / Unit of Fuels for FY 2012-13

Sl. No.	Power Stations	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 (Rs./Mt)	Wt. Av. Cost of Gas (Rs./ SCM)	Wt. Av. cost of Oil (Rs./Kl)
1	Ukai (1-5)	2624	2964.00	-	-	-	42234
2	Gandhinagar (1-4)	5586	3595.00	8847.00	-	-	40586
3	Gandhinagar- 5*	5561	3594.00	8823.00	-	-	40586
4	Wanakbori 1-6 TPS	4445	3439.00	-	-	-	43596
5	Wanakbori 7 TPS *	4424	3316.00	-	-	-	43596
6	Sikka TPS	5671	4120.00	3599.00	-	-	52999
7	KLTPS 1-3	-	-	-	915.00	-	51937
8	KLTPS - 4	-	-	-	944.00	-	51937
9	Dhuvaran (Gas -1)*	-	-	-	-	15.00	-
10	Dhuvaran (Gas-2)	-	-	-	-	15.32	-
11	Utran (Gas)*	-	-	-	-	13.24	-
12	Utran extension *	-	-	-	-	20.71	-

*PPA governed stations

The Commission, after due validation, approves the weighted average GCVs of fuels, percentage of mix of coal and prices of fuel (actuals), as furnished by GSECL, for truing up purpose for FY 2012-13 as these are uncontrollable items.

4.5 Fuel Cost

Based on the performance and cost parameters, the approved fuel costs for each of the stations for the year FY 2012-13 for truing up purpose, along with the actuals furnished by GSECL are given in Table 4.19 below.

Table 4.19: Fuel Cost of different stations for FY 2012-13 for Truing up

Sl. No	Power Station	As per Actuals furnished by GSECL				As Approved by the Commission			
		Gross Generation (MUs)	Net Generation (MUs)	Fuel cost (Rs. Cr)	Fuel Cost per unit Net (Rs./kWh)	Gross Generation (MUs)	Net Generation (MUs)	Fuel cost (Rs. Cr)	Fuel Cost per unit Net (Rs./kWh)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Ukai 1-5	5372	4877	1143	2.34	5372	4889	1170	2.39
2	Gandhinagar 1-4	2342	2083	725	3.48	2342	2108	744	3.53
3	Gandhinagar -5*	1619	1464	418	2.85	1619	1473	421	2.86
4	Wanakbori 1-6 TPS	7439	6757	1983	2.94	7439	6769	1975	2.92
5	Wanakbori -7*	1591	1444	380	2.63	1591	1448	399	2.76
6	Sikka TPS	782	683	266	3.89	782	696	274	3.93
7	KLTPS 1-3	1362	1182	179	1.51	1362	1199	166	1.38
8	KLTPS -4	400	322	47	1.46	400	352	46	1.31
9	Dhuvaran Gas -1*	363	342	110	3.23	363	351	110	3.14
10	Dhuvaran Gas -2	487	465	150	3.22	487	472	150	3.17
11	Utran Gas*	388	362	121	3.36	388	366	115	3.13
12	Utran Extension*	567	548	225	4.11	567	550	228	4.14
	Total	**22712**	**20529**	**5747**		**22712**	**20673**	**5798**	

*PPA governed stations

The detailed calculations for each station for arriving at the above costs are given in Annexure 4.1 to 4.12

4.5.1 Variation between Actual Fuel Costs and Approved Fuel Costs

The comparison between the fuel costs of all stations taken together, as per annual accounts for FY 2012-13 and the cost approved for truing up purpose, is given in the Table below:

Table 4.20: Cost of different fuels as per Audited Annual Accounts and as approved for Truing up for FY 2012-13

(Rs. Crore)

Item	Cost as per Annual Accounts	Cost as approved
Total Fuel Cost	5748	5798

The station-wise fuel costs are not provided in the audited annual accounts. The Commission has taken note of the submission made by GSECL, but for truing up purpose, the Commission has considered the fuel cost as computed, based on the approved performance parameters.

4.5.2 Gains and Losses in Fuel costs due to controllable factors

Petitioner's Submission

GSECL has submitted that it has derived fuel expenses, considering performance parameters, such as auxiliary consumption, station heat rate, specific oil consumption and transit loss, as approved in Tariff Order dated 2nd June 2012 for truing up for FY 2010-11 and Annual Tariff determination for FY 2012-13 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.

Commission's Analysis

The Commission has compared the fuel expenses, so derived by the GSECL, with the fuel expenses arrived with the now approved operational performance parameters and for actual net generation for identification of Gains / (Losses) on account of variation in these parameters and approves the Gains / (Losses) station-wise for Non-PPA stations, as given in the Table below:

Table 4.21: Approved Gains / (Losses) from Fuel Expenses for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Actual Fuel Cost	Fuel cost arrived with approval parameter for actual net generation for FY 12-13	Deviation +/(-)	Gains / (Losses) due to controllable factor (5-3)
1	2	3	4	5	6
A	**Non-PPA based Stations**				
1	Ukai (1-5)	1143.00	1167.35	24.35	24.35
2	Gandhinagar (1-4)	725.00	735.26	10.26	10.26
3	Wanakbori 1-6 TPS	1983.00	1971.48	(11.52)	(11.52)
4	Sikka TPS	266.00	268.60	2.60	2.60
5	KLTPS 1-3	179.00	163.61	(15.39)	(15.39)
6	KLTPS 4	47.00	42.12	(4.88)	(4.88)
7	Dhuvaran (Gas 2)	150.00	147.40	(2.60)	(2.60)
8	Ukai Hydro	0.00	0.00	0.00	0.00
9	Kadana Hydro	0.00	0.00	0.00	0.00
	Sub Total (A)	**4493.00**	**4495.83**	**2.83**	**2.83**
B	**PPA based Stations**				
10	Gandhinagar 5*	-	-	-	-
11	Wanakbori 7*	-	-	-	-
12	Dhuvaran (Gas 1)*	-	-	-	-
13	Utran Gas*	-	-	-	-
14	Utran Extension*	-	-	-	-
	Sub Total (B)	**-**	**-**	**-**	**-**
	Total (A+B)	**4493.00**	**4495.83**	**2.83**	**2.83**

4.6 Fixed Charges

4.6.1 Operations & Maintenance (O&M) Expenses

GSECL has claimed Rs. 1046.00 Crore towards actual O&M expenses for generating stations other than PPA governed stations, in the Truing up for FY 2012-13 against Rs. 687 Crore approved for FY 2012-13 in the MYT Order for FY 2012-13. The O&M charges approved for the year 2011-12 in the MYT Order and now claimed by GSECL are as given in Table below:

Table 4.22: O&M expenses claimed by GSECL in Truing up for FY 2012-13

(Rs. Crore)

Particulars	Approved for FY 2012-13 in MYT Order	Claimed in truing up for FY 2012-13
O&M expenses	687.09	1046.00

Petitioner's Submission

GSECL has submitted that the O&M expenses have been classified as "Controllable" under the GERC (MYT) Regulations except the effect of factors like inflation and pay revision and it has categorized employee expenses and insurance expenses as uncontrollable and; R&M, and Administrative & General expenses as controllable. GSECL has indicated a net loss of Rs. 295 Crore comprising Rs. 157 Crore towards loss due to controllable factors and Rs. 138 Crore loss due to uncontrollable factors. The station wise O&M expenses claimed by GSECL in the Truing up for FY 2012-13 and the controllable and uncontrollable Gains/(Losses) are given in the Table below:

Table 4.23: Gains/(Losses) from O&M expenses claimed for FY 2012-13

(**Rs. Crore)**

Sl. No.	Power Station	O&M (Actual)	O&M (Approved)	Gains/(Losses) due to controllable factors	Gains/(Losses) due to uncontrollable factors
1	Ukai (1-5)	216	136	(41)	(39)
2	Gandhinagar (1-4)	136	96	(17)	(22)
3	Gandhinagar 5*				
4	Wanakbori 1-6 TPS	238	139	(57)	(42)
5	Wanakbori 7 TPS*				
6	Sikka TPS	79	49	(16)	(14)
7	KLTPS 1-3	88	77	(7)	(5)
8	KLTPS 4	30	17	(6)	(7)
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	35	19	(10)	(6)
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	13	12	(1)	(1)
14	Kadana Hydro	20	14	(3)	(3)
	Total	**855**	**560**	**(157)**	**(138)**

* PPA based stations

Commission's Analysis:

The actual O&M expenses station wise are given in the Appendix A of the petition. The actual O&M expenses as given in the format aggregate to Rs. 1046 Crore including the PPA governed stations against Rs. 686.77 Crore approved in the MYT Order. With reference to a query from the Commission on the huge variation in the O&M expenses in the case of Ukai (1-5), Gandhinagar (1-4) and Wanakbori (1-6). GSECL has submitted a statement of O&M expenses component wise vide Annexure-E with its letter no. GSECL/GERC CELL/TRUING UP 12-13/021 dated 02.01.2014. In this statement, GSECL has included an amount if Rs. 178.74 Crore towards allocation of Head Quarters expenses. GSECL has mentioned the following reasons for abnormal increase in the O&M expenses of the above three stations.

1. Allocation of rebate of Rs. 139.12 Crore for prompt payment charges.
2. Allocation of expenses of Rs. 73 Crore for liquidated damages.

3. Increase of salary by 11% as compared to previous years.
4. Replacement of Turbine Rotor of Wanakbori TPS Unit 1& 2.
5. LTSA expenses of Dhuvaran Gas 1&2 and Utran Extension.
6. Security expenses.
7. Green cess paid Rs. 38.51 Crore which was not considered and approved in MYT.

With reference to a further query from the Commission, GSECL has submitted vide its letter dated 19.02.2014 the station wise details of O&M expenses for an amount of Rs. 909.75 Crore for FY 2012-13. These expenses in respect of GSECL Head Quarters are given at Rs. 148.55 Crore which include Rs. 73 Crore towards liquidated damages and green cess of Rs. 38.51 Crore. GSECL has also submitted the station wise details of green cess paid. In respect of GTPS and Dhuvaran Gas stations GSECL has submitted combined O&M expenses instead of unit wise. The Commission has considered the O&M expenses in respect of GTPS Units 1-4 at Rs. 96.94 Crore as per the information submitted by GSECL and the balance as pertaining to GTPS Unit 5. In respect of Dhuvaran Gas the O&M expenses are apportioned equally between two Gas stations. There is no justification for allowing the liquidated damages claimed to the extent of Rs. 73.00 Crore. Further, as per the order of Hon'ble High Court, Green Cess is not recoverable from the consumers if it is not passed through on to the consumers during the respective time period. Out of the total Green Cess amount of Rs. 38.51 Crore claimed by GSECL, Green Cess amount of Rs. 12.53 Crore pertaining to months Apr. 12 to Jun. 12 is allowed under O&M expenses in True-up of FY 2012-13 as it was already passed on to the consumers under FPPPA. The Commission while allowing FPPPA for the months of Jul. 12 and onwards had not allowed the Green Cess to be passed on to the consumers. Hence, Green Cess pertaining to months of Jul. 12 to Mar. 13 i.e. Rs. 25.98 Crore cannot be allowed in the True-up of FY 2012-13. Thus an amount of Rs. 98.98 Crore is disallowed out of Rs. 148.55 Crore as claimed by GSECL towards head-quarter charges. The remaining balance of Rs. 49.57 Crore (148.55 – (73.00 + 25.98)) Crore is allocated station wise in proportion to the O&M expenses reported. The Commission thus approves the O&M expenses of Rs. 823.09 Crore in the truing up for FY 2012-13 as detailed in the Table below:

Table 4.24: O&M Expenses approved in the Truing up for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Employee Cost	R&M Expenses	A&G Expenses	Green Cess Allowed	Total	Expenses Disallowed	O&M Expenses considered	Head Qtrs. Charges allocated	Station-wise O&M expenses approved
1	Ukai (1-5)	89.33	27.80	25.45	3.19	145.77		145.77	9.28	155.06
2	Gandhinagar (1-4)	82.71	18.96	14.76	1.30	117.73		96.94	6.31	103.25
3	Gandhinagar 5*				0.86	0.86		21.65	1.27	22.92
4	Wanakbori 1-6 TPS	85.51	64.01	22.19	4.21	175.92		175.92	11.18	187.10
5	Wanakbori 7 TPS*	6.63	3.03	0.72	0.86	11.24		11.24	0.68	11.92
6	Sikka TPS	31.92	20.76	6.10	0.04	58.82		58.82	3.83	62.64
7	KLTPS 1-3	30.63	25.97	7.70	0.68	64.98		64.98	4.19	69.17
8	KLTPS 4	13.15	6.15	2.48	0.22	22.00		22.00	1.42	23.42
9	Dhuvaran (Gas 1)*	20.63	26.17	5.75	0.13	52.68		26.40	1.71	28.11
10	Dhuvaran (Gas 2)				0.34	0.34		26.62	1.71	28.33
11	Utran Gas*	17.30	18.62	3.61	0.21	39.74		39.53	2.57	42.10
12	Utran Extension*	3.42	49.68	2.70	0.50	56.30		56.30	3.63	59.93
13	Ukai Hydro	6.36	4.14	0.50		11.00		11.00	0.72	11.72
14	Kadana Hydro	8.52	6.81	1.03		16.36		16.36	1.07	17.43
15	GSECL	70.26	4.91	73.38	0.00	148.55	98.98#	49.57		
16	**Total**	**466.37**	**277.01**	**166.37**	**12.53**	**922.28**	**98.98**	**823.09**	**49.57**	**823.09**

*PPA governed stations

Liquidated damages of Rs. 73 Crore + Green cess of Rs. 25.98 Crore

GSECL has claimed the variation in O&M Expenses part under controllable factor and partly uncontrollable. However, the Commission has considered the variation as controllable in accordance with the provisions under Regulation 23 of GERC (MYT) Regulations, 2011. The approved O&M expenses and gains and losses are given in the Table below:

Table 4.25: Approved O&M Expenses & Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / (Losses) due to controllable factor	Gains / (Losses) due to uncontrollable factor
1	2	3	4	5	6	7	8
A	Non-PPA based Stations						
1	Ukai (1-5)	136.24	216.00	155.06	(18.82)	(18.82)	
2	Gandhinagar (1-4)	96.49	136.00	103.25	(6.76)	(6.76)	
3	Wanakbori 1-6 TPS	139.42	238.00	187.10	(47.68)	(47.68)	
4	Sikka TPS	48.88	79.00	62.64	(13.76)	(13.76)	
5	KLTPS 1-3	76.62	88.00	69.17	7.45	7.45	
6	KLTPS 4	17.15	30.00	23.42	(6.27)	(6.27)	
7	Dhuvaran (Gas 2)	18.87	35.00	28.33	(9.46)	(9.46)	
8	Ukai Hydro	12.14	13.00	11.72	0.42	0.42	
9	Kadana Hydro	13.96	20.00	17.43	(3.47)	(3.47)	
	Sub Total (A)	**559.77**	**855.00**	**658.11**	**(98.34)**	**(98.34)**	
B	PPA based Stations						
10	Gandhinagar 5*	26.00	29.00	22.92			
11	Wanakbori 7*	26.00	13.00	11.92			
12	Dhuvaran (Gas 1)*	16.00	35.00	28.11			
13	Utran Gas*	13.00	51.00	42.10			
14	Utran Extension*	46.00	63.00	59.93			
	Sub Total (B)	**127.00**	**191.00**	**164.98**			
	Total (A+B)	**686.77**	**1046.00**	**823.09**	**(98.34)**	**(98.34)**	

* PPA based stations

4.6.2 Depreciation for FY 2012-13

GSECL has claimed Rs. 670 Crore towards actual depreciation in the truing up for FY 2012-13 against Rs. 561 Crore approved for the year in MYT Order dated 11th April, 2011 for the generating stations other than PPA governed stations. The depreciation approved for the FY 2012-13 in MYT Order and now claimed by GSECL is as given in the Table below:

Table 4.26: Depreciation claimed for FY 2012-13

(Rs. Crore)

Particulars	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Depreciation	561	670

Petitioner's Submission

GSECL has submitted the actual depreciation for FY 2012-13 is Rs. 670 Crore against the approved depreciation of Rs. 560.82 Crore based on the opening gross fixed assets as per the audited annual accounts and considering the capital addition during the year. GSECL has also submitted that depreciation of Ukai TPS (1-5) charged in the books of accounts is on the higher side due to depreciation of capital spares over the balance useful life of the plant. In respect of Gandhinagar TPS Unit (1-4) higher depreciation is charged for phasing out of units 1&2. The station wise depreciation claimed by GSECL in the Truing up for FY 2012-13 and the uncontrollable Gains/(Losses) are as given in the Table below:

Table 4.27: Depreciation and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Depreciation (Actual)	Depreciation (Approved)	Gains/ (Losses) due to controllable factors	Gains/ (Losses) due to uncontrollable factors
1	Ukai (1-5)	122	59		(63)
2	Gandhinagar (1-4)	108	66		(41)
3	Gandhinagar 5*				
4	Wanakbori 1-6 TPS	93	86		(7)
5	Wanakbori 7 TPS*				
6	Sikka TPS	31	30		(1)
7	KLTPS 1-3	61	60		(1)
8	KLTPS 4	35	35		(0)
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	23	22		(1)
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	7	7		1
14	Kadana Hydro	15	15		(0)
	Total	**495**	**380**		(114)

* PPA based stations

Commission's Analysis

The Commission has analysed the depreciation claimed by GSECL. The depreciation claimed by GSECL for the stations Ukai (1-5), Gandhinagar (1-4) and Wanakbori (1-6) is on higher side when compared to the depreciation approved for these stations for the year in MYT Order. The depreciation claimed on all other stations is within the average rate of depreciation of 5.28%. With reference to query from the Commission, GSECL, vide letter no. GERC cell/Truing up 12-13/021 dated 02.01.2014, submitted that (i) for Ukai (1-5) capital spares have been depreciated on the basis of balance useful life of the asset and (ii) Higher depreciation is charged for GTPS units 1 & 2 for phasing out of these units. The Commission has computed the depreciation of these stations adopting the actual weighted average rate of depreciation of FY 2011-12 as considered in the truing up for FY 2011-12 in the Tariff order dated 30th March 2013.

Gains/(Losses)

The Commission is of the view that the amount of depreciation is dependent on the quantum of capitalization, rate of depreciation and disposal of existing assets if any. The Commission is therefore of the view that the parameters which impact depreciation should be treated as uncontrollable. GSECL has not claimed any Gains/(Losses) in respect of PPA governed stations.

The Commission, accordingly, approves the depreciation and Gains/(Losses) on account of depreciation station wise in the Truing up for FY 2012-13 as detailed in the Table below:

Table 4.28: Approved Depreciation Charges & Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	2	3	4	5	6	7	8
A	Non-PPA based Stations						
1	Ukai (1-5)	58.79	122.00	68.09	(9.30)		(9.30)
2	Gandhinagar (1-4)	66.38	108.00	73.48	(7.10)		(7.10)
3	Wanakbori 1-6 TPS	85.60	93.00	78.89	6.71		6.71
4	Sikka TPS	30.40	31.00	30.92	(0.52)		(0.52)
5	KLTPS 1-3	59.66	61.00	60.26	(0.60)		(0.60)
6	KLTPS 4	35.17	35.00	35.63	(0.46)		(0.46)
7	Dhuvaran (Gas 2)	21.64	23.00	20.63	1.01		1.01
8	Ukai Hydro	7.35	7.00	6.12	1.23		1.23
9	Kadana Hydro	15.07	15.00	15.10	(0.03)		(0.03)
	Sub Total (A)	**380.06**	**495.00**	**389.12**	**(9.06)**		**(9.06)**
B	PPA based Stations						
10	Gandhinagar 5*	32.70	34.00	33.83			
11	Wanakbori 7*	31.75	32.00	32.22			

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	2	3	4	5	6	7	8
12	Dhuvaran (Gas 1)*	16.50	19.00	20.68			
13	Utran Gas*	20.25	24.00	23.29			
14	Utran Extension*	79.56	66.00	65.96			
	Sub Total (B)	**180.76**	**175.00**	**175.97**			
	Total (A+B)	**560.82**	**670.00**	**565.08**	**(9.06)**		**(9.06)**

*PPA based stations

4.6.3 Interest and Finance charges for FY 2012-13

GSECL has claimed Rs. 225 Crore towards interest and finance charges in the Truing up FY 2012-13 against Rs. 362 Crore approved for the year in MYT Order dated 11th April, 2011. The interest and finance charges approved for FY 2012-13 in the MYT Order and claimed by GSECL as furnished by GSECL are given in the Table below:

Table 4.29: Interest and Finance charges claimed in Truing up for FY 2012-13

(Rs. Crore)

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Interest and Finance charges	362	225

Petitioner's Submission

GSECL has submitted that the interest and finance charges have been classified as "uncontrollable" expenses in the MYT Order dated 11th April, 2011 and accordingly it has considered the Gains/(Losses) on account of Interest and Finance charges into "uncontrollable" factors. The station wise Interest and Finance charges claimed by GSECL in the Truing up for FY 2012-13 and the uncontrollable Gains/(Losses) as furnished by GSECL are given in the Table below:

Table 4.30: Interest and Finance charges and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Interest & Finance charges (Actual)	Interest & Finance charges (Approved)	Gains/(Losses) due to controllable factors	Gains/ (Losses) due to uncontrollable factors
1	Ukai (1-5)	23.00	58.00	-	35
2	Gandhinagar (1-4)	23.00	30.00	-	7
3	Gandhinagar 5*			-	
4	Wanakbori 1-6 TPS	14.00	63.00	-	50

Sl. No.	Power Station	Interest & Finance charges (Actual)	Interest & Finance charges (Approved)	Gains/(Losses) due to controllable factors	Gains/ (Losses) due to uncontrollable factors
5	Wanakbori 7 TPS*			-	
6	Sikka TPS	4.00	14.00	-	10
7	KLTPS 1-3	10.00	34.00	-	24
8	KLTPS 4	36.00	38.00	-	2
9	Dhuvaran Gas 1*			-	
10	Dhuvaran Gas 2	27.00	10.00	-	(17)
11	Utran Gas*	1.00	6.00	-	
12	Utran Extension*	84.00	96.00	-	
13	Ukai Hydro	1.00	5.00	-	4
14	Kadana Hydro	2.00	7.00	-	5
	Total	**225.00**	**362.00**	**-**	119

*PPA based stations

Commission's Analysis

The actual Interest and Finance charges station-wise are given in the Appendix A of the petition. The actual Interest and Finance charges aggregate to Rs. 227 Crore including the PPA governed stations against Rs. 367.57 Crore approved for FY 2012-13 in the MYT Order. The net capitalization achieved for Non-PPA governed stations is Rs. 158 Crore other than Ukai-6 during FY 2012-13 against Rs. 678 Crore approved in the MYT Order dated 11th April, 2011. GSECL has taken into consideration the capitalisation achieved during FY 2012-13 and the normative borrowings. Thus, the total capitalisation is Rs. 164 Crore including Ukai-6. It has not taken the repayment equal to the depreciation in its computation of interest and finance charges. The Commission has recomputed the allowable interest charges in the truing up for FY 2012-13 considering the 70% of actual capitalisation as normative loan and repayment of loan equivalent to depreciation approved for FY 2012-13 in accordance with the GERC (MYT) Regulations, 2011.

Further, GSECL has applied average rate of interest worked out on the basis of actual repayment of loan and average of opening and closing loan amount on the figure of normative loan. But as per Regulation 39.5 of GERC (MYT) Regulations, 2011, the weighted average rate of interest is to be calculated on the basis of the actual loan portfolio at the beginning of each year to the generating company. GSECL vide its e-mail dated 02.04.2014 submitted details of loans showing opening balance as on 01.04.2012 and applicable rate of interest on each loan portfolio for FY 2012-13. The Commission has worked out the weighted average interest rate as

10.22% and applied the same on the normative loan amount for all the stations of GSECL.

The parameters, which impact interest and finance charges, such as capital expenditure and capitalization are uncontrollable. The Commission accordingly approves the Gains/(Losses) on account of interest and finance charges in the Truing up as detailed in the Table below:

Table 4.31: Approved Interest & Finance Charges & Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
A	**Non-PPA based Stations**						
1	Ukai (1-5)	57.51	23.00	34.88	22.63		22.63
2	Gandhinagar (1-4)	30.23	23.00	37.32	(7.09)		(7.09)
3	Wanakbori 1-6 TPS	63.47	14.00	31.51	31.96		31.96
4	Sikka TPS	14.33	4.00	10.77	3.56		3.56
5	KLTPS 1-3	34.11	10.00	23.86	10.25		10.25
6	KLTPS 4	37.98	36.00	37.44	0.54		0.54
7	Dhuvaran (Gas 2)	9.64	27.00	8.64	1.00		1.00
8	Ukai Hydro	4.80	1.00	2.14	2.66		2.66
9	Kadana Hydro	7.38	2.00	5.16	2.22		2.22
	Sub Total (A)	**259.45**	**140.00**	**191.71**	**67.74**		**67.74**
B	**PPA based Stations**						
10	Gandhinagar 5*	0.00	0.00	0.00			
11	Wanakbori 7*	0.00	0.00	0.00			
12	Dhuvaran (Gas 1)*	5.47	2.00	0.98			
13	Utran Gas*	6.28	1.00	1.54			
14	Utran Extension*	96.38	84.00	87.84			
	Sub Total (B)	**108.13**	**87.00**	**90.36**			
	Total (A+B)	**367.58**	**227.00**	**282.07**	**67.74**		**67.74**

*PPA based stations

4.6.4 Return on Equity for FY 2012-13

GSECL has claimed Rs. 256 Crore towards return on equity in the Truing up for FY 2012-13 against Rs. 258 Crore approved for the year in the MYT Order dated 11th April, 2011 for the generating stations other than PPA governed stations as detailed in the Table below:

Table 4.32: Return on Equity claimed for FY 2012-13

(Rs. Crore)

Particulars	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Return on equity	258	256

Petitioner's Submission

GSECL has submitted that comparison of the actual value for Return on equity computed on the basis of opening equity for FY 2012-13 and addition to equity during the year on account of funding of capital expenditure against approved, resulted in uncontrollable gain of Rs. 2.0 Crore. The station wise return on equity claimed by GSECL in the Truing up for FY 2012-13 and the uncontrollable Gains/(Losses) are given in the Table below:

Table 4.33: Return on equity and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Return on Equity (Actual)	Return on Equity (Approved)	Gains/ (Losses) due to controllable factors	Gains/ (Losses) due to uncontrollable factors
1	Ukai (1-5)	23.00	25.00		2
2	Gandhinagar (1-4)	34.00	31.00		(3)
3	Gandhinagar 5*				-
4	Wanakbori 1-6 TPS	55.00	58.00		3
5	Wanakbori 7 TPS*				
6	Sikka TPS	21.00	20.00		(1)
7	KLTPS 1-3	44.00	44.00		0
8	KLTPS 4	29.00	28.00		0
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	14.00	15.00		1
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	8.00	8.00		0
14	Kadana Hydro	28.00	28.00		0
	Total	**256.00**	**258.00**		**2**

*PPA based stations

Commission's Analysis

The Commission has observed that GSECL has compared the actual return on equity claimed against the return on equity approved for the generating stations other than PPA governed stations. The actual return on equity FY 2012-13 is Rs. 389.00 Crore against Rs. 390.70 Crore approved in the MYT Order for all the stations. The overall decrease in the return on equity is Rs. 1.70 Crore. This is on account of lesser capitalization during FY 2012-13. The Commission has computed the RoE taking into consideration the opening equity and addition / deletion of equity during FY 2012-13.

Gains/(Losses)

The Commission is of the view that the return on equity depends on the amount of capitalization and the debt equity ratio considered during the financial year and these parameters are uncontrollable in nature. The Variance in the amount of return on equity is therefore, treated as uncontrollable.

The Commission, accordingly approves the return on equity and Gains/(Losses) on account of return on equity in the Truing up for FY 2012-13 station wise as detailed in the Table below:

Table 4.34: Approved Return on Equity Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	2	3	4	5	6	7	8
A	**Non-PPA based Stations**						
1	Ukai (1-5)	24.99	23.00	22.50	2.49		2.49
2	Gandhinagar (1-4)	30.66	34.00	33.67	(3.01)		(3.01)
3	Wanakbori 1-6 TPS	58.38	55.00	55.26	3.12		3.12
4	Sikka TPS	20.44	21.00	21.14	(0.70)		(0.70)
5	KLTPS 1-3	43.54	44.00	43.90	(0.36)		(0.36)
6	KLTPS 4	28.42	29.00	28.64	(0.22)		(0.22)
7	Dhuvaran (Gas 2)	15.40	14.00	14.37	1.03		1.03
8	Ukai Hydro	8.12	8.00	8.01	0.11		0.11
9	Kadana Hydro	28.00	28.00	28.10	(0.10)		(0.10)
	Sub Total (A)	**257.95**	**256.00**	**255.58**	**2.37**		**2.37**
B	**PPA based Stations**						
10	Gandhinagar 5*	26.78	27.00	26.82			
11	Wanakbori 7*	26.00	26.00	26.01			
12	Dhuvaran (Gas 1)*	12.87	12.00	11.90			
13	Utran Gas*	10.40	11.00	10.81			
14	Utran Extension*	56.70	57.00	57.25			
	Sub Total (B)	**132.75**	**133.00**	**132.79**			
	Total (A+B)	**390.70**	**389.00**	**388.37**	**2.37**		**2.37**

*PPA Stations

4.6.5 Interest on Working Capital for FY 2012-13

Petitioner's Submission

GSECL has claimed Rs. 234 Crore towards interest on working capital in the Truing up for FY 2012-13. The interest on working capital approved for FY 2012-13 in the MYT Order dated 31st March, 2011, and claimed by GSECL in the Truing up are given in the Table 4.35 below:

Table 4.35: Interest on Working Capital claimed by GSECL in Truing up for FY 2012-13
(Rs. Crore)

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Interest on Working Capital	175	234

The gains and losses submitted by GSECL in its petition for truing up for FY 2012-13 are as given in the Table below:

Table 4.36: Gains / (Losses) from Interest on Working Capital claimed for FY 2012-13
(Rs. Crore)

Sl. No.	Power Station	Interest on WC (Actual)	Interest on WC (Approved)	Gains/(Losses) due to Controllable factors	Gains/(Losses) due to uncontrollable factors
1	Ukai (1-5)	45.00	27		(18)
2	Gandhinagar (1-4)	30.00	29		(1)
3	Gandhinagar 5*	15.00	9		
4	Wanakbori 1-6 TPS	72.00	51		(21)
5	Wanakbori 7 TPS*	14.00	9		
6	Sikka TPS	12.00	9		(3)
7	KLTPS 1-3	10.00	12		2
8	KLTPS 4	4.00	9		5
9	Dhuvaran Gas 1*	5.00	3		
10	Dhuvaran Gas 2	6.00	3		(3)
11	Utran Gas*	5.00	3		
12	Utran Extension*	12.00	10		
13	Ukai Hydro	1.00	1		0
14	Kadana Hydro	2.00	1		(1)
	Total	**234.00**	**175**		**(41)**

*PPA based stations

Commission's Analysis

The Commission has examined the interest on working capital claimed by GSECL for FY 2012-13. The Commission has observed that GSECL has worked out the interest on working capital considering 14.75% the SBAR as on 1.4.2012.

Regulation 41.2 (b) specifies that interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the Financial year in which the petition is filed. The Commission while Truing up for FY 2011-12 had decided to consider the rate (SBAR) prevailing as on 1st April of the financial year for which Truing up is being done. The SBAR as on 1st April 2012 is 14.75%. The Commission, accordingly, takes into consideration the SBAR of 14.75% in computation of Interest in Working Capital for FY 2012-13.

The Commission has computed the Working Capital and interest thereon, as detailed in Table below:

Gains / (Losses)

The Commission is of the view that interest on working capital being normative should be considered as uncontrollable.

The Commission, accordingly, approves interest on working capital at Rs. 230.54 Crore. The Gains / (Losses) on account of interest on working capital in the truing up for FY 2012-13 station-wise as detailed in the Table below:

Table 4.37: Approved Interest on Working Capital Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	2	3	4	5	6	7	8
A	Non-PPA based Stations						
1	Ukai (1-5)	26.69	45.00	40.58	(13.89)		(13.89)
2	Gandhinagar (1-4)	28.62	30.00	29.52	(0.90)		(0.90)
3	Wanakbori 1-6 TPS	51.02	72.00	70.56	(19.54)		(19.54)
4	Sikka TPS	9.04	12.00	11.83	(2.79)		(2.79)
5	KLTPS 1-3	11.98	10.00	10.33	1.65		1.65
6	KLTPS 4	9.13	4.00	4.34	4.79		4.79
7	Dhuvaran (Gas 2)	3.12	6.00	5.65	(2.53)		(2.53)
8	Ukai Hydro	0.53	1.00	0.70	(0.17)		(0.17)
9	Kadana Hydro	1.10	2.00	1.53	(0.43)		(0.43)
	Sub Total (A)	**141.23**	**182.00**	**175.06**	**(33.83)**		**(33.83)**
B	**PPA based Stations**						
10	Gandhinagar 5*	9.28	15.00	15.53			
11	Wanakbori 7*	8.85	14.00	14.55			
12	Dhuvaran (Gas 1)*	2.80	5.00	4.53			
13	Utran Gas*	3.23	5.00	4.97			
14	Utran Extension*	9.93	12.00	11.80			
	Sub Total (B)	**34.09**	**51.00**	**51.38**			
	Total (A+B)	**175.32**	**233.00**	**226.45**	**(33.83)**		**(33.83)**

4.6.6 SLDC charges for FY 2012-13

GSECL has claimed Rs. 2.00 Crore towards SLDC charges in the Truing up FY 2012-13 against Rs. 2.00 Crore approved for the year in MYT Order dated 11th April, 2011. The SLDC charges approved for FY 2012-13 in the MYT Order and claimed by GSECL as furnished by GSECL are given in the Table below:

Table 4.38: SLDC charges claimed in Truing up for FY 2012-13

(Rs. Crore)

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
SLDC charges	2.00	2.00

Petitioner's Submission

GSECL has submitted it has considered the Gains/(Losses) on account of SLDC charges as "uncontrollable" factors. The station wise SLDC charges claimed by GSECL in the Truing up for FY 2012-13 and the uncontrollable Gains/(Losses) are given in the Table below:

Table 4.39: SLDC charges and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	SLDC (Actual)	SLDC (Approved)	Gains/(Losses) due to controllable Factors	Gains/(Losses) due to uncontrollable Factors
1	Ukai (1-5)	1.00	0.00		0.00
2	Gandhinagar (1-4)	0.00	0.00		0.00
3	Gandhinagar 5*				
4	Wanakbori 1-6 TPS	1.00	1.00		0.00
5	Wanakbori 7 TPS*				
6	Sikka TPS	0.00	0.00		0.00
7	KLTPS 1-3	0.00	0.00		0.00
8	KLTPS 4	0.00	0.00		0.00
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	0.00	0.00		0.00
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	0.00	0.00		0.00
14	Kadana Hydro	0.00	0.00		0.00
	Total	**2.00**	**2.00**		**0.00**

*PPA based stations

Commission's Analysis

The actual SLDC charges station wise are given in the Appendix-A of the petition. The actual SLDC charges aggregate to Rs. 3.49 Crore including the PPA governed stations against Rs. 2.69 Crore approved for FY 2012-13 in the MYT Order. The Commission approves the SLDC charges as claimed by GSECL.

Gains / (Losses):

The parameters, which impact SLDC charges, are uncontrollable. The Commission accordingly approves the Gains/(Losses) on account of SLDC charges in the Truing up as detailed in the Table 4.40 below:

Table 4.40: Approved SLDC charges Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor (5-3)
1	2	3	4	5	6	7	8
A	**Non-PPA based Stations**						
1	Ukai (1-5)	0.46	1.00	0.64	(0.18)		(0.18)
2	Gandhinagar (1-4)	0.36	0.00	0.44	(0.08)		(0.08)
3	Wanakbori 1-6 TPS	0.68	1.00	0.78	(0.10)		(0.10)
4	Sikka TPS	0.13	0.00	0.15	(0.02)		(0.02)
5	KLTPS 1-3	0.12	0.00	0.14	(0.02)		(0.02)
6	KLTPS 4	0.04	0.00	0.00	0.04		0.04
7	Dhuvaran (Gas 2)	0.06	0.00	0.00	0.06		0.06
8	Ukai Hydro	0.16	0.00	0.00	0.16		0.16
9	Kadana Hydro	0.13	0.00	0.14	(0.01)		(0.01)
	Sub Total (A)	**2.14**	**2.00**	**2.29**	**(0.15)**		**(0.15)**
B	**PPA based Stations**						
10	Gandhinagar 5*	0.11	0.00	0.00			
11	Wanakbori 7*	0.11	0.00	0.00			
12	Dhuvaran (Gas 1)*	0.06	0.00	0.00			
13	Utran Gas*	0.07	0.00	1.20			
14	Utran Extension*	0.20	0.00	0.00			
	Sub Total (B)	**0.55**	**0.00**	**1.20**			
	Total (A+B)	**2.69**	**2.00**	**3.49**	**(0.15)**		**(0.15)**

4.6.7 Water charges for FY 2012-13

GSECL has claimed Rs. 55.00 Crore towards water charges in the Truing up FY 2012-13 against Rs. 76.00 Crore approved in the MYT Order. The water charges approved for FY 2012-13 in the MYT Order and claimed by GSECL as furnished by GSECL are given in the Table 4.41 below:

Table 4.41: Water charges claimed in Truing up for FY 2012-13

(Rs. Crore)

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Water Charges	76.00	55.00

Petitioner's Submission

GSECL has submitted it has considered the Gains/(Losses) on account of water charges into "uncontrollable" factors. The station wise water charges claimed by

GSECL in the Truing up for FY 2012-13 and the uncontrollable Gains/(Losses) are given in the Table 4.42 below:

Table 4.42: Water charges and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Water Charges (Actual)	Water Charges (Approved)	Gains/ (Losses) Due to controllable factors	Gains/(Losses) due to uncontrollable factors
1	Ukai (1-5)	0.00	0.00		0
2	Gandhinagar (1-4)	12.00	30.47		18
3	Gandhinagar 5*				
4	Wanakbori 1-6 TPS	40.00	40.57		0
5	Wanakbori 7 TPS*				
6	Sikka TPS	1.00	3.89		3
7	KLTPS 1-3	0.00	0.60		0
8	KLTPS 4	0.00	0.00		0
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	1.00	0.00		(1)
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	0.00	0.00		0.00
14	Kadana Hydro	0.00	0.00		0.00
	Total	**55**	**76**		**20**

*PPA based stations

Commission's Analysis

The actual water charges station wise are given in the Appendix A of the petition. The actual water charges aggregate to Rs. 75.63 Crore excluding the PPA governed stations against Rs. 94.56 Crore approved for FY 2012-13 in the MYT Order. The water charges as per audited accounts are 75.60 Crore. The Commission approves the water charges as claimed by GSECL as they are as per audited annual accounts.

Gains / (Losses):

As provided in the GERC (MYT) Regulations, 2011, as well as in MYT Order, the Commission is of the opinion that the water charges should be considered at the level of actuals. Accordingly, the Commission approves the Gains/(Losses) on account of water charges as uncontrollable in the Truing up as detailed in the Table 4.43 below:

Table 4.43: Approved Water Charges Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Approved for FY 2012-13 in MYT order	Claimed in Truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor
1	2	3	4	5	6	7	8
A	**Non-PPA based Stations**						
1	Ukai (1-5)	0.00	0.00	0.17	(0.17)		(0.17)
2	Gandhinagar (1-4)	30.47	12.00	12.26	18.21		18.21
3	Wanakbori 1-6 TPS	40.57	40.00	40.20	0.37		0.37
4	Sikka TPS	3.89	1.00	1.18	2.71		2.71
5	KLTPS 1-3	0.60	0.00	0.38	0.22		0.22
6	KLTPS 4	0.00	0.00	0.31	(0.31)		(0.31)
7	Dhuvaran (Gas 2)	0.00	1.00	0.66	(0.66)		(0.66)
8	Ukai Hydro	0.00	0.00	0.00	0.00		0.00
9	Kadana Hydro	0.00	0.00	0.00	0.00		0.00
	Sub Total (A)	**75.53**	**54.00**	**55.16**	**20.37**		**20.37**
B	**PPA based Stations**						
10	Gandhinagar 5*	7.62	8.00	8.47			
11	Wanakbori 7*	7.12	9.00	8.53			
12	Dhuvaran (Gas 1)*	0.00	1.00	0.50			
13	Utran Gas*	2.70	2.00	1.60			
14	Utran Extension*	1.59	1.00	1.37			
	Sub Total (B)	**19.03**	**21.00**	**20.47**			
	Total (A+B)	**94.56**	**75.00**	**75.63**	**20.37**		**20.37**

4.6.8 Income Tax for FY 2012-13

GSECL has claimed Rs. 43.13 Crore towards Income Tax in the Truing up FY 2012-13 against Rs. 25.00 Crore approved for the year in MYT Order dated 11th April, 2011. The Income Tax approved for FY 2012-13 in the MYT Order and claimed by GSECL are given in the Table 4.44 below:

Table 4.44: Income Tax claimed in Truing up for FY 2012-13

(Rs. Crore)

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Income Tax	25.00	43.13

Petitioner's Submission

GSECL has submitted that it has paid a total tax of Rs. 44.00 Crore as against which the approved tax was only Rs. 25.00 Crore leading to a loss of Rs. 19 Crore which is uncontrollable. The station wise details are given in the Table 4.45 below:

Table 4.45: Income Tax and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Tax(Actual)	Tax (Approved)	Gains/(Losses) due to controllable factors	Gains/(Losses) due to uncontrollable factors
1	Ukai (1-5)	8.00	1.00		(7)
2	Gandhinagar (1-4)	6.00	2.00		(4)
3	Gandhinagar 5*	2.00	2.00		
4	Wanakbori 1-6 TPS	11.00	4.00		(7)
5	Wanakbori 7 TPS*	2.00	2.00		
6	Sikka TPS	2.00	2.00		0
7	KLTPS 1-3	2.00	3.00		1
8	KLTPS 4	1.00	1.00		0
9	Dhuvaran Gas 1*	1.00	1.00		0
10	Dhuvaran Gas 2	1.00	1.00		0
11	Utran Gas*	1.00	1.00		0
12	Utran Extension*	3.00	2.00		(1)
13	Ukai Hydro	3.00	1.00		(2)
14	Kadana Hydro	2.00	2.00		0
	Total	**45.00**	**25.00**		(19)

*PPA based stations

Commission's Analysis

The Income Tax paid has been verified from the audited annual accounts for FY 2012-13 and found as Rs. 44.36 Crore. The Commission approves the Income Tax as claimed by GSECL.

Gains / (Losses):

The variation in Income Tax is uncontrollable under the provisions of Regulation 23 of GERC (MYT) Regulations 2011. The Commission, accordingly, approves the Gains/(Losses) on account of Income Tax in the Truing up as detailed in the Table 4.46 below:

Table 4.46: Approved Income tax Gains / (Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor
1	2	3	4	5	6	7	8
A	**Non-PPA based Stations**						
1	Ukai (1-5)	1.00	8.00	7.55	(6.55)		(6.55)
2	Gandhinagar (1-4)	2.00	6.00	5.86	(3.86)		(3.86)
3	Wanakbori 1-6 TPS	4.00	11.00	11.18	(7.18)		(7.18)
4	Sikka TPS	2.00	2.00	2.13	(0.13)		(0.13)
5	KLTPS 1-3	3.00	2.00	1.91	1.09		1.09
6	KLTPS 4	1.00	1.00	0.67	0.33		0.33

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor
7	Dhuvaran (Gas 2)	1.00	1.00	1.00	0.00		0.00
8	Ukai Hydro	1.00	3.00	2.71	(1.71)		(1.71)
9	Kadana Hydro	2.00	2.00	2.15	(0.15)		(0.15)
	Sub Total (A)	**17.00**	**36.00**	**35.16**	**(18.16)**		**(18.16)**
B	**PPA based Stations**						
10	Gandhinagar 5*	2.00	2.00	1.86			
11	Wanakbori 7*	2.00	2.00	1.86			
12	Dhuvaran (Gas 1)*	1.00	1.00	0.95			
13	Utran Gas*	1.00	1.00	1.20			
14	Utran Extension*	2.00	3.00	3.33			
	Sub Total (B)	**8.00**	**9.00**	**9.20**			
	Total (A+B)	**25.00**	**45.00**	**44.36**	**(18.16)**		**(18.16)**

4.6.9 Non-Tariff Income for FY 2012-13

GSECL has claimed Rs. 151.00 Crore towards non-tariff income in the Truing up FY 2012-13 against Rs. 118 Crore approved for the year in MYT Order dated 11th April, 2011. The non-tariff incomes approved for FY 2012-13 in the MYT Order and claimed by GSECL as furnished by GSECL are given in the Table 4.47 below:

Table 4.47: Non-Tariff income claimed in Truing up for FY 2012-13

(**Rs. Crore)**

Particular	Approved for FY 2012-13 in MYT Order	Claimed in Truing up for FY 2012-13
Non-Tariff income	118.00	151.00

Petitioner's Submission

GSECL has requested to consider the non-tariff income as controllable factor though it is considered as uncontrollable by the Commission. GSECL has further submitted that it makes all efforts to sell fly ash by arranging seminars for advantages of using fly ash, contacting cement industry and other related industries and therefore requested to consider the variation as controllable factor.

The station wise non-tariff income claimed by GSECL in the Truing up for FY 2012-13 and the Gains/(Losses) are given in the Table 4.48 below:

Table 4.48: Non-tariff income and Gains/(Losses) claimed for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Non- Tariff Income (Actual)	Non-Tariff Income (Approved)	Gains/ (Losses) due to controllable factors	Gains/ (Losses) due to uncontrollable factors
1	Ukai (1-5)	48.00	25.27	(23)	
2	Gandhinagar (1-4)	35.00	19.62	(15)	
3	Gandhinagar 5*				
4	Wanakbori 1-6 TPS	56.00	37.45	(18)	
5	Wanakbori 7 TPS*				
6	Sikka TPS	6.00	7.13	1	
7	KLTPS 1-3	4.00	6.39	3	
8	KLTPS 4	0.00	2.23	2	
9	Dhuvaran Gas 1*				
10	Dhuvaran Gas 2	3.00	3.33	0	
11	Utran Gas*				
12	Utran Extension*				
13	Ukai Hydro	0.00	9.07	9	
14	Kadana Hydro	0.00	7.19	7	
	Total	**151**	**118**	(34)	

*PPA based stations

Commission's Analysis

The actual non-tariff income station-wise is given in the table 2 of the True-up petition. The actual non-tariff income aggregate to Rs. 176 Crore including the PPA governed stations against Rs. 148.50 Crore approved for FY 2012-13 in the MYT Order. GSECL has requested to consider the deviation in non-tariff as controllable. The Non-Tariff income is arising from ancillary or incidental activities to the power generation. As such deviation is considered as uncontrollable. In regard to the mechanism for sharing of Gains / (Losses) pointed out by GSECL, it is required to refer to Regulation 24.1 which provides the mechanism for sharing of Gains / (Losses) on account of uncontrollable factors. The Commission approves the non-tariff income as shown by GSECL.

Gains / (Losses):

The parameters, which impact non-tariff income, are considered uncontrollable. The Commission accordingly approves the Gains/(Losses) on account of non-tariff income in the Truing up as detailed in the Table below:

Table 4.49: Approved Non-Tariff Income Gains/(Losses) for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order	Claimed in truing up of FY 2012-13	Approved in Truing up for FY 2012-13	Deviation +/(-)	Gains / Losses due to controllable factor	Gains / (Losses) due to uncontrollable factor
1	2	3	4	5	6	7	8
A	Non-PPA based Stations						
1	Ukai (1-5)	25.27	48.00	48.00	(22.73)		(22.73)
2	Gandhinagar (1-4)	19.62	35.00	35.00	(15.38)		(15.38)
4	Wanakbori 1-6 TPS	37.45	56.00	56.00	(18.55)		(18.55)
6	Sikka TPS	7.13	6.00	6.00	1.13		1.13
7	KLTPS 1-3	6.39	4.00	4.00	2.39		2.39
8	KLTPS 4	2.23	0.00	0.00	2.23		2.23
10	Dhuvaran (Gas 2)	3.33	3.00	3.00	0.33		0.33
13	Ukai Hydro	9.07	0.00	0.00	9.07		9.07
14	Kadana Hydro	7.19	0.00	0.00	7.19		7.19
	Sub Total (A)	**117.68**	**152.00**	**152.00**	**(34.32)**		**(34.32)**
B	PPA based Stations						
3	Gandhinagar 5*	6.24	11.00	11.00			
5	Wanakbori 7*	6.24	9.00	9.00			
9	Dhuvaran (Gas 1)*	3.18	2.00	2.00			
11	Utran Gas*	4.01	1.00	1.00			
12	Utran Extension*	11.15	1.00	1.00			
	Sub Total (B)	**30.82**	**24.00**	**24.00**			
	Total (A+B)	**148.50**	**176.00**	**176.00**	**(34.32)**		**(34.32)**

4.7 Approved Fixed Charges

The Commission reviewed the performance of GSECL under Regulation 22 of GERC (MYT) Regulations 2011 with reference to the audited annual accounts for FY 2012-13.

The Commission has discussed and approved various components of fixed charges for approval of trued up ARR in the above paragraphs.

The fixed charges approved for FY 2012-13 in the MYT Order for FY 2011-16 dated 31st March 2011, claimed by GSECL in Truing up are given in the Table 4.50 below:

Table 4.50: Fixed Charges Approved in the Truing up for FY 2012-13

(Rs. Crore)

Sl. No	Fixed Charges	Approved for FY 2012-13 in MYT order	Claimed in Truing up	Approved in Truing up for FY 2012-13	Deviation +/(-)
1	**2**	**4**	**3**	**5**	**6**
1	Depreciation	560.82	670.00	565.09	(4.27)
2	Interest & Finance Charges	367.58	227.00	282.07	85.51
3	Return on Equity	390.70	389.00	388.37	6.42
4	Interest on Working Capital	175.32	233.00	226.45	(51.13)
5	O&M Expenses	686.77	1046.00	823.09	(136.32)
6	Water Expenses	94.56	75.00	75.63	18.93
7	SLDC Charges	2.69	2.00	3.49	(0.80)
8	Income Tax	25.00	45.00	44.36	(19.36)
9	**Total Fixed Charges**	**2303.44**	**2687.00**	**2408.55**	**(101.01)**
10	Less: Non-Tariff Income	148.50	176.00	176.00	**(27.50)**
11	**Net Fixed Charges**	**2154.94**	**2511.00**	**2232.55**	**(73.51)**

The Fixed charges approved station wise are given in Table 4.51 below:

Table 4.51: Approved Station-wise Fixed Charges for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Depreciation	Interest & Finance Charges	Return on Equity	Interest on Working Capital	O&M Expenses	Water Charges	SLDC Charges	Income Tax	Total Fixed Cost	Less Non-Tariff Income	Net Fixed Charges
A	**Non-PPA based Stations**											
1	Ukai (1-5)	68.09	34.88	22.50	40.58	155.06	0.17	0.64	7.55	**329.46**	48.00	**281.46**
2	Gandhinagar (1-4)	73.48	37.32	33.67	29.49	103.25	12.26	0.44	5.86	**295.78**	35.00	**260.78**
3	Wanakbori 1-6 TPS	78.89	31.51	55.26	70.60	187.10	40.20	0.78	11.18	**475.51**	56.00	**419.51**
4	Sikka TPS	30.92	10.77	21.14	11.83	62.64	1.18	0.15	2.13	**140.76**	6.00	**134.76**
5	KLTPS 1-3	60.26	23.86	43.90	10.35	69.17	0.38	0.14	1.91	**209.96**	4.00	**205.96**
6	KLTPS 4	35.63	37.44	28.64	4.35	23.42	0.31	0.00	0.67	**130.46**	0.00	**130.46**
7	Dhuvaran (Gas 2)	20.63	8.64	14.37	5.61	28.33	0.66	0.00	1.00	**79.24**	3.00	**76.24**
8	Ukai Hydro	6.12	2.14	8.01	0.70	11.72	0.00	0.00	2.71	**31.39**	0.00	**31.39**
9	Kadana Hydro	15.10	5.16	28.10	1.53	17.43	0.00	0.14	2.15	**69.62**	0.00	**69.62**
	Sub Total (A)	**389.12**	**191.71**	**255.58**	**175.06**	**658.11**	**55.16**	**2.29**	**35.16**	**1762.19**	**152.00**	**1610.19**
B	**PPA based Stations**											
10	Gandhinagar 5*	33.83	0.00	26.82	15.53	22.92	8.47	0.00	1.86	**109.42**	11.00	**98.42**
11	Wanakbori 7*	32.22	0.00	26.01	14.55	11.92	8.53	0.00	1.86	**95.09**	9.00	**86.09**
12	Dhuvaran (Gas 1)*	20.68	0.98	11.90	4.53	28.11	0.50	0.00	0.95	**67.64**	2.00	**65.64**
13	Utran Gas*	23.29	1.54	10.81	4.97	42.10	1.60	1.20	1.20	**86.71**	1.00	**85.71**
14	Utran Extension*	65.96	87.84	57.25	11.80	59.93	1.37	0.00	3.33	**287.48**	1.00	**286.48**
	Sub Total (B)	**175.97**	**90.36**	**132.79**	**51.38**	**164.98**	**20.47**	**1.20**	**9.20**	**646.34**	**24.00**	**622.34**
	Total (A+B)	**565.09**	**282.07**	**388.37**	**226.44**	**823.09**	**75.63**	**3.49**	**44.36**	**2408.55**	**176.00**	**2232.55**

4.8 Sharing of Gains / (Losses) for FY 2012-13

The Commission has analysed the Gains / (Losses) on account of Controllable and Uncontrollable factors.

The relevant Regulations are extracted below

Regulation 24. Mechanism for pass through of gains or losses on account of uncontrollable factors

24.1 The approved aggregate gain or loss to the Generating Company or Transmission Licensee 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 Distribution Licensee over such period as may be specified in the Order of the Commission passed under these Regulations.

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

24.3 Nothing contained in this Regulation 24 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.

Regulation 25. Mechanism for sharing of gains or losses on account of controllable factors

25.1 The approved aggregate gain to the Generating Company or Transmission Licensee 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 specified in the Order of the Commission under Regulation 22.6;*
- b. *The balance amount, which will amount to two-thirds of such gain, may be utilized at the discretion of the Generating Company or Transmission Licensee or Distribution Licensee.*

25.2 The approved aggregate loss to the Generating Company or Transmission Licensee 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 specified in the Order of the Commission under Regulation 22.6; and

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

The Gains / (Losses) due to controllable factors in respect of O&M charges and fuel charges approved to be passed through to their beneficiaries are given in the Table below:

Table 4.52: Approved Gains / (Losses) due to Controllable Factors for FY 2012-13

(Rs. Crore)

Sl. No.	Power Station	Approved for FY 2012-13 in MYT order			Gains / (Losses) to be passed through 1/3	Gains / (Losses) on account of company 2/3
		O&M Charges	Fuel Charges	Total		
A	**Non-PPA based Stations**					
1	Ukai (1-5)	(18.82)	24.35	5.54	1.85	3.69
2	Gandhinagar (1-4)	(6.76)	10.26	3.50	1.17	2.33
3	Wanakbori 1-6 TPS	(47.68)	(11.52)	(59.20)	(19.73)	(39.46)
4	Sikka TPS	(13.76)	2.60	(11.16)	(3.72)	(7.44)
5	KLTPS 1-3	7.45	(15.39)	(7.94)	(2.65)	(5.29)
6	KLTPS 4	(6.27)	(4.88)	(11.15)	(3.72)	(7.43)
7	Dhuvaran (Gas 2)	(9.46)	(2.60)	(12.06)	(4.02)	(8.04)
8	Ukai Hydro	0.42	0.00	0.42	0.14	0.28
9	Kadana Hydro	(3.47)	0.00	(3.47)	(1.16)	(2.31)
	Sub Total (A)	**(98.34)**	**2.83**	**(95.51)**	**(31.84)**	**(63.68)**
B	**PPA based Stations**					
10	Gandhinagar 5*	0.00	0.00	0.00	0.00	0.00
11	Wanakbori 7*	0.00	0.00	0.00	0.00	0.00
12	Dhuvaran (Gas 1)*	0.00	0.00	0.00	0.00	0.00
13	Utran Gas*	0.00	0.00	0.00	0.00	0.00
14	Utran Extension*	0.00	0.00	0.00	0.00	0.00
	Sub Total (B)	**0.00**	**0.00**	0.00	0.00	0.00
	Total (A+B)	**(98.34)**	**2.83**	**(95.51)**	**(31.84)**	**(63.68)**

*PPA based stations

The Gains / (Losses) due to uncontrollable factors in respect of depreciation, interest & finance charges, return on equity, interest on working capital, SLDC, water charges, income tax and non-tariff income approved to be passed through to their beneficiaries are given in the Table 4.53 below:

Table 4.53: Approved Gains / (Losses) due to Uncontrollable Factors for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Approved for FY 2012-13 in MYT order								Total Gains / (Losses/()
		Depreciation	Interest & Finance	Return on Equity	Interest on Working Capital	SLDC	Water Charges	Income Tax	Non - Tariff Income	
A	**Non-PPA based Stations**									
1	Ukai (1-5)	(9.30)	22.63	2.49	(13.89)	(0.18)	(0.17)	(6.55)	22.73	**17.77**
2	Gandhinagar (1-4)	(7.10)	(7.09)	(3.01)	(0.90)	(0.08)	18.21	(3.86)	15.38	**11.55**
3	Wanakbori 1-6 TPS	6.71	31.96	3.12	(19.54)	(0.10)	0.37	(7.18)	18.55	**33.90**
4	Sikka TPS	(0.52)	3.56	(0.70)	(2.79)	(0.02)	2.71	(0.13)	(1.13)	**0.98**
5	KLTPS 1-3	(0.60)	10.25	(0.36)	1.65	(0.02)	0.22	1.09	(2.39)	**9.84**
6	KLTPS 4	(0.46)	0.54	(0.22)	4.79	0.04	(0.31)	0.33	(2.23)	**2.48**
7	Dhuvaran (Gas 2)	1.01	1.00	1.03	(2.53)	0.06	(0.66)	0.00	(0.33)	**(0.42)**
8	Ukai Hydro	1.23	2.66	0.11	(0.17)	0.16	0.00	(1.71)	(9.07)	**(6.78)**
9	Kadana Hydro	(0.03)	2.22	(0.10)	(0.43)	(0.01)	0.00	(0.15)	(7.19)	**(5.70)**
	Sub Total (A)	**(9.06)**	**67.74**	**2.37**	**(33.83)**	**(0.15)**	**20.37**	**(18.16)**	**34.32**	**63.60**
B	**PPA based Stations**									
10	Gandhinagar 5*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
11	Wanakbori 7*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
12	Dhuvaran (Gas 1)*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
13	Utran Gas*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
14	Utran Extension*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Sub Total (B)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total (A+B)	**(9.06)**	**67.74**	**2.37**	**(33.83)**	**(0.15)**	**20.37**	**(18.16)**	**34.32**	**63.60**

*PPA based stations

The consolidated Gains / (Losses) approved in the Truing up for FY 2012-13 are given in the Table below:

Table 4.54: Total Consolidated Gains / (Losses) Approved for FY 2012-13

(Rs. Crore)

Sl. No	Power Station	Gains / (Losses) to be passed through 1/3	Gains / (Losses) of Uncontrollable factors to be passed through	Total Gains / (Losses)
A	**Non-PPA based Stations**			
1	Ukai (1-5)	1.85	17.77	19.61
2	Gandhinagar (1-4)	1.17	11.55	12.71
3	Wanakbori 1-6 TPS	(19.73)	33.90	14.17
4	Sikka TPS	(3.72)	0.98	(2.74)
5	KLTPS 1-3	(2.65)	9.84	7.20
6	KLTPS 4	(3.72)	2.48	(1.24)
7	Dhuvaran (Gas 2)	(4.02)	(0.42)	(4.44)
8	Ukai Hydro	0.14	(6.78)	(6.64)
9	Kadana Hydro	(1.16)	(5.70)	(6.86)
	Sub Total (A)	**(31.84)**	**63.60**	**31.77**
B	**PPA based Stations**			
10	Gandhinagar 5*	0.00	0.00	0.00
11	Wanakbori 7*	0.00	0.00	0.00
12	Dhuvaran (Gas 1)*	0.00	0.00	0.00
13	Utran Gas*	0.00	0.00	0.00
14	Utran Extension*	0.00	0.00	0.00
	Sub Total (B)	**0.00**	**0.00**	**0.00**
	Total (A+B)	**(31.84)**	**63.60**	**31.77**

*PPA based stations

The Commission thus approves the net Gain of Rs. 31.77 Crore in the Truing up for FY 2012-13.

Annexure 4.1

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - Ukai TPS 1 to 5

Sl.No.	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	5372
2	Auxiliary Consumption	C	%	9.00%
3	Auxiliary Consumption	B	MUs	483
4	Net Generation	Y=A - B	MUs	4889
5	Station Heat Rate	D	KCal/kWh.	2,765
6	Sp. Oil Consumption	E	ml/kWh	2.00
7	Gross Calorific Value of Coal	F	kcal/kg	3,816
8	Calorific value of Oil	G	kcal/l	10,402
9	Overall Heat	H=A x D	G Cal	14853580
10	Heat from Oil	I=(A x E x G)/1000	G Cal	111759
11	Heat from Coal	J=H-I	G Cal	14741821
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	22.31%
15	B) Washed Coal	X2	%	77.69%
16	C) Imported Coal	X3	%	0.00%
17	Actual Oil Consumption	L=A x E	kl	10744
18	Actual Coal Consumption	M=(J X 1000)/F	MT	3863161
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	868822
20	B) Washed Coal	Q2=M* x X2 / (1-K)	MT	3025493
21	C) Imported Coal	Q3=M* X X3	MT	0.00
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	2624
24	B) Washed Coal	P2	Rs./MT	2964.00
25	C) Imported Coal	P3	Rs./MT	0
26	Price of Oil	P4	Rs./kl	42234
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	22798
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	89676
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	0
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	112474
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	4538
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	117011
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	2.18
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	2.39
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	788
37*	Actual Net Generation	S	MUs	4877
38*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	1167.35

* Required for computation of Gains / Losses

Annexure 4.2

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - Gandhinagar 1-4

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	2342
2	Auxiliary Consumption	C	%	10.00%
3	Auxiliary Consumption	B	MUs	234
4	Net Generation	Y=A - B	MUs	2108
5	Station Heat Rate	D	KCal/kWh.	2,782
6	Sp. Oil Consumption	E	ml/kWh	1.50
7	Gross Calorific Value of Coal	F	kcal/kg	4,073
8	Calorific value of Oil	G	kcal/l	10,526
9	Overall Heat	H=A x D	G Cal	6515444
10	Heat from Oil	I=(A x E x G)/1000	G Cal	36978
11	Heat from Coal	J=H-I	G Cal	6478466
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	17.46%
15	B) Washed Coal	X2	%	70.81%
16	C) Imported Coal	X3	%	11.74%
17	Actual Oil Consumption	L=A x E	kl	3513
18	Actual Coal Consumption	M=(J X 1000)/F	MT	1590588
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	279956
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	1135379
21	C) Imported Coal	Q3=M* X X3	MT	186735
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	5586.00
24	B) Washed Coal	P2	Rs./MT	3595.00
25	C) Imported Coal	P3	Rs./MT	8847
26	Price of Oil	P4	Rs./kl	40586
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	15638
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	40817
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	16520
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	72976
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	1426
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	74401
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	3.18
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	3.53
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	1142
37*	Actual Net Generation	S	MUs	2083
38*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	735.26

* Required for computation of Gains / Losses

Annexure 4.3

Approved Fuel costs for FY 2012-13 for True-up

Fuel costs (Coal, Lignite & Secondary Oil) - Gandhinagar 5

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	1619
2	Auxiliary Consumption	C	%	9.00%
3	Auxiliary Consumption	B	MUs	146
4	Net Generation	Y=A - B	MUs	1473
5	Station Heat Rate	D	KCal/kWh.	2,460
6	Sp. Oil Consumption	E	ml/kWh	3.50
7	Gross Calorific Value of Coal	F	kcal/kg	4,052
8	Calorific value of Oil	G	kcal/l	10,509
9	Overall Heat	H=A x D	G Cal	3982740
10	Heat from Oil	I=(A x E x G)/1000	G Cal	59549
11	Heat from Coal	J=H-I	G Cal	3923191
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	7.16%
15	B) Washed Coal	X2	%	86.25%
16	C) Imported Coal	X3	%	6.59%
17	Actual Oil Consumption	L=A x E	kl	5667
18	Actual Coal Consumption	M=(J X 1000)/F	MT	968211
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	69883
20	B) Washed Coal	Q2=M* x X2/(1-k)	MT	841816
21	C) Imported Coal	Q3=M* X X3	MT	63805
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	5561.00
24	B) Washed Coal	P2	Rs./MT	3594.00
25	C) Imported Coal	P3	Rs./MT	8823.00
26	Price of Oil	P4	Rs./kl	40586
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	3886
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	30255
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	5630
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	39771
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	2300
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	42070
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	2.60
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	2.86
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	1056

Annexure 4.4

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - Wanakbori 1-6

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	7439
2	Auxiliary Consumption	C	%	9.00%
3	Auxiliary Consumption	B	MUs	670
4	Net Generation	Y=A - B	MUs	6769
5	Station Heat Rate	D	KCal/kWh.	2,625
6	Sp. Oil Consumption	E	ml/kWh	1.00
7	Gross Calorific Value of Coal	F	kcal/kg	3,733
8	Calorific value of Oil	G	kcal/l	10,543
9	Overall Heat	H=A x D	G Cal	19527375
10	Heat from Oil	I=(A x E x G)/1000	G Cal	78429
11	Heat from Coal	J=H-I	G Cal	19448946
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	25.84%
15	B) Washed Coal	X2	%	74.16%
16	C) Imported Coal	X3	%	0.00%
17	Actual Oil Consumption	L=A x E	kl	7439
18	Actual Coal Consumption	M=(J X 1000)/F	MT	5210004
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	1357122
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	3894898
21	C) Imported Coal	Q3=M* X X3	MT	0
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	4445.00
24	B) Washed Coal	P2	Rs./MT	3439.00
25	C) Imported Coal	P3	Rs./MT	0.00
26	Price of Oil	P4	Rs./kl	43596
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	60324
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	133946
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	0
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	194270
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	3243
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	197513
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	2.66
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	2.92
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	1011
37*	Actual Net Generation	S	MUs	6757
38*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	1971.48

* Required for computation of Gains / Losses

Annexure 4.5

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - Wanakbori 7

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	1591
2	Auxiliary Consumption	C	%	9.00%
3	Auxiliary Consumption	B	MUs	143
4	Net Generation	Y=A - B	MUs	1448
5	Station Heat Rate	D	KCal/kWh.	2,460
6	Sp. Oil Consumption	E	ml/kWh	3.50
7	Gross Calorific Value of Coal	F	kcal/kg	3,737
8	Calorific value of Oil	G	kcal/l	10,543
9	Overall Heat	H=A x D	G Cal	3913860
10	Heat from Oil	I=(A x E x G)/1000	G Cal	58709
11	Heat from Coal	J=H-I	G Cal	3855151
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	25.87%
15	B) Washed Coal	X2	%	74.13%
16	C) Imported Coal	X3	%	0.00%
17	Actual Oil Consumption	L=A x E	kl	5569
18	Actual Coal Consumption	M=(J X 1000)/F	MT	1031617
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	269031
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	770905
21	C) Imported Coal	Q3=M* X X3	MT	0
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	4424
24	B) Washed Coal	P2	Rs./MT	3316
25	C) Imported Coal	P3	Rs./MT	0
26	Price of Oil	P4	Rs./kl	43596
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	11902
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	25563
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	0
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	37465
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	2428
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	39893
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	2.51
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	2.76
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	1019

Annexure 4.6

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - Sikka TPS

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	782
2	Auxiliary Consumption	C	%	11.00%
3	Auxiliary Consumption	B	MUs	86
4	Net Generation	Y=A - B	MUs	696
5	Station Heat Rate	D	KCal/kWh.	3,035
6	Sp. Oil Consumption	E	ml/kWh	4.00
7	Gross Calorific Value of Coal	F	kcal/kg	4,053
8	Calorific value of Oil	G	kcal/l	10,362
9	Overall Heat	H=A x D	G Cal	2373370
10	Heat from Oil	I=(A x E x G)/1000	G Cal	32412
11	Heat from Coal	J=H-I	G Cal	2340958
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	25.45%
15	B) Washed Coal	X2	%	56.63%
16	C) Imported Coal	X3	%	17.92%
17	Actual Oil Consumption	L=A x E	kl	3128
18	Actual Coal Consumption	M=(J X 1000)/F	MT	577586
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	148181
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	329725
21	C) Imported Coal	Q3=M* X X3	MT	103503
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	5671.00
24	B) Washed Coal	P2	Rs./MT	4120.00
25	C) Imported Coal	P3	Rs./MT	3599.00
26	Price of Oil	P4	Rs./kl	52999
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	8403
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	13585
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	3725
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	25713
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	1658
33	Total Fuel Cost	O=N4 + N5	Rs. Lakh	27371
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	3.50
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	3.93
36	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	1153
37*	Actual Net Generation	S	MUs	683
38*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	268.60

* Required for computation of Gains / Losses

Annexure 4.7

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - KLTPS 1-3

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	1362
2	Auxiliary Consumption	C	%	12.00%
3	Auxiliary Consumption	B	MUs	163
4	Net Generation	Y=A - B	MUs	1199
5	Station Heat Rate	D	KCal/kWh.	3,300
6	Sp. Oil Consumption	E	ml/kWh	3.00
7	Gross Calorific Value of Lignite	F	kcal/kg	2,816
8	Calorific value of Oil	G	kcal/l	10,285
9	Overall Heat	H=A x D	G Cal	4494600
10	Heat from Oil	I=(A x E x G)/1000	G Cal	42025
11	Heat from Lignite	J=H-I	G Cal	4452575
12	Transit losses	K	%	0.20%
13	Actual Oil Consumption	L=A x E	kl	4086
14	Actual Lignite Coal Consumption	M=(J X 1000)/F	MT	1581170
15	Coal Consumption including Transit Loss	N=M/(1-K)	MT	1584339
16	Price of Lignite	P1	Rs./MT	915.00
17	Price of Oil	P2	Rs./kl	51937
18	Cost of Lignite	N1=M x P1	Rs. Lakh	14468
19	Oil Cost	N2=P2 x L/10^5	Rs. Lakh	2122
20	Total Fuel Cost	O=N1 + N2	Rs. Lakh	16590
21	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	1.22
22	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	1.38
23	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	369
24*	Actual Net Generation	S	MUs	1182
25*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	163.61

* Required for computation of Gains / Losses

Annexure 4.8

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Coal, Lignite & Secondary Oil) - KLTPS 4

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	400
2	Auxiliary Consumption	C	%	12.00%
3	Auxiliary Consumption	B	MUs	48
4	Net Generation	Y=A - B	MUs	352
5	Station Heat Rate	D	KCal/kWh.	3,000
6	Sp. Oil Consumption	E	ml/kWh	3.00
7	Gross Calorific Value of Lignite	F	kcal/kg	2,816
8	Calorific value of Oil	G	kcal/l	10,286
9	Overall Heat	H=A x D	G Cal	1200000
10	Heat from Oil	I=(A x E x G)/1000	G Cal	12343
11	Heat from Lignite	J=H-I	G Cal	1187657
12	Transit losses	K	%	0.20%
13	Actual Oil Consumption	L=A x E	kl	1200
14	Actual Lignite Coal Consumption	M=(J X 1000)/F	MT	421753
15	Coal Consumption including Transit Loss	N=M/(1-K)	MT	422598
16	Price of Lignite	P1	Rs./MT	944.00
17	Price of Oil	P2	Rs./kl	51937.00
18	Cost of Lignite	N1=M x P1	Rs. Lakh	3981
19	Oil Cost	N2=P2 x L/10^5	Rs. Lakh	623
20	Total Fuel Cost	O=N1 + N2	Rs. Lakh	4605
21	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	1.15
22	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	1.31
23	Cost of fuel/G.Cal	R=(O/H)*10^5	Rs./Gcal	384
24*	Actual Net Generation	S	MUs	322
25*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	42.12

* Required for computation of Gains / Losses

Annexure 4.9

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Gas) - Dhuvaran Gas 1

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	363
2	Auxiliary Consumption	C	%	3.376%
3	Auxiliary Consumption	B	MUs	12
4	Net Generation	Y=A - B	MUs	351
5	Station Heat Rate	D	KCal/kWh.	1,950
6	Calorific value of Gas	F	kcal/scm	9,639
7	Overall Heat from Gas	H=A x D	G Cal	707850
8	Actual Gas Consumption	M=(H x 1000)/F	M. scm	73436
9	Price of Gas	P1	Rs./scm	15.00
10	Cost of Gas	N5=P1 x M/10^5	Rs. Lakh	11015
11	Total Fuel Cost	N5	Rs. Lakh	11015
12	Fuel Cost/Unit Gross	P=N5/(A*10)	Rs./kWh	3.03
13	Fuel Cost/Unit Net	Q=N5/(Y*10)	Rs./kWh	3.14
14	Cost of fuel/G.Cal	R=(N5/H)*10^5	Rs./Gcal	1556

Annexure 4.10

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Gas) - Dhuvaran Gas 2

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	487
2	Auxiliary Consumption	C	%	3.00%
3	Auxiliary Consumption	B	MUs	15
4	Net Generation	Y=A - B	MUs	472
5	Station Heat Rate	D	KCal/kWh.	1,950
6	Calorific value of Gas	F	kcal/scm	9,716
7	Overall Heat from Gas	H=A x D	G Cal	949650
8	Actual Gas Consumption	M=(H x 1000)/F	M. scm	97741
9	Price of Gas	P1	Rs./scm	15.32
10	Cost of Gas	N5=P1 x M/10^2	Rs. Lakh	14974
11	Total Fuel Cost	N5	Rs. Lakh	14974
12	Fuel Cost/Unit Gross	P=N5/(A*10)	Rs./kWh	3.07
13	Fuel Cost/Unit Net	Q=N5/(Y*10)	Rs./kWh	3.17
14	Cost of fuel/KCal	R=(N5/H)*10^5	Rs./Gcal	1577
15*	Actual Net Generation	S	MUs	465
16*	Normative Fuel Cost for actual Net Generation	T=S*Q/10	Rs. Crore	147.40

* Required for computation of Gains / Losses

Annexure 4.11

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Gas) - Utran Gas

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	388
2	Auxiliary Consumption	C	%	5.576%
3	Auxiliary Consumption	B	MUs	22
4	Net Generation	Y=A - B	MUs	366
5	Station Heat Rate	D	KCal/kWh.	2,150
6	Calorific value of Gas	F	kcal/scm	9,627
7	Overall Heat from Gas	H=A x D	G Cal	834200
8	Actual Gas Consumption	M=(H x 1000)/F	M. scm	86652
9	Price of Gas	P1	Rs./scm	13.24
10	Cost of Gas	N5=P1 x M/10^5	Rs. Lakh	11473
11	Total Fuel Cost	N5	Rs. Lakh	11473
12	Fuel Cost/Unit Gross	P=N5/(A*10)	Rs./kWh	2.96
13	Fuel Cost/Unit Net	Q=N5/(Y*10)	Rs./kWh	3.13
14	Cost of fuel/G.Cal	R=(N5/H)*10^5	Rs./Gcal	1375

Annexure 4.12

Approved Fuel costs for FY 2012-13 for True-up
Fuel costs (Gas) - Utran Extension

Sl.No	Item	Derivation	Unit	2012-13
1	Gross Generation	A	MUs	567
2	Auxiliary Consumption	C	%	3.00%
3	Auxiliary Consumption	B	MUs	17
4	Net Generation	Y=A - B	MUs	550
5	Capacity		MW	375
6	Station Heat Rate	D	KCal/kWh.	1,850
7	Calorific value of Gas	F	kcal/scm	9,545
8	Overall Heat from Gas	H=A x D	G Cal	1048950
9	Actual Gas Consumption	M=(H x1000)/F	M. scm	109895
10	Price of Gas	P1	Rs./scm	20.71
11	Cost of Gas	N5=P1 x M/10^5	Rs. Lakh	22759
12	Total Fuel Cost	N5	Rs. Lakh	22759
13	Fuel Cost/Unit Gross	P=N5/(A*10)	Rs./kWh	4.01
14	Fuel Cost/Unit Net	Q=N5/(Y*10)	Rs./kWh	4.14
15	Cost of fuel/G.Cal	R=(N5/H)*10^5	Rs./Gcal	2170

5. Determination of Generation Charges for FY 2014-15

5.1 Introduction

This Chapter deals with the determination of the Generation Charges (Fixed charges and Variable charges) for FY 2014-15 for GSECL.

The fixed charges and variable charges approved for FY 2014-15 in the MYT order are as given below:

Table 5.1: Fixed and variable charges approved for FY 2014-15 for the existing stations in the MYT order

Sl. No	Power Station	Approved Net Fixed Charges for FY 2014-15 (Rs. Crore)	Approved Energy Charges for FY 2014-15 (Rs. /kWh)
1	Ukai (1-5)	333.51	1.701
2	Gandhinagar (1-4)	265.06	2.375
3	Gandhinagar 5*	100.29	2.130
4	Wanakbori 1-6 TPS	471.22	2.108
5	Wanakbori 7*	97.61	2.022
6	Sikka TPS	120.98	2.756
7	KLTPS 1-3	220.31	1.181
8	KLTPS 4	121.45	1.109
9	Dhuvaran (Gas 1)*	55.49	2.411
10	Dhuvaran (Gas 2)	64.55	2.388
11	Utran Gas*	53.91	2.367
12	Utran Extension*	265.75	2.071
13	Ukai Hydro	24.83	0.00
14	Kadana Hydro	58.58	0.00
	Total	**2253.53**	

The Commission has considered the ARR approved in the MYT order dated 11th April, 2011 for FY 2014-15, while determining the generation tariff for FY 2014-15 for existing stations.

5.2 Generation charges for new power stations Ukai-6, Dhuvaran CCPP-3 and Sikka 3&4

5.2.1 Fixed Charges for Ukai-6, Dhuvaran CCPP-3 and Sikka 3 & 4

GSECL has submitted the fixed charges in respect of Ukai-6, Dhuvaran – 3 and Sikka- 3&4 for FY 2014-15 as detailed in the Table Below.

Table 5.2: Proposed Fixed Charges for Ukai-6, Dhuvaran 3 and Sikka 3&4 for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Depreciation	146.73	83.16	143.35
2	Interest on Loan	178.76	111.37	196.56
3	Return on Equity	116.72	66.15	114.03
4	Interest on Working Capital	30	23	44
5	O&M Cost	72.97	73.50	81.60
6	SLDC Charges	0.21	0.16	0.21
7	MAT	23.35	13.24	22.82
8	**Total**	**568.80**	**370.28**	**602.56**

Petitioner's submission

GSECL has submitted the COD for the above new generating stations as detailed below:

Name of the Station	Capacity MW	COD	Capital Cost (Rs. Crore)
Ukai-6	500	8th June, 2013	2779
Dhuvaran CCPP-3	375	31st March, 2014	1575
Sikka- 3&4	500	31st March, 2014	2715

GSECL has submitted that the above plants will be fully operational during FY 2014-15 and accordingly the variable charges and fixed charges are projected for FY 2014-15.

Commission's analysis

The Commission had approved the generation tariff for Ukai-6 for FY 2013-14 based on the submission made by GSECL that the Ukai-6 generating station of 500 MW was synchronized successfully on 1st October, 2012 and the unit will be operational for the whole period of FY 2013-14. The COD of Ukai-6 is now given as 8th June, 2013.

Similarly the Commission had approved the generation tariff in respect of Dhuvaran CCPP-3 unit of 375 MW based on the submission made by GSECL that the project was scheduled to be Commissioned on 9th September, 2013. The COD of Dhuvaran CCPP-3 unit is now given as 31st March, 2014.

The Commission now considers the revised COD for the above new generating stations. The determination of fixed charges and variable charges for these power stations are discussed below.

Depreciation

GSECL has proposed the depreciation charges for FY 2014-15 as detailed in the Table below:

Table 5.3: Proposed Depreciation for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	GFA in Beginning of Year	Rs. Cr.	2779	1575	2715
2	Capital Addition	Rs. Cr.	-	-	-
3	Deduction	Rs. Cr.	-	-	-
4	Closing GFA	Rs. Cr.	2779	1575	2715
5	Rate of Depreciation	%	5.28%	5.28%	5.28%
6	**Depreciation**	**Rs. Cr.**	**147**	**83**	**143**

Petitioner' submission

GSECL has submitted that the opening Gross Fixed Assets for FY 2014-15 have been arrived on the basis of actual value for FY 2013-14 and the capital addition to the fixed assets has been considered based on the works which are likely to be capitalized during the year. The depreciation is claimed at 5.28% as approved in the Tariff Order dated 30th March, 2013 for True-up for FY 2011-12 and ARR and Tariff for FY 2013-14.

Commission's analysis

The Commission had provisionally considered capitalization of Rs. 2770 Crore during FY 2013-14 in respect of Ukai-6 in the Tariff Order dated 30th March, 2013 while determining the tariff provisionally for FY 2013-14. GSECL has now reported the GFA at Rs. 2779 Crore based on the likely capitalization towards GFA in the beginning of the FY 2014-15. For Dhuvaran 3 and Sikka 3 &4 GSECL has furnished the COD as 31st March, 2014. GSECL has applied the rate of depreciation of 5.28% as per the GERC (MYT) Regulations, 2011. The depreciation for these three stations has been computed as detailed in the Table below:

Table 5.4: Provisionally Approved Depreciation for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	GFA in Beginning of Year	Rs. Cr.	2779	1575	2715
2	Capital Addition	Rs. Cr.	-	-	-
3	Deduction	Rs. Cr.	-	-	-
4	Closing GFA	Rs. Cr.	2779	1575	2715
5	Rate of Depreciation	%	5.28%	5.28%	5.28%
6	**Depreciation**	**Rs. Cr.**	**146.73**	**83.16**	**143.35**

The Commission provisionally approves the depreciation for the new projects as detailed in the above table for FY 2014-15.

Interest and Finance Charges

GSECL has proposed the interest and finance charges for FY 2014-15 as detailed in the Table below:

Table 5.5: Proposed Interest and Finance Charges for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Opening Loans	1826	1102	1900
2	Loan additions during the year	-	-	-
3	Repayment during the year	147	83	143
4	Closing loans	1679	1019	1757
5	Average Loans	1753	1061	1828
6	Wt. Avg. Rate of Interest on Loan	10.20%	10.50%	10.75%
7	Interest on Loan	179	111	197
8	Guarantee Charges	-	-	-
9	**Total Interest & Finance Charges**	**179**	**111**	**197**

Petitioner's submission

GSECL has submitted that funding of new capital expenditure in the control period has been assumed to be undertaken at a normative debt equity ratio of 70:30 in accordance with the GERC (MYT) Regulations, 2011 and the loan addition have been estimated accordingly. Repayment of loan has been considered equivalent to depreciation considered for the year in accordance with the GERC (MYT) Regulations, 2011. Interest rate for various power projects has been considered as weighted average interest rate for FY 2013-14.

Commission's analysis

GSECL has adopted the interest rate of 10.20% in respect of Ukai-6, which is lower than 11.76% approved for FY 2013-14 in the Tariff Order dated 30th March, 2013. The interest rate of 10.50% adopted by GSECL in respect of Dhuvaran CCPP-3 is the same as considered for FY 2013-14. The rate of interest claimed in respect of Sikka 3&4 is 10.75% against 10.50% approved in the MYT Order dated 11th April, 2011. The Commission takes into consideration the rate of interest at 10.50% for FY 2014-15 as approved in the MYT Order.

The interest and finance charges provisionally approved for FY 2014-15 are given in the Table below:

Table 5.6: Provisionally Approved Interest and Finance Charges for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Opening Loans	1826.00	1102.00	1900.00
2	Loan additions during the year	-	-	-
3	Repayment during the year	146.73	83.16	143.35
4	Closing loans	1679.27	1018.84	1756.65
5	Average Loans	1752.61	1060.42	1828.33
6	Wt. Avg. Rate of Interest on Loan	10.20%	10.50%	10.50%
7	Interest on Loan	178.77	111.34	191.97
8	Guarantee Charges	-	-	-
9	**Total Interest & Finance Charges**	**178.77**	**111.34**	**191.97**

Return on Equity

GSECL has proposed the ROE @ 14% for FY 2014-15 as detailed in the Table below:

Table 5.7: Proposed Return on Equity for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Opening Equity	Rs. Cr.	834	473	815
2	Additions during the year	Rs. Cr.	-	-	-
3	Closing Equity	Rs. Cr.	834	473	815
4	Average Equity	Rs. Cr.	834	473	815
5	Rate of Return on Equity	%	14%	14%	14%
6	**Return on Equity**	Rs. Cr.	**117**	**66**	**114**

Petitioner's submission

GSECL has submitted that the Return on Equity for FY 2014-15 has been computed on normative basis @14% for all need projects in time with GERC Terms and Conditions of Tariff. The additions to the equity expected during the based on the normative equity contribution towards capital expenditure.

Commission analysis

The opening equity claimed for the three new generating stations for FY 2014-15 is 30% of the capital cost considered for the respective projects. The rate of return claimed is 14% as per the GERC (MYT) Regulations, 2011. The ROE approved for their new projects for FY 2014-15 is given in the Table below:

Table 5.8: Provisionally Approved Return on Equity for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Opening Equity	Rs. Cr.	834	473	815
2	Additions during the year	Rs. Cr.	-	-	-
3	Closing Equity	Rs. Cr.	834	473	815

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
4	Average Equity	Rs. Cr.	834	473	815
5	Rate of Return on Equity	%	14%	14%	14%
6	**Return on Equity**	Rs. Cr.	**116.76**	**66.22**	**114.10**

Interest on Working Capital

GSECL has projected the interest on working capital for FY 2014-15 for the need generating stations as detailed in the Table below:

Table 5.9: Proposed Interest on Working Capital for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran Gas-3	Sikka 3 &4
1	Coal Cost (1 ½ months)	Rs. Cr.	74	52	128
2	Sec Fuel Cost (2 Months)	Rs. Cr.	2	-	4
3	O&M Expenses (1 month)	Rs. Cr.	6	6	7
4	Maintenance Spares	Rs. Cr.	29	17	29
5	Receivable (1 Month)	Rs. Cr.	97	83	137
6	Total Working Capital	Rs. Cr.	208	157	304
7	Rate of Interest	%	14.45%	14.45%	14.45%
8	**Interest on Working Capital**	**Rs. Cr.**	**30**	**23**	**44**

Petitioner's submission

GSECL has submitted that the interest on working capital is worked out based on the norms specified under the GERC Tariff Regulations.

Maintenance spares requirement is calculated at 1% of opening GFA escalated at the rate of 6%. The rate of interest is adopted at 14.45% being the SBAR as on 1st April, 2013.

Commission analysis

The Commission has computed the working capital and interest on working capital as detailed in the Table below in accordance with the provisions under GERC (MYT) Regulations 2011.

Table 5.10: Provisionally approved Interest on Working Capital for FY 2014-15

(Rs. Crore)

Sl. No.	Particulars	Unit	Ukai-6	Dhuvaran-3	Sikka 3 &4
1	Coal Cost (1 ½ months)	Rs. Cr.	72.41	-	125.50
2	Sec Fuel Cost (2 Months)	Rs. Cr.	1.60	-	1.95
3	Gas (1 Month)	Rs. Cr.	-	52.09	-
4	O&M Expenses (1 month)	Rs. Cr.	6.08	6.11	6.80
5	Maintenance Spares	Rs. Cr.	27.79	15.75	27.15
6	Receivable (1 Month)	Rs. Cr.	94.46	81.43	137.80
7	Total Working Capital	Rs. Cr.	202.34	155.38	299.19
8	Rate of Interest	%	14.45%	14.45%	14.45%
9	**Interest on Working Capital**	**Rs. Cr.**	**29.24**	**22.45**	**43.23**

Operations and Maintenance Expenses (O&M)

GSECL has projected the O&M Expenses for FY 2014-15 for the new generating stations as detailed in the Table below:

Table 5.11: Proposed O&M Cost for FY 2014-15

(Rs. Crore)

Sl. No.	Station	O&M Cost (FY 2014-15)
1	Ukai-6	72.97
2	Dhuvaran (Gas 3)	73.50
3	Sikka 3&4	81.60

Petitioner's submission

GSECL has submitted that the O&M Expenses consisting of Employee Cost, Administration and General Expenses and Repairs and Maintenance expenses are computed on the basis of GERC (MYT) Regulations, 2011.

Commission analysis

The Commission has computed the O&M Expenses for the three new generating stations for FY 2014-15 as per the norms specified under Regulations 56(a) for the coal based generating units of Ukai – 6 and Sikka 3&4 and as per Regulation 56(c) for Dhuvaran CCPP as detailed in the Table below:

Table 5.12: Provisionally Approved O&M expenses for FY 2014-15

(Rs. Crore)

Sl. No.	Station	O&M Cost (FY 2014-15)
1	Ukai - 6	72.97
2	Dhuvaran CCPP – 3	73.31
3	Sikka 3&4	81.56

The Commission provisionally approves the O&M Expenses for the new generating stations for FY 2014-15 as detailed above.

SLDC Fees and Charges

GSECL has projected the SLDC fees and charges in respect of the new generating stations for FY 2014-15 as detailed in the Table below:

Table 5.13: Proposed SLDC Charges for FY 2014-15

(Rs. Crore)

Sl. No.	Station	SLDC Charges (FY 2014-15)
1	Ukai-6	0.21
2	Dhuvaran (Gas 3)	0.16
3	Sikka 3&4	0.21

Petitioner's submission

GSECL has submitted that the SLDC fees and charges are payable with reference to the direction of the Commission to GETCO to file separate ARR for SLDC as per

Regulations 5 of 2005 for "Levy and Collection of fees and charges for SLDC effective from the date of notification."

Commission analysis

The SLDC fees and charges are payable to SLDC. The Commission approves these charges for the new generating stations as projected by GSECL for FY 2014-15.

Table 5.14: Provisionally Approved SLDC Charges for FY 2014-15

(Rs. Crore)

Sl. No.	Station	SLDC Charges (FY 2014-15)
1	Ukai-6	0.21
2	Dhuvaran (Gas 3)	0.16
3	Sikka 3&4	0.21

MAT

GSECL has projected the tax for FY 2014-15 at the rate of 20.003% for the new generating station as detailed in the Table below:

Table 5.15: Proposed MAT for FY 2014-15

(Rs. Crore)

Sl. No.	Station	MAT (FY 2014-15)
1	Ukai-6	23.35
2	Dhuvaran (Gas 3)	13.24
3	Sikka 3&4	22.82

Petitioner's submission

GSECL has submitted that the norms of the GERC and CERC and all other SERCs allow the tax on income that is earned by GSECL through the generation business as per the Regulations. GSECL has requested the Commission to reimburse the tax on income as per the provision of the Regulations.

Commission's analysis

Regulations 42.1 provides for approval of income tax payable for each year of the control period, if any based on the actual income tax paid as per the latest audited annual accounts available. As these generating stations are yet to be commissioned the tax provision proposed by GSECL is not considered for FY 2014-15.

The Commission provisionally approves on the basis of above analysis, the fixed charges for Ukai – 6, Dhuvaran CCPP-3 and Sikka 3 &4 for FY 2014-15 as detailed in the Table below:

Table 5.16: Provisionally Approved Fixed Charges for FY 2014-15

(Rs. Crore)

Sl. No	Station	Ukai 6	Dhuvaran CCPP-3	Sikka 3&4
1	Depreciation	146.73	83.16	143.35
2	Interest & Finance Charges	178.77	111.34	191.97
3	Return on Equity	116.76	66.22	114.10
4	Interest on Working Capital	29.24	22.45	43.23
5	O&M Expenses	72.97	73.31	81.56
6	SLDC Charges	0.21	0.16	0.21
7	Income Tax	0.00	0.00	0.00
8	**Net Fixed ARR**	**544.68**	**356.64**	**574.42**

5.2.2 Variable Charges for Ukai-6

Petitioner's Submission

GSECL has projected the performance parameters as per norms and cost parameters, as approved by the Commission in the Tariff Order dated 30th March, 2013 for the year 2013-14 for arriving at the energy charges for FY 2014-15, for the Ukai -6 station, except for auxiliary consumption and SHR of Ukai-6, which have been proposed at 8.5% and 2425 kcal/kWh respectively.

The different parameters projected are given in the Table below:

Table 5.17: Parameters Projected for Ukai-6 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	8.5
4	Station Heat Rate	Kcal / kWh	2425
5	Sp. Oil Consumption	ml / kWh	1.00
6	Gross Calorific Value of Coal	Kcal / kg	4200
7	Gross Calorific Value of Oil	Kcal / l	10469
8	Transit Losses	%	0.8
9	Price of Coal	Rs. / MT	2730
10	Price of Oil	Rs./ KL	25775

Based on the above, GSECL arrived at the energy charges of Rs. 1.757 / kWh net.

GSECL also pleaded as follows:

- CERC has considered a Heat Rate of 2424.24 Kcal/Kg, for the purpose of provisional Tariff for the Mauda STPP Stage-I, 500 MW station of NTPC, considering the steam pressure of 170 Kg/Cm^2 and Super Heat Temperature /Reheat Temperature of 537/565 degree centigrade. The Ukai-6 Station is of the same vintage and capacity as the above NTPC Station. Moreover, no machine of GSECL is running with its 100% MCR, all the times due to backing down and

RSD. In view of this, the Commission is requested to consider the Heat Rate of 2425 kcal/Kg for the Ukai -6 Station.

- The Commission has considered the Auxiliary Consumption of 6 %, instead of claimed 8.5%. In this connection, it is submitted that though electrical driven BFP is due for start-up, because the machine is not running under 100% MCR due to Backing Down and RSD quite often, electrical driven BFP had to be used, in place of steam driven BFP, in which case, auxiliary consumption will be higher. It is requested that the actual situation of running of the machine be taken into consideration and the matter reviewed.

Commission's Analysis

In the tariff Order for FY 2013-14, the Commission approved the SHR for Ukai-6 at 2385 Kcal/kWh, after taking into consideration the Gross Heat Rate at 100% STG MCR and boiler efficiency at 100% BMCR.

The Commissions feels there is no need for reconsidering the Heat Rate approved in the earlier Order dated 30th March, 2013.

The Commission considered the Auxiliary Consumption at 6.00%, as per GERC (MYT) Regulations, 2011 (Table 9 of Regulation 54.6), after obtaining the details from GSECL about the boiler feed pumps, whether these are steam-driven or electricity-driven.

The other parameters projected by GSECL are as per GERC (MYT) Regulations, 2011 and so the Commission considers the same.

Thus, the Commission provisionally approves the following parameters for Ukai-6 for FY 2014-15 as given in the Table below:

Table 5.18: Parameters Provisionally Approved for Ukai-6 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	6
4	Station Heat Rate	Kcal / kWh	2385
5	Sp. oil Consumption	ml / kWh	1.00
6	Gross Calorific Value of Coal	Kcal / kg	4200
7	Gross Calorific Value of Oil	Kcal / l	10469
8	Transit Losses	%	0.8
9	Price of Coal	Rs. / MT	2730
10	Price of Oil	Rs./ KL	25775

The Commission approves the fuel cost for Ukai-6 Station, based on the above parameters. The fuel cost works out to Rs. 588.85 Crore for a gross generation at 3723 MU and a net generation at 3500 MU. The net energy charge works out to Rs. 1.683 / kWh.

The detailed calculations for arriving at the costs are given in Annexure 5.1.

5.2.3 Variable Charges for Dhuvaran CCPP-3

Petitioner's Submission

GSECL submitted that Dhuvaran CCPP-3, gas based unit (375 MW) is scheduled to be Commissioned on 31st March, 2014 and the unit will be operational for the whole year of FY 2013-14. GSECL projected the operational performance parameters as per norms, as shown in the Table below:

Table 5.19: Performance Parameters Projected for Dhuvaran CCPP-3 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	3
4	Station heat rate	Kcal / kWh	1850

The cost parameters projected are as given in the Table below:

Table 5.20: Cost Parameters Projected for Dhuvaran CCPP-3 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Calorific value of gas	Kcal/ kWh	9700
2	Price of gas	Rs. / scm	11.62

With the above parameters GSECL projected the fuel cost at Rs. 621 Crore for a net generation of 2716 MU, at Rs. 2.285/unit net.

Commission's Analysis

The Commission approves the performance parameters for the station as projected, as they are as per norms. Regarding calorific value of gas, the value (9700 Kcal / kWh) projected by GSECL is the same as that approved in the Order dated 30th March, 2013 for Dhuvaran (Gas 2) station and the same is approved.

The Commission has considered the price of gas at Rs. 11.62/ scm for FY 2014-15, for Dhuvaran CCPP-3 as projected by GSECL.

Thus, the Commission provisionally approves the following parameters for Dhuvaran CCPP-3 for FY 2014-15 as given in the Table below:

Table 5.21: Parameters provisionally approved for Dhuvaran CCPP-3 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	3
4	Station heat rate	Kcal / kWh	1850
5	Calorific value of gas	Kcal/ kWh	9700
6	Price of gas	Rs. / scm	11.62

Based on the above, the fuel costs work out to Rs. 620.53 Crore for this station for a Gross energy generation of 2800 MU and a Net generation of 2716 MU, with the energy charge at Rs. 2.285 / unit net.

The details of calculations for arriving at the fuel costs are given in Annexure 5.2

5.2.4 Variable Charges for Sikka Units 3 & 4

Petitioner's submission

GSECL submitted that Sikka 3&4 Coal based units (2x250 MW) are scheduled to the Commissioned on 31.3.2014 and the units will be operational for the entire year of FY 2014-15. GSECL has projected the operational performance Parameters as per norms, as shown in the Table below**:**

Table 5.22: Performance Parameters Projected by GSECL for Sikka 3&4 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	8.5
4	Station Heat Rate	Kcal / kWh	2450
5	Sp oil Consumption	ml / kWh	2.00
6	Gross Calorific Value of Coal	Kcal / kg	5500
7	Gross Calorific Value of Oil	Kcal / l	10269
8	Transit Losses	%	0.80
9	Price of Coal (imported)	Rs. / MT	6600
10	Price of Oil	Rs./ KL	33352

Based on the above, GSECL arrived at the energy charges at Rs. 3.259/ kWh net. It has been stated by GSECL, that the parameters have been projected, based on the GERC (MYT) Regulations, 2011.

Commission's Analysis

The Commission obtained from GSECL, vide its letter dated 02.01.2014, the details of design Heat Rate, which is 2252 Kcal/kWh. It has been submitted by GSECL that, as per the prevailing Regulations, the norm for SHR of 250 MW was 2520 kcal/kWh. However, GSECL has projected 2450 Kcal/kWh only.

As per Regulation 54.3 of GERC (MYT) Regulations, the SHR for new stations shall be considered at 1.065 x Design Heat Rate.

Accordingly, the SHR is considered by the Commission at 2398 Kcal/kWh.

The GSECL has clarified, vide its letter dated 2nd January, 2014 and through email dated 05.02.2014 that new units of Sikka are designed on Induced Draft Cooling Tower (IDCT). Hence, as per GERC (MYT) Regulations, 2011, Clause 54.6(c), auxiliary consumption for station with IDCT is 9.00%. Based on the information furnished by the GSECL the Commission provisionally approves the auxiliary consumption at 9.00%.

Specific Oil consumption, however, is approved at 1.0 ml/kWh, as per Regulations, against 2.0 ml/kWh projected by GSECL.

As GSECL is projecting usage of only imported coal for the Units during FY 2014-15, no Transit loss is considered. It has been submitted by GSECL, vide its letter dated 02.01.2014, that

- The GCV of coal for the station (5500 Kcal/kWh) has been projected as per Tenders published by GSECL for imported Coal for Sikka TPS Units No. 3& 4.
- CV of Oil (10259 Kcal/ kWh) has been projected, as approved in the MYT Order dated 11.04.2011 for FY 2014-15 for Sikka TPS Units 1&2.
- Price of imported Coal (Rs. 6600/ MT) is as per tender published by GSECL.
- Price of Oil (Rs. 33352/ KL) is projected, as approved in the MYT Order for Sikka TPS Units 1 &2 for FY 2014-15.

The cost parameters, as projected by GSECL, are approved for Sikka 3 &4 units for FY 2014-15. Thus the parameters approved for Sikka 3 &4 units for FY 2014-15 are as given in Table below:

Table 5.23: Parameters provisionally approved for Sikka 3 & 4 for FY 2014-15

Sl. No	Parameters	Unit	Value
1	Plant Availability Factor	%	85
2	Plant Load Factor	%	85
3	Auxiliary Consumption	%	9.00
4	Station Heat Rate	Kcal / kWh	2398
5	Sp. oil Consumption	ml / kWh	1.00

Sl. No	Parameters	Unit	Value
6	Gross Calorific Value of Coal	Kcal / kg	5500
7	Gross Calorific Value of Oil	Kcal / l	10269
8	Transit Losses	%	0
9	Price of Coal	Rs. / MT	6600
10	Price of Oil	Rs./ KL	33352

The Commission approves the Fuel Cost for Sikka Units 3&4, based on the above discussed parameters. The Fuel Cost works out to Rs. 1023.05 Cr for a Gross Generation of 3504 MU, and Net Generation at 3206 MU. The Net Energy charges work out to Rs. 3.191/kWh.

The detailed calculations for arriving at the costs are given in Annexure 5.3.

5.2.5 Approved Fixed and Energy Charges for all the stations of GSECL for FY 2014-15

The approved fixed and energy charges for all the stations of GSECL for FY 2014-15 are as given in the Table below:

Table 5.24: Approved Charges for FY 2014-15

Sl. No	Power Station	Approved Fixed Charges for FY 2014-15 (Rs. Crore)	Approved Energy Charges for FY 2014-15 (Rs. /kWh)
1	Ukai (1-5)	333.51	1.701
2	Gandhinagar (1-4)	265.06	2.375
3	Gandhinagar 5*	100.29	2.130
4	Wanakbori 1-6 TPS	471.22	2.108
5	Wanakbori -7*	97.61	2.022
6	Sikka TPS	120.98	2.756
7	KLTPS 1-3	220.31	1.181
8	KLTPS 4	121.45	1.109
9	Dhuvaran (Gas -1)*	55.49	2.411
10	Dhuvaran (Gas- 2)	64.55	2.388
11	Utran Gas*	53.91	2.367
12	Utran Extension*	265.75	2.071
13	Ukai Hydro	24.83	0.00
14	Kadana Hydro	58.58	0.00
15	Ukai-6[#]	544.68	1.683
16	Dhuvaran CCPP-3[#]	356.64	2.285
17	Sikka 3&4[#]	574.42	3.185

* PPA based stations.
[#] New stations for which fixed and energy charges are provisionally approved.

Annexure 5.1

Approved Fuel costs for Ukai -6 for FY 2014-15

Sl.No.	Item	Derivation	Unit	2014-15
1	Gross Generation	A	MUs	3723
2	Auxiliary Consumption	C	%	6.00%
3	Auxiliary Consumption	B	MUs	223
4	Net Generation	Y=A - B	MUs	3500
5	Station Heat Rate	D	KCal/kWh.	2,385
6	Sp. Oil Consumption	E	ml/kWh	1.00
7	Gross Calorific Value of Coal	F	kcal/kg	4,200
8	Calorific value of Oil	G	kcal/l	10,469
9	Overall Heat	H=A x D	G Cal	8879355
10	Heat from Oil	I=(A x E x G)/1000	G Cal	38976
11	Heat from Coal	J=H-I	G Cal	8840379
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	0.00%
15	B) Washed Coal	X2	%	100.00%
16	C) Imported Coal	X3	%	0.0%
17	Actual Oil Consumption	L=A x E	kl	3723
18	Actual Coal Consumption	M=(J X 1000)/F	MT	2104852
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	0
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	2121827
21	C) Imported Coal	Q3=M* X X3	MT	0.00
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	0
24	B) Washed Coal	P2	Rs./MT	2730.00
25	C) Imported Coal	P3	Rs./MT	0
26	Price of Oil	P4	Rs./kl	25775
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	0
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	57926
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	0
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	57926
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	960
33	Total Fuel Cost	O = N4 + N5	Rs. Lakh	58885
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	1.582
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	1.683

Annexure 5.2

Approved Fuel costs for Dhuvaran ccpp-3 for FY 2014-15

Sl.No	Item	Derivation	Unit	2014-15
1	Gross Generation	A	MUs	2800
2	Auxiliary Consumption	C	%	3.00%
3	Auxiliary Consumption	B	MUs	84
4	Net Generation	Y=A - B	MUs	2716
5	Station Heat Rate	D	KCal/kWh.	1,850
6	Calorific value of Gas	F	kcal/scm	9,700
7	Overall Heat from Gas	H=A x D	G Cal	5180000
8	Actual Gas Consumption	M=(H x 1000)/F	M. scm	534021
9	Price of Gas	P1	Rs./scm	11.62
10	Cost of Gas	N5=P1 x M/10^2	Rs. Lakh	62053
11	Total Fuel Cost	N5	Rs. Lakh	62053
12	Fuel Cost/Unit Gross	P=N/(A*10)	Rs./kWh	2.216
13	Fuel Cost/Unit Net	Q=N/(Y*10)	Rs./kWh	2.285

Annexure 5.3

Approved Fuel costs for Sikka 3&4 for FY 2014-15

Sl.No.	Item	Derivation	Unit	2014-15
1	Gross Generation	A	MUs	3504
2	Auxiliary Consumption	C	%	9.00%
3	Auxiliary Consumption	B	MUs	315
4	Net Generation	Y=A - B	MUs	3189
5	Station Heat Rate	D	KCal/kWh.	2,398
6	Sp. Oil Consumption	E	ml/kWh	1.00
7	Gross Calorific Value of Coal	F	kcal/kg	5,500
8	Calorific value of Oil	G	kcal/l	10,269
9	Overall Heat	H=A x D	G Cal	8402592
10	Heat from Oil	I=(A x E x G)/1000	G Cal	35983
11	Heat from Coal	J=H-I	G Cal	8366609
12	Transit losses	K	%	0.8%
13	Coal Blend			
14	A) Indigenous Coal	X1	%	0.00%
15	B) Washed Coal	X2	%	0.00%
16	C) Imported Coal	X3	%	100.0%
17	Actual Oil Consumption	L=A x E	kl	3504
18	Actual Coal Consumption	M=(J X 1000)/F	MT	1521202
19	A) Indigenous Coal	Q1=M* x X1/(1-K)	MT	0
20	B) Washed Coal	Q2=M* x X2/(1-K)	MT	0
21	C) Imported Coal	Q3=M* X X3	MT	1521202
22	Price of Coal			
23	A) Indigenous Coal	P1	Rs./MT	0
24	B) Washed Coal	P2	Rs./MT	0.00
25	C) Imported Coal	P3	Rs./MT	6600
26	Price of Oil	P4	Rs./kl	33352
27	Coal cost			
28	A) Indigenous Coal	N1=Q1 X P1	Rs. Lakh	0
29	B) Washed Coal	N2=Q2 X P2	Rs. Lakh	0
30	C) Imported Coal	N3=Q3 X P3	Rs. Lakh	100399
31	Total Coal Cost	N4=N1+N2+N3	Rs. Lakh	100399
32	Oil Cost	N5=P4 x L/10^5	Rs. Lakh	1169
33	Total Fuel Cost	O = N4 + N5	Rs. Lakh	101568
34	Fuel Cost/Unit Gross	P=O/(A*10)	Rs./kWh	2.899
35	Fuel Cost/Unit Net	Q=O/(Y*10)	Rs./kWh	3.185

6. Compliance of Directives

6.1 Compliance of Directives issued by the Commission

The Commission in its Tariff order dated 2nd June, 2012 had issued certain directives to GSECL relating to the compliance of the already issued directives

The Commission also issued some new directives to GSECL in the Tariff order dated 2nd June, 2012.

The Commission, while discussing the compliance of the above directives, recorded its comments on the compliance and in the process, further action required was indicated in the Tariff Order dated 30th March, 2013. The response to these comments and further action are submitted by GSECL which are discussed hereunder.

Directive 1: Renovation and Modernization (R&M) of Thermal Plant

Quarterly progress report on the R&M of Ukai TPS units 1 & 2 shall be submitted to the Commission.

The current status of the study by M/s JCOAL shall be submitted to the Commission on a quarterly basis and once the full report is received from M/s JCOAL, GSECL should analyse the cost effectiveness of the proposed R&M and submit the same for the approval of the Commission.

The final report from JCOAL may be expedited.

Compliance:

M/s JCOAL has submitted its preliminary report earlier. As informed by CEA, and discussions on 30.05.2012, M/s JCOAL has discontinued the work.

Commission's comments:

GSECL is directed to provide its comments on what it proposes next in view of the discontinuation of work by JCOAL.

Directive 2: Quality of Coal

The GSECL to make all efforts for replacing the balance main line coal with washed coal. The matter may be perused and report submitted to the Commission.

Compliance:

For implementation of recommendations of the Inter-Ministerial Task Force, GSECL has taken up the matter with various levels of Central Government**.** Further, SECL has informed that swapping of 1-2 MTPA quantity of Korba field to Korea-Rewa field with MPPGCL not feasible and not implemented, as MPPGCL is also requesting for change of their programme from Korea-Rewa to Korba field. However, GSECL has taken up the matter with Ministry of Coal, Coal India Limited for implementation of same. GSECL has represented strongly for implementation of the recommendation of the Task Force, in the meeting taken by Additional Secretary, Ministry of Power to discuss the issues related to Implementation of the recommendation of the Task Force.

Commission's comments:

GSECL is directed to report the latest position in replacing the main-line coal with washed coal

Directive 3: Business Plan

GSECL should develop competency in all fields of planning and operations, and should come up as an efficient state owned generating company which is ready to compete with private generating companies. GSECL is directed to design a road map for the same and apprise the Commission of the action taken.

The action taken report may be submitted by 30th June, 2013.

Compliance:

The action to be taken to design a road map to get preparedness to compete with private generation companies is under process and on the finalization of the same GSECL will submit within stipulated time.

Commission's comments:

This may be expedited and the report submitted by 30th September, 2014.

Directive 4: Sikka TPS

GSECL is directed to apprise the Commission about the schedule for completion and submit the progress report of the de-silting work on a quarterly basis. GSECL is also directed to submit the performance improvement report of the units at Sikka as soon as de-silting work is completed.

A further report may be submitted after completing 100% of the work.

Compliance:

The De-silting work is 100% completed on 28-02-2013. After completion of the work of De-silting, during low tide period, even though at (-) 4 Meter level on Dated 14-11-2012 and 15-11-2012, no requirement was aroused to take sea water from R/C pond in to CWPH for both the units, and no generation loss observed during that low tide period.

Commission's comments:

The Compliance report of GSECL is noted.

Directive 5: KLTPS Unit- 4

GSECL shall submit progress in PG test along with final results of the test to the Commission in respect of KLTPS-4.

The work may be expedited and informed to the Commission early.

Compliance:

The PG test of Turbine and Boiler was carried out on 02 & 03-12-2012. The PG test report is submitted by M/s. BHEL for which result is under discussion, and hence not yet finalized. On finalization of the PG Test Report, the same will be intimated to the Commission in due course.

Commission's comments:

GSECL is directed to submit P.G. test results by September 2014.

Directive 6: Cost Audit of Generating Stations

GSECL is directed to do a comprehensive cost audit and identify the area where efficiency is improved and cost is reduced. This may be taken up in a phased manner, power station wise. Action taken should be reported.

The comprehensive cost Audit report may be submitted early.

Compliance:

Cost audit report was submitted by GSECL. However the Commission has desired the same in different manner which is under process.

Commission's comments:

The cost audit as desired by the Commission shall be submitted by June 2014.

6.2 Compliance of New Directives issued in T.O. dated 2nd June 2012

Directive 1: Details of damage caused to the Dhuvaran Gas-1

GSECL has submitted in its petition that a compressor was damaged in Dhuvaran Gas 1 due to which there was forced outage of 157 days in the plant. GSECL is directed to furnish the details of damage caused to the Dhuvaran Gas 1, and the action taken for restoration of the same. Further, it is also directed to submit the reasons as to why it took so long to restore the plant.

The time schedule for completion of the repairs and putting back the unit in service shall be reported to the Commission. GSECL shall also report the costs etc., involved by 30th June, 2013.

Compliance:

The details of time schedule and cost involved for putting back unit in service are as under:

- Date of Tripping of unit: **02-05-2010**
- Date of Synchronization of unit: **04-10-2010**

Cost of Repairs [Including On Shore and Off Shore repairs]: **USD 67,80,077.39.** (equivalent Rs. 31,93,41,645.00 i.e. Rs. 31.93 Crore approx. @ exchange rate Rs. 47.10/ 1 $ as on 01.06.2010)

Commission's comments:

The Compliance report of GSECL is noted.

Directive 2: Transit loss of Coal

GSECL is directed to make claims for the transit loss with the railways and in the event of settlement of such claims, the benefit of such claims shall be passed on to the consumers. This matter may be pursued with Railways and the claim shall be reported to the Commission.

Compliance:

The matter has been taken up with Railway Authorities and they have informed that as per Goods Tariff No. 46 Pt.-I (Vol-II), clause No. 12 the commodities indicated with “OR” (Owners’ Risk) in the column “Risk rate” will be charged/booked at owners’ risk and as the coal is booked on “OR” basis, they do not accept any liability for any transit loss.

Commission’s comments:

The Compliance report of GSECL is noted.

Directive 3:

GSECL is directed to submit to the Commission a progress report on the implementation of the recommendations made in fuel audit report for FY 2010-11 of Power Stations of GSECL.

COMMISSION'S ORDER

The Commission approves the station-wise fixed charges and energy charges for the FY 2014-15 as shown in the Table below:

Sl. No	Power Station	Approved Fixed Charges for FY 2014-15 (Rs. Crore)	Approved Energy Charges for FY 2014-15 (Rs. /kWh)
1	Ukai (1-5)	333.51	1.701
2	Gandhinagar (1-4)	265.06	2.375
3	Gandhinagar 5*	100.29	2.130
4	Wanakbori 1-6 TPS	471.22	2.108
5	Wanakbori -7*	97.61	2.022
6	Sikka TPS	120.98	2.756
7	KLTPS 1-3	220.31	1.181
8	KLTPS 4	121.45	1.109
9	Dhuvaran (Gas -1)*	55.49	2.411
10	Dhuvaran (Gas- 2)	64.55	2.388
11	Utran Gas*	53.91	2.367
12	Utran Extension*	265.75	2.071
13	Ukai Hydro	24.83	0.00
14	Kadana Hydro	58.58	0.00
15	Ukai-6#	544.68	1.683
16	Dhuvaran CCPP-3#	356.64	2.285
17	Sikka 3&4#	574.42	3.185

* PPA based stations.
# New stations for which fixed and energy charges are provisionally approved.

The net gain of Rs. 31.77 Crore approved in the Truing up for FY 2012-13 is to be passed on to the Discoms in 12 equal monthly instalments through GUVNL.

This order shall come into force with effect from the 1st May, 2014.

Sd/-
DR. M.K. IYER
Member

Sd/-
SHRI PRAVINBHAI PATEL
Chairman

Place: Gandhinagar
Date: 29/04/2014