

1.2. In exercise of the powers conferred under Sections 62, 64 and other provisions of Electricity Act 2003, read with RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, and other enabling Regulations, the Commission, after carefully considering each of the submissions of the Petitioner, Respondents and suggestions/objections submitted by the Stakeholder, has passed the following Order.

1.3. This Order has been structured in following sections as given under:

Section 1: General

Section 2: Summary of True up and Tariff determination process.

Section 3: Summary of objections/ comments/ suggestions received from Stakeholders and GLPL's response thereon.

Section 4: Analysis of True up for FY 2014-15 to FY 2016-17.

Section 5: Determination of ARR and Tariff for FY 2018-19.

SECTION 2

Summary of Filing of True up and Tariff determination process

- 2.1. GLPL filed a petition on 01.01.2018 for true up for FY 2014-15 to FY 2016-17 and ARR and Tariff determination for FY 2018-19 for GLTPP Units 1&2.
- 2.2. As required under Section 64(2) of the Electricity Act, 2003, public notice with salient features of the petition inviting objections/ comments/ suggestions were published in the following newspapers on the dates mentioned against each:

Table 1: Details of Public Notice

Sl. No.	Name of News Paper	Date of publishing
(i)	Danik Navjyoti	28.02.2018
(ii)	Rastradoot	28.02.2018
(iii)	Times of India	28.02.2018

- 2.3. The petition was also placed on RERC and RVUN websites. The objections/ comments/ suggestions were received from Shri. G. L. Sharma and Discoms.
- 2.4. The Commission forwarded the objections/ comments/ suggestions of stakeholders to GLPL for its reply. The Petitioner replied to the same vide its letter dated 20.04.2018.
- 2.5. The Commission vide its letter dated 10.04.2018 communicated the data gaps in the Petition. The Petitioner furnished the information vide its letter dated 20.04.2018.
- 2.6. The public hearing in the matter was held on 24.04.2018.
- 2.7. To facilitate reference, an index of the issues and points dealt with is placed in Annexure-1.
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SECTION 3

Summary of Objections/Comments/Suggestions received from Stakeholders and GLPL's response thereon

A. General

Stakeholder's Comments/Suggestions

3.1 GLPL in reply to a query vide letter No. GLPL/MD/Barmer/F.11/D.02 dated 01.05.2017 had replied as under:

"The GLPL unit 1&2 are under shut down from 11.07.2014 to 27.01.2016 respectively till now. GLPL is in process of disinvestment and for the purpose of disinvestment tariff is required."

3.2 The Units of the plant are still under shut down and are not likely to come into operations. Petitioner may intimate the probable date of operation if it has any plans to come into operations in near future.

3.3 There was an attachment of Cabinet decision no. 118/2016 dated 20.9.2016 enclosed with the letter no. 15(36)Urja/2014 dated 21/22.9.2016 by Joint Secretary of Energy Department, Govt. of Rajasthan. In this regard, the Cabinet in its decision no. 118/2016 dated 20.9.2016 had accorded sanction of disinvestment of the Units of GLPL and had directed the Petitioner to take appropriate action against the responsible officials. The Petitioner may furnish the copy of report sent to the Govt. of Rajasthan in compliance to the direction in above letter No. 118/2016 dated 20.9.2016.

3.4 Commission in its Order dated 24.2.2014 at Para 116 had observed that the details of assets and liabilities transferred by RVUN was not made a part of agreement and as such the completeness of the whole exercise of transfer of assets could not be assessed. As the Petitioner has not provided necessary details of assets and liabilities transferred by RVUN, the same may be furnished.

GLPL's Response

3.5 The GLPL Units 1&2 are under shut down from 11.07.2014 and 27.01.2016 respectively till now. GLPL is in process of disinvestment and for the purpose

of disinvestment tariff is required. GLPL is awaiting instruction of Govt of Rajasthan for further directions.

- 3.6 As regards the report to be submitted to GoR, it is still in progress.
- 3.7 Since, all the normative parameters of the Units have already been determined by the Commission, therefore GLPL requested the Commission to consider the petition for determination of tariff for FY 2018-19.

B. True up of FY 2014-15, FY 2015-16 and FY 2016-17

Annual Accounts and Cost Records

Stakeholder's Comments/Suggestions

- 3.8 Cost records are not available and the Petitioner may provide the same. In respect of Annual Accounts for FY 2014-15, CAG while over-ruling the Statutory Auditors opinions, has opined that the financial statements of the company do not give a true and fair view. The Commission may consider as to how far it will be correct to finalize the true up petition of the company on the basis of accounts which do not give a true and fair view.
- 3.9 With regards to Annual Accounts of FY 2016-17 it is submitted that in the petition the management response in respect of Chartered Accountant Report is not available. The same may be made available by the Petitioner.

GLPL's Response

- 3.10 The cost records and the management responses for audited accounts for FY 2016-17 have been submitted.
- 3.11 In respect of CAG opinion, the management's response is provided in the petition at page no. 377 which substantiates the above comment.

Generation

Stakeholder's Comments/Suggestions:

- 3.12 The gross generation during FY 2015-16 and FY 2016-17 was zero and hence question of any true up does not arise.
- 3.13 As the actual PLF was less than the norm, proportionate reduction in fixed

charges is to be carried out.

3.14 The Petitioner should provide the actual gross generation, auxiliary consumption and net generation for Units 1 &2 along with actual month wise electricity consumption of various pumping stations. Such expenses should be awarded on actual basis.

GLPL's Response

3.15 Unit 1 was under shut down during FY 2015-16 and FY 2016-17. GLPL requested the Commission to allow fixed cost to meet expenses as claimed.

3.16 The actual PLF of the Units was low due to problems faced at GLPL. The lignite supplied to GLPL is having approximately 5% Sulphur. Due to very high Sulphur content, huge quantity of lime is required for mixing, which is in range of 30% of total lignite fed to combustor to bring SOx within environmentally safe limits. As boiler is not capable enough to handle this huge quantity of lime, consequently choking of back pass caused long shut down of the Units. To avoid this, the Units were operated at part load and further due to high Sulphur in lignite many other failures occurred which includes huge damages of lignite chain feeder causing shutdown. Further during rainy season on account of wet lignite and choking of bunkers, Units remained shut down for longer period due to choking of lignite section and lignite bunkers which are beyond the control of GLPL. These are the uncontrollable factors due to which plant load factor was low. Therefore, GLPL requested the Commission to allow full recovery of fixed charges.

Depreciation

Stakeholder's Comments/Suggestions:

3.17 Depreciation may be approved based on the approved capital cost.

GLPL's Response

3.18 The additions and deductions to capital cost were either deferred payments of original scope or write-off of assets. Therefore, GLPL requested

the Commission to consider depreciation after considering addition and deduction as claimed.

Interest on Loan

Stakeholder's Comments/Suggestions:

3.19 Interest on loan may be approved based on the approved loan balance.

GLPL's Response

3.20 The interest on term loan has been computed considering the actual rate of interest and normative loan as per RERC Tariff Regulations, 2014. Therefore, GLPL requested the Commission to allow interest on term loan as claimed.

Interest on Working Capital

Stakeholder's Comments/Suggestions:

3.21 Interest on working capital may be allowed on normative basis after taking into consideration the changes required to be made in the relevant components of working capital.

GLPL's Response

3.22 GLPL requested the Commission to allow interest on working capital as per RERC Tariff Regulations, 2014.

O&M Expenses

Stakeholder's Comments/Suggestions:

3.23 As the actual O&M expenses are lower than the normative O&M expenses, there is a gain and such gain may be directed to be transferred to pension fund.

GLPL's Response

3.24 GLPL requested the Commission to allow O&M expenses as per RERC Tariff Regulations, 2014.

Special O&M Expenses

Stakeholder's Comments/Suggestions:

3.25 The Petitioner has not submitted the supporting documents to substantiate

the special O&M expenses claimed for true up in compliance to the directions of the Commission.

GLPL's Response

3.26 The supporting documents for the special O&M expenses has been enclosed with reply of Commission's data gap and the copy of the same is being supplied to the stakeholder. Therefore, GLPL requested the Commission to allow special O&M expenses as per RERC Tariff Regulations, 2014.

Energy Charges

Stakeholder's Comments/Suggestions:

3.27 The normative SHR of 2449.50 kcal/kWh as approved by the Commission may be approved in true up of energy charges.

3.28 Petitioner should provide the supporting documents related to the fuel cost, analysis report of actual GCV and moisture content related to the Units 1 & 2.

GLPL's Response

3.29 The SHR of the plant was higher due to running the plant on partial load on account of high Sulphur content in lignite. Due to very high Sulphur content, huge quantity of lime is required for mixing, which is in range of 30% of total lignite fed to combustor to bring oxide of SO_x within environmentally safe limits. As boiler is not capable enough to handle this huge quantity of lime, consequently choking of back pass causing long shut down of the Units. To avoid this, Units were operated at part load and further due to high Sulphur in lignite many other failures were occurred which includes huge damages of lignite chain feeder causing shutdown. Further during rainy season on account of wet lignite and choking of bunkers, Units remained shut down for longer period due to choking of lignite section and lignite bunkers which are beyond the control of GLPL. These are the uncontrollable factors due to which plant SHR has been increased. Therefore, GLPL requested the Commission to allow full recovery of energy charges as claimed.

C. ARR and Tariff for FY 2018-19

Tariff determination

Stakeholder's Comments/Suggestions

- 3.30 For a generating station, which is not in operation and no power is supplying to distribution licensee then no tariff is required to be determined. As GLPL would not be supplying electricity to Discoms during FY 2018-19, Petitioner is not required to file a petition for determination of tariff. Accordingly, the Commission may disallow the petition for determination of tariff for GLPL for FY 2018-19.
- 3.31 Tariff determination for FY 2018-19 may be carried out in accordance with the approach adopted by the Commission in the Tariff Order for the previous year.

GLPL's Response

- 3.32 Since, the Units may be revived at any stage of time then GLPL shall not be able to bill the generated energy if tariff is not approved. Considering this aspect, petition for determination of tariff FY 2018-19 has been filed and GLPL requested the Commission to determine the tariff for GLPL to enable billing of energy on revival of the GLPL.

Generation Forecast

Stakeholder's Comments/Suggestions

- 3.33 Unit 1 and 2 are under shutdown from 11.7.2014 and 27.1.2016 respectively, till now and are not likely to come into operation. Thus, the generation forecast projected for FY 2018-19 is incorrect.

GLPL's Response

- 3.34 The figures of generation are estimated figures, at the time of filing petition based on normative parameters. GLPL shall supply electricity on getting instructions for revival of units.

Capital Cost

Stakeholder's Comments/Suggestions

- 3.35 Final capital cost of Units 1 & 2 as approved by the Commission should be

considered without any revision.

GLPL's Response

- 3.36 Capital cost has been considered as approved by the Commission in its Order dated 12.08.2015 and subsequent additions and deduction in audited accounts which are mainly adjustment of advance within original scope of work.

Additional Capitalization

Stakeholder's Comments/Suggestions:

- 3.37 The Commission in its Order dated 17.10.2016 had not approved the additional capitalization of Rs 7,90,120 for Unit 1 on account of cost of computer and office equipment with the rationale that such expenses are not related to capital cost and are related to O&M. The Petitioner has claimed the additional capitalization of Rs 1.15 Crore with a deduction of Rs 0.33 Crore for Unit-1 for FY 2016-17, Rs 2.62 Crore in FY 2015-16 for Unit-2 and Rs 0.13 Crore with deduction of Rs 4.42 Crore in FY 2016-17 for Unit-2. In this regard, the Petitioner should provide the reasons for not indicating such amounts in its petition for tariff determination for FY 2017-18. Further, the Petitioner in its petition for tariff for FY 2017-18 had submitted the COD of Unit 1 and Unit 2 as 18.10.2011 and 12.03.2011, respectively. Therefore, in accordance with Regulation 17 of the RERC Tariff Regulations, 2014, additional capital expenditure as claimed after cut-off date is not admissible.
- 3.38 The Petitioner at page 16 of the petition at s. no. 3 under head "During FY 2016-17" has deducted the sum of Rs 4,42,42,166/- under the head Plant & Machinery on transfer of assets. In this regard, the Petitioner should indicate the nature of plant and machinery transferred along with the proper justification and should also provide the details of the entity/company receiving such transferred assets.

GLPL's Response

- 3.39 At the time of filing of petition for ARR of FY 2017-18, the accounts of FY 2016-17 were not finalised but now the same have been finalised and

accordingly the addition and deduction are submitted. The addition and deduction are either deferred payments of original scope of work/adjustment of advances or the write-off of assets. Therefore, GLPL requested the Commission to consider additions and deduction in capital cost as claimed.

3.40 The computer and office equipment are purely capital assets in nature. Therefore, GLPL requested the Commission to consider these expenditures as additional capitalization and revised capital cost as claimed.

3.41 A sum of Rs. 4,40,28,437/- is pertaining to bulldozer which have been transferred from GLPL to CTPP and Rs. 213729/- land under lease hold adjustment.

Depreciation

Stakeholder's Comments/Suggestions

3.42 Petitioner should furnish the list of assets retired/replaced during past years, i.e. FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. The Commission may allow depreciation for Units 1 and 2 in respect of closing GFA approved, on the same approach as adopted in Order dated 07.12.2016. No additional capital expenditure may be considered beyond the already approved capital cost. However, deductions, as claimed by the Petitioner should be considered while allowing depreciation.

GLPL's Response

3.43 No assets has been retired/ replaced. Assets have been transferred.

3.44 The additions and deduction are either deferred payments of original scope of work/advance adjustment or write-off of assets. Therefore, GLPL requested the Commission to allow depreciation after considering additions and deductions as submitted.

Interest on term loan and Finance Charges

Stakeholder's Comments/Suggestions

3.45 As the Units are under shutdown, the Petitioner has not utilized the loan amount for their own fault. Therefore, the interest for such loan may not be

allowed.

GLPL's Response

3.46 The interest on term loan is being charged by the funding agencies irrespective of whether the plant is under running or shut down. Whereas Tariff is allowed on normative basis and is charged only when power is generated from the plant. Therefore, GLPL requested the Commission to allow interest on term loan as per RERC Tariff Regulations, 2014.

Interest on working capital

Stakeholder's Comments/Suggestions:

3.47 As the Units are under shutdown, the interest on working capital may not be allowed.

GLPL's Response

3.48 Interest on working capital is allowed in tariff on normative basis and is charged only when power is generated from the plant. Therefore, GLPL requested the Commission to allow interest on working capital as per RERC Tariff Regulations, 2014.

O&M Expenses

Stakeholder's Comments/Suggestions:

3.49 O&M expenses are admissible on normative basis.

GLPL's Response

3.50 GLPL has claimed O&M expenses as per RERC Tariff Regulations, 2014.

Special O&M Expenses

Stakeholder's Comments/Suggestions:

3.51 The Commission in its Order dated 07.12.2016 had only approved the electricity consumption charges in the special O&M expenses. The Commission has disallowed the remaining expenses under special O&M expenses as the same were not justified by the Petitioner with the supporting documents.

3.52 As the Units are under shutdown, any process water could not be

transported and therefore, special O&M expenses claimed by the Petitioner are not admissible.

GLPL's Response

3.53 The actual expenditure for the pumping stations and pipeline beyond 50 km is enclosed with reply of data gaps sought by the Commission and copy of the same is being supplied to the stakeholder. Therefore, GLPL requested the Commission to allow the actual expenditure on the pumping stations and pipe line maintenance beyond 50 km as per RERC Tariff Regulations, 2014. This petition is for tariff of FY 2018-19 and expenditure so allowed will be passed on to DISCOMs only in the case power is generated from the plant.

Insurance

Stakeholder's Comments/Suggestions

3.54 Insurance charges may be considered on the basis of actual incurred in FY 2016-17 and the Petitioner should furnish necessary supporting documents to substantiate such expenses.

GLPL's Response

3.55 The insurance charges have been claimed on the basis of actual expenditure incurred in FY 2016-17 and policies have been submitted with main petition. GLPL requested the Commission to allow insurance charges for FY 2018-19 with escalation of 5% of as actual incurred in FY 17-18.

Return on Equity

Stakeholder's Comments/Suggestions

3.56 As the Units are under shutdown, the Petitioner has not utilized the investment. Therefore, the Return on Equity may not be allowed.

GLPL's Response

3.57 Return on equity is allowed as per RERC Tariff Regulations, 2014 and is passed on only when energy is generated by the plant. Therefore, GLPL requested the Commission to allow RoE as per RERC Tariff Regulations, 2014.

Non-Tariff Income

Stakeholder's Comments/Suggestions

3.58 Non-tariff income as submitted by the Petitioner may be allowed.

GLPL's Response

3.59 Non-tariff income has been claimed on the basis of actual in FY 16-17 and the same may be allowed.

Energy Charges

Stakeholder's Comments/Suggestions

3.60 As the Units are under shutdown, there may not be any consumption of fuels. Therefore, any cost incurred on consumption of fuels may not be allowed. Norms of operation may be considered as approved by the Commission in its Order dated 07.12.2016.

GLPL's Response

3.61 The norms of operation have been considered as approved by the Commission in its order dated 07.12.2016 and determination of energy charges is essential to enable GLPL to bill the energy, in case of revival of the Units and the generation begins in FY 2018-19. Therefore, GLPL requested the Commission to allow energy charges as submitted as per RERC Tariff Regulations, 2014.

SECTION 4

Analysis of True up of ARR for FY 2014-15, FY 2015-16 & FY 2016-17 and Allowed Fixed Charges and Energy Charges

Norms of Operation

Availability

GLPL's Submissions

- 4.1 GLPL submitted the details of actual Availability for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 2: Availability as submitted by GLPL

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Target Availability for full recovery of fixed charges	76.13%	77.64%	78.63%	80.00%	80.00%	80.00%
Actual as claimed	50.22%	41.16%	0.00%	40.88%	0.00%	0.00%

- 4.2 GLPL requested the Commission to consider the target Availability of 70% citing the Commission's Order dated 24.02.2016 passed in petition no. 464/14 in the matter of determination of final tariff for Units 1 to 8 of M/s Raj West Power Limited.

Commission's Analysis

- 4.3 The actual Availability in FY 2014-15 was lower than the target Availability for Units 1&2. Unit 1 was not in operation in FY 2015-16 and FY 2016-17. The actual Availability of Unit 2 in FY 2015-16 was lower than the target Availability. Unit 2 was not in operation in FY 2016-17.
- 4.4 GLPL, in its replies to data gaps submitted that the CFBC boilers are based on lignite fuel which is poor quality of coal with high sulphur content, it is difficult to achieve high value of availability targets for full recovery of fixed charges. Therefore, GLPL requested the Commission to consider the target Availability of 70% for FY 2014-15 to FY 2016-17.
- 4.5 The Commission directed GLPL to submit the SLDC certificates in support of

the Availability claimed for FY 2014-15 to FY 2016-17. GLPL has not been able to submit the SLDC certificate showing the loss in generation due to SLDC instructions. Hence, the Commission has approved Availability equivalent to the actual PLF for the respective years for carrying out true up of both the Units.

Table 3: Availability approved by the Commission

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Actual as claimed	50.22%	41.16%	0.00%	40.88%	0.00%	0.00%
Approved on true up	9.06%	19.76%	0.00%	21.60%	0.00%	0.00%

4.6 As regards the prayer of GLPL to consider the target Availability of 70%, the same is devoid of merit and the reliance placed by GLPL on the Commission's Order dated 24.02.2016 is misplaced.

4.7 The Commission for the purpose of recovery of fixed charges has considered the normative Availability as specified in the RERC Tariff Regulations, 2014.

Plant Load Factor (PLF)

GLPL's Submission

4.8 GLPL submitted the details of actual PLF for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 4: PLF as submitted by GLPL

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Target PLF for incentive	76.13%	77.64%	78.63%	80.00%	80.00%	80.00%
Actual as claimed	8.73%	19.76%	0.00%	20.98%	0.00%	0.00%

4.9 The actual PLF was significantly lower than the target PLF for incentive. GLPL cited the high sulphur content in lignite as the reason for lower PLF and submitted that in order to neutralise this high sulphur content, large quantity of lime is added due to which back pass of the boiler was getting frequently choked.

Commission's Analysis

4.10 In reply to a query of the Commission, GLPL submitted that the actual PLF was low due to problems faced at GLPL. The lignite supplied to GLPL is having 5-6% sulphur. Due to very high sulphur content, huge quantity of lime is required for mixing, which in the range of 30% of total lignite fed to combustor to bring SO_x within environmentally safe limits. As the boiler is not capable enough to handle this huge quantity of lime, consequently, choking of back pass cause long shut down of the Units. To avoid this, the Units were operated at part load and further due to high sulphur in lignite many other failures were occurred which includes huge damages to lignite chain feeder causing shutdown. Further during rainy season on account of wet lignite and choking of bunkers, Units remained shutdown for longer period due to choking of lignite section and lignite bunkers which are beyond the control of GLPL. These major factors were responsible for low PLF.

4.11 GLPL stated that higher limestone consumption was causing frequent choking of back pass of the boiler. GLPL in its reply to data gaps submitted the actual sulphur content in lignite as 5.21% and 4.82% for FY 2014-15 and FY 2015-16 respectively. The arrangement of quality fuel is the responsibility of the generator and therefore any adverse impact of fuel cannot be passed on to the beneficiaries.

4.12 The Commission has recomputed the PLF in accordance with Regulation 2(44) of the RERC Tariff Regulations, 2014. The Commission for the purpose of computing the PLF has considered the normative auxiliary consumption.

4.13 The Commission, in view of the above, has approved the PLF for Units 1&2 as shown in the Table below:

Table 5: PLF approved by the Commission

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Actual as claimed	8.73%	19.76%	0.00%	20.98%	0.00%	0.00%
Approved on true up	9.06%	19.76%	0.00%	21.60%	0.00%	0.00%

Auxiliary Consumption

GLPL's Submissions

4.14 GLPL submitted the details of actual auxiliary consumption for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 6: Auxiliary consumption as submitted by GLPL

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Approved in the Tariff Order	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
Actual as claimed	23.36%	21.04%	-	17.60%	-	-

4.15 GLPL submitted that the actual auxiliary consumption claimed is without considering the auxiliary consumption of pumping stations. The details of actual gross generation, actual net generation and revised net generation without considering the auxiliary consumption of pumping stations is as shown in the Table below:

Table 7: Actual auxiliary consumption of Unit 1 for FY 2014-15

Particulars	Legend	FY 2014-15
		Unit 1
Actual gross generation (MU)	A	114.51
Actual net generation as per audited accounts (MU)	B	84.60
Actual auxiliary consumption (MU)	C	29.91
Auxiliary consumption of pumping stations (MU)	D	3.16
Net generation claimed for true up (MU)	E=B+D	87.76
Auxiliary consumption claimed for true up (MU)	F=C-D	26.75
Auxiliary consumption claimed for true up (%)	F÷A	23.36%

Commission's Analysis

4.16 The Commission has gone through the submissions of the Petitioner. It is observed that the Petitioner has not submitted any justification in support of higher auxiliary consumption. The Commission has approved the auxiliary consumption as specified under RERC Tariff Regulations, 2014 and is as shown in the Table below:

Table 8: Auxiliary consumption approved by the Commission

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Actual as claimed	23.36%	21.04%	-	17.60%	-	-
Approved on true up	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%

Station Heat Rate (SHR)

GLPL's Submission

4.17 GLPL submitted the details of actual SHR for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 9: Station Heat Rate as submitted by GLPL (kcal/kWh)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Approved in the Tariff Order	2449.50	2449.50	2449.50	2449.50	2449.50	2449.50
Actual as claimed	3737.73	3765.13	-	3936.74	-	-

Commission's Analysis:

4.18 The Commission has gone through the submissions of the Petitioner. It is observed that the Petitioner has not submitted any justification in support of higher SHR submitted by it.

4.19 The Commission vide its Order dated 07.12.2016 passed in the matter of approval of ARR and Tariff for GLPL for FY 2014-15 to FY 2016-17 had approved the normative SHR, before correction for moisture content in Lignite, as 2449.50 kcal/kWh.

4.20 With regards to the SHR the Commission has considered SHR as per Regulation 45(3)(b) and Annexure 2 of the RERC Tariff Regulations, 2014, as extracted below:

"45 (3) Gross Station Heat Rate –

(a)

(b) Gross Station Heat Rate for new Thermal Generating stations/units achieving COD on or after 01.04.2009 till 31.03.2014:

Coal and lignite based thermal power generating stations

$= 1.045 \times \text{Design Heat Rate (kcal/kWh)}$.

Where the Design Heat Rate of a Unit means the Unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure:

Provided further that where Unit heat rate has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the Unit design heat rate shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided further that where Unit heat rate has not been guaranteed and turbine cycle heat rate and boiler efficiency guaranteed by the supplier is also not available the design heat rate shall not exceed the limit as specified under Annexure- 2

In case of lignite-fired generating stations, maximum design heat rate shall be increased using factor for moisture content as given below.

(i) For lignite having 50% moisture: Multiplying factor of 1.10

(ii) For lignite having 40% moisture: Multiplying factor of 1.07

(iii) For lignite having 30% moisture: Multiplying factor of 1.04

(iv) For other values of moisture content, multiplying factor shall be prorated for moisture content between 30-40 and 40-50 depending upon the rated values of multiplying factor for the respective range given under sub-sub-regulations (i) to (iii) above.

(v) Moisture content shall be determined at the stage of firing.

Provided that the heat rate norms computed as per above shall be limited to the heat rate norms approved during FY 2009-10 to FY 2013-14."

4.21 Regarding the design heat rate, the Commission is of the view that design parameters of a plant cannot be changed from time to time and only the moisture content can have its impact on the performance. Therefore, as the Commission vide its order dated 13.11.2009 has already approved the design heat rate of 2300 Kcal/kWh, the same has been considered by the Commission in this order also and thereafter the moisture correction factor has been taken in accordance with RERC Tariff Regulations, 2014 for computing the Station Heat Rate to be allowed. Further, the APTEL in its Judgment dated 15.12.2011 under Appeal No. 182 of 2010 filed by the

Petitioner against the Commission's order dated 13.11.2009 ruled as under:

"14.

(iii) Station Heat Rate: We are in agreement with the findings of the State Commission that the Design Rate is subject to the ceiling of 2300 kCal/kWh as specified under Regulation 26 (ii)(B)(a) of the Central Commission's Regulation, 2009. However, the Station Heat Rate has to be corrected for moisture content in coal according to Regulation 43(3)(b) as per the fourth proviso to Appendix 2."

4.22 Therefore, the Commission in this order has considered the design heat rate of 2300 kCal/kWh as per RERC Tariff Regulations, 2014. Accordingly, the SHR approved by the Commission is as shown in the table below:

Table 10: Normative SHR as approved by the Commission for FY 14-15, FY 15-16 and FY 16-17

Particulars	Units	Approved
Design Heat Rate (DHR)	kCal/kWh	2300.00
Allowable Design Heat Rate	kCal/kWh	2300.00
SHR (1.045*Allowable DHR)	kCal/kWh	2403.50

4.23 Further, the Commission vide its Order dated 04.04.2018 on approval of ARR & Tariff for GLPL for FY 2017-18 revised the normative SHR allowable in accordance with RERC Tariff Regulations, 2014 to 2403.50 Kcal/kWh. Accordingly, the Commission has considered normative SHR of 2403.50 kcal/kWh in the true up for FY 2014-15 to FY 2016-17.

4.24 GLPL submitted the actual moisture content in Lignite as 26.66% and 28.20% for FY 2014-15 and FY 2015-16. The correction factor for moisture content in Lignite is specified in Regulation 45(3)(b) for Lignite having moisture content in the range of 30% to 50%. As the actual moisture content in Lignite was less than 30%, correction factor is not applicable in the instant case.

4.25 The normative SHR approved by the Commission is as shown in the Table below:

Table 11: SHR approved by the Commission (kcal/kWh)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Actual as claimed	3737.73	3765.13	-	3936.74	-	-
Approved on true up	2403.50	2403.40	-	2403.50	-	-

Secondary Fuel Oil Consumption (SFOC)
GLPL's Submission

4.26 GLPL submitted the details of actual SFOC for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 12: SFOC as submitted by GLPL (ml/kWh)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Approved in the Tariff Order	1.00	1.00	1.00	1.00	1.00	1.00
Actual as claimed	0.72	1.62	-	1.20	-	-

Commission's Analysis:

4.27 The Commission has gone through the submissions of the Petitioner. It is observed that the Petitioner has not submitted any justification in support of higher SFOC submitted by it for Unit 2 for FY 2014-15 and FY 2015-16. The Commission has approved the SFOC as specified under RERC Tariff Regulations, 2014 and is as shown in the Table below:

Table 13: SFOC approved by the Commission (ml/kWh)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Actual as claimed	0.72	1.62	-	1.20	-	-
Approved on true up	1.00	1.00	-	1.00	-	-

Fuel Price and Calorific Value
GLPL's Submission

4.28 GLPL submitted the actual prices and GCV of fuels and price of limestone for FY 2014-15 and FY 2015-16. The fuel prices and calorific values of the fuels along with price of limestone as claimed by the Petitioner and

approved by the Commission is as shown in the Table below:

Table 14: Fuel prices and GCV and price of limestone

Unit	FY 2014-15					FY 2015-16				
	Lignite		Secondary fuel oil		Limestone	Lignite		Secondary fuel oil		Limestone
	GCV	Price	GCV	Price	Price	GCV	Price	GCV	Price	Price
	kcal/kg	Rs./MT	kcal/lt.	Rs./kL	Rs./MT	kcal/kg	Rs./MT	kcal/lt.	Rs./kL	Rs./MT
Unit 1	2948.99	971.19	10600.00	62925.83	611.00	-	-	-	-	-
Unit 2	2948.99	1071.74	10600.00	60115.52	611.00	2988.09	1310.99	10600.00	40461.77	611.00

Annual Fixed Charges

4.29 The Annual Fixed Charges comprise of the following elements:

- (i) Operation and Maintenance (O&M) expenses
- (ii) Depreciation
- (iii) Interest and finance charges on term loans
- (iv) Return on Equity
- (v) Insurance
- (vi) ARR and tariff petition fees
- (vii) Interest on working capital
- (viii) Less: Non-Tariff Income

4.30 Each of these elements has been dealt with in the following paragraphs.

Operation and Maintenance (O&M) Expenses

GLPL's Submission

4.31 GLPL claimed the actual O&M expenses for FY 2014-15 to FY 2016-17 as shown in the Table below:

Table 15: Normative O&M expenses claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	26.45	19.45	28.00	11.41	29.64	4.79
Unit 2	26.45	13.96	28.00	11.41	29.64	4.79
Total	52.90	33.40	55.99	22.82	59.27	9.58

4.32 Further, as per Regulation 47 of RERC Tariff Regulations, 2014, in case the

process water is required to be transported over a distance of more than 50 km then appropriate special O&M expenses, subject to the prudence check by the Commission, shall be allowed in addition to the above O&M expenses. It shall include O&M expenses related to pipe line beyond 50 km and water pumping station operation cost and additional power consumption for such pumping stations.

4.33 GLTPP is bringing process water from Indira Gandhi Nahar Pariyojana Mohangarh Jaisalmer located at 170 km from the power plant and there are 4 pumping stations for pumping water from Mohangarh to Giral. The complete pipeline and pumping stations are maintained by GLTPP, the O&M of pipeline and pumping stations is carried out by GLTPP staff and single contract man power, the spares and consumables are not accounted separately for 50 km and 120 km. Thus, the expenditure is not accounted separately for 50 km and 120 km. Therefore, the expenditure for these heads is taken on prorata basis i.e., per km basis and claimed for 120 km out of 170 km.

4.34 The electricity consumption of Mohangarh pumping station is not claimed as it is near the canal. The electricity charges for Kanod pumping station are divided in the ratio of 10:25 as this pumping station pumps water for 35 km out of which 10 km comes under the first 50 km range and rest 25 km is beyond the 50 km range. Further, the electricity for Aakal and Devikot is claimed in full.

4.35 Expenses other than electricity charges have been calculated considering per km pro rata basis i.e., Total Expenses x 120 / 170 (120 km=170 km-50 km).

Table 16: Special O&M expenses claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	1.11	1.66	1.17	1.05	1.17	0.94
Unit 2	1.11	1.23	1.17	0.63	1.17	0.94
Total	2.22	2.89	2.34	1.68	2.34	1.89

4.36 GLPL also referred to Regulation 9(2) of the RERC Tariff Regulations, 2014 regarding sharing of gain or loss on account of controllable factors. GLPL claimed the actual O&M expenses including the actual special O&M expenses as shown in the Table below, in its true up claim for FY 2014-15 to FY 2016-17.

Table 17: Total O&M expenses claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	27.56	21.11	29.17	12.46	30.81	5.73
Unit 2	27.56	15.18	29.17	12.04	30.81	5.73
Total	55.12	36.29	58.33	24.50	61.61	11.47

Commission's Analysis:

4.37 The Commission vide its Order dated 07.12.2016 on approval of ARR and Tariff for GLPL for FY 2014-15 to FY 2016-17 had approved the normative O&M expenses in accordance with RERC Tariff Regulations, 2014. The Commission has considered the same in the true up for FY 2014-15 to FY 2016-17.

4.38 Further Regulation 47(4) of the RERC Tariff Regulations, 2014 specifies as under:

“(4) In case the process water is required to be transported over a distance of more than 50 km, then appropriate special O&M expenses, subject to the prudence check by the Commission, shall be allowed in addition to the above O&M expenses. It shall include O&M expenses related to pipe line beyond 50 km and water pumping station operation cost, and additional power consumption for such stations.”

4.39 The Commission observed that the Petitioner has not substantiated its claim towards special O&M expenses its petition. The Commission therefore directed the Petitioner to submit the same. In response the Petitioner vide its reply to objections dated 20.04.2018 submitted the basis of allocation of various expenses on the Units. The Petitioner however did not submit any supporting documents to justify the cost booked. However, it is observed

that the Petitioner has revised its claim for both the units. The Commission has considered the revised submissions of the Petitioner. The Commission is of the view that as the O&M contract has been given for the entire pipe line and in the absence of actual expenses incurred in segregation for the pipeline that is beyond 50 km range and within 50 km range, the Commission is unable to carry out the prudence check of actual O&M expenses incurred against this pipeline beyond 50 Km. Allowing the special O&M on pro-rata basis will not be a correct approach because many overheads may be common for pipeline beyond the range of 50 km and within the range of 50 km. Therefore, in line with the approach adopted by the Commission in its previous Orders, the Commission in view of the above has only approved the electricity consumption charges in the special O&M expenses as claimed by GLPL in its replies to data gaps.

4.40 The special O&M expenses approved by the Commission are as shown in Tables below.

Table 18: Special O&M expenses approved by the Commission (Rs. Crore)

Particulars	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Revised claim	Approved on true up	Approved in Tariff Order	Revised claim	Approved on true up	Approved in Tariff Order	Revised claim	Approved on true up
Unit 1									
Electricity consumption charges	1.11	0.26	0.26	1.17	0.31	0.31	1.17	0.01	0.01
Pipe line maintenance cost	0.00	0.04	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Repairs cost	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee cost	0.00	0.35	0.00	0.00	0.26	0.00	0.00	0.00	0.00
Sub-total	1.11	0.68	0.26	1.17	0.63	0.31	1.17	0.01	0.01
Unit 2									
Electricity consumption charges	1.11	0.26	0.26	1.17	0.31	0.31	1.17	0.01	0.01
Pipe line maintenance cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repairs cost	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee cost	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-total	1.11	0.35	0.26	1.17	0.31	0.31	1.17	0.01	0.01
Total	2.22	1.03	0.52	2.34	0.94	0.61	2.34	0.02	0.02

4.41 The total O&M expenses approved by the Commission are as shown in the

Table below:

Table 19: Total O&M expenses approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	27.56	21.11	26.71	29.17	12.46	28.30	30.81	5.73	29.64
Unit 2	27.56	15.18	26.71	29.17	12.04	28.30	30.81	5.73	29.65
Total	55.12	36.29	53.42	58.33	24.50	56.61	61.61	11.47	59.29

Additional Capitalisation

GLPL's Submission

4.42 The opening GFA for FY 2014-15 as claimed by GLPL is as shown in the Table below:

Table 20: Opening GFA for FY 2014-15 as claimed by GLPL (Rs. Crore)

Particulars	FY 2014-15	
	Unit 1	Unit 2
Land & Land Rights	1.31	0.02
Building & civil Works of Power Plants	88.67	1.96
Hydraulic Works	69.08	29.74
Other civil works	0.00	0.34
Plant & Machinery	616.72	797.71
Lines & cable Network	0.47	16.76
Vehicles	0.17	0.00
Furniture & Fixtures	0.38	0.01
Office Equipment	0.14	0.04
Total	776.94	846.58

4.43 The actual additional capitalisation claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 21: Additional capitalisation claimed by GLPL

S. No.	Year	Amount (Rs.)	Asset class	Details
Unit 1				
1	FY 2014-15	43,55,280	Land	Land purchased from RSMM
2		28,19,086	Plant & Machinery	Balance payment released to

S. No.	Year	Amount (Rs.)	Asset class	Details
				consultant M/s Design
3		4,39,858	Office equipment	Computer
4		3,50,262	Office equipment	Office equipment
5	FY 2016-17	51,24,484	Building & civil works	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
6		23,75,000	Plant & Machinery	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
7		56,65,014	Hydraulic works	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
8		19,47,317	Land	Land addition
9		-18,66,427	Land	Deduction on transfer of assets
10		-1,40,00,000	Plant & Machinery	Deduction on transfer of assets
Unit 2				
11	FY 2014-15	3,38,48,180	Plant & Machinery	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
12	FY 2015-16	2,61,81,239	Plant & Machinery	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
13	FY 2016-17	6,52,840	Building & civil works	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
14		6,83,569	Hydraulic works	Balance payment released as per Regulation 17(1)(a) of RERC Tariff Regulations, 2014
15		-4,42,42,166	Plant & Machinery	Deduction on transfer of assets

4.44 The GFA addition and deduction as considered by GLPL in its computations of depreciation is as shown in the Table below:

Table 22: GFA addition and deduction as submitted by GLPL in its depreciation computations (Rs. Crore)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17		
	Unit 1	Addition	Deduction	Addition	Deduction	Addition	Deduction
Land & Land Rights		0.44	0.00	0.00	0.00	0.19	0.19
Building & civil Works of Power Plants		0.00	0.00	0.00	0.00	0.51	0.00
Hydraulic Works		0.00	0.00	0.00	0.00	0.57	0.00
Plant & Machinery		0.32	0.00	0.00	0.00	0.24	0.14
Lines & cable Network		0.00	0.00	0.00	0.00	0.00	0.00
Vehicles		0.00	0.00	0.00	0.00	0.00	0.00
Furniture & Fixtures		0.00	0.00	0.00	0.00	0.00	0.00
Office Equipment		0.04	0.00	0.00	0.00	0.00	0.00
Total		0.79	0.00	0.00	0.00	1.51	0.33
Unit 2	Addition	Deduction	Addition	Deduction	Addition	Deduction	
Land & Land Rights		0.00	0.00	0.00	0.00	0.00	0.00
Building & civil Works of Power Plants		0.00	0.00	0.00	0.00	0.07	0.00
Hydraulic Works		0.00	0.00	0.00	0.00	0.07	0.00
Other civil works		0.00	0.00	0.00	0.00	0.00	0.00
Plant & Machinery		3.38	0.00	2.62	0.00	0.00	4.42
Lines & cable Network		0.00	0.00	0.00	0.00	0.00	0.00
Vehicles		0.00	0.00	0.00	0.00	0.00	0.00
Furniture & Fixtures		0.00	0.00	0.00	0.00	0.00	0.00
Office Equipment		0.00	0.00	0.00	0.00	0.00	0.00
Total		3.38	0.00	2.62	0.00	0.13	4.42

4.45 GLPL submitted that the above additional capitalisation has been claimed in accordance with the Regulation 17 of the RERC Tariff Regulations, 2014.

Commission's Analysis:

4.46 The Commission vide its Order dated 04.04.2018 on approval of true up for Units 1 & 2 from the COD of the respective Units till FY 2013-14 had approved the closing GFA as on 31.03.2014. The same has been considered as the opening GFA for FY 2014-15 as shown below:

Table 23: Opening GFA for FY 2014-15 as considered by the Commission (Rs. Crore)

Particulars	FY 2014-15	
	Unit 1	Unit 2
Land & Land Rights	1.31	0.02
Building & civil Works of Power Plants	88.67	1.96
Hydraulic Works	69.08	29.72

Particulars	FY 2014-15	
	Unit 1	Unit 2
Other civil works	0.00	0.34
Plant & Machinery	616.88	797.75
Lines & cable Network	0.30	16.74
Vehicles	0.17	0.00
Furniture & Fixtures	0.38	0.01
Office Equipment	0.14	0.04
Total	776.93	846.58

4.47 The Unit 2 had achieved COD on 12.03.2011 and Unit 1 had achieved COD on 18.10.2011 thereby, the station had achieved COD on 18.10.2011. In accordance with RERC Tariff Regulations, 2014, the cut-off date means the 31st March of the year closing after 365 days from the date of commercial operation of the project and therefore, the cut-off date for GLPL is 31.03.2013. Hence, the period under true up in the instant petition falls after the cut-off date.

4.48 As regards the additional capitalisation incurred after the cut-off date, Regulation 17(2) of the RERC Tariff Regulations, 2014 specifies as under:

“(2) The capital expenditure incurred on the following counts after the cut-off date may, at its discretion, be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
- (ii) Change in law;*
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (iv) Any additional works/ services, which have become necessary for efficient and successful operation of a generating station or transmission system but not included in the original capital cost.”*

4.49 The Petitioner neither in the petition, nor in the replies to data gaps, submitted the justification for the additional capitalisation claimed, in accordance with the above stated Regulation. Further, the expenditure incurred towards minor assets like office furniture is not allowable in additional capitalisation which has been the approach adopted by the

Commission for other generating stations in the State. Hence, the Commission has not approved the additional capitalisation claimed by GLPL for FY 2014-15 to FY 2016-17.

4.50 GLPL has claimed the GFA deduction for some of the years. The Commission has considered the GFA deduction as claimed by GLPL in the true up for FY 2014-15 to FY 2016-17.

4.51 In view of the above, the GFA balances approved by the Commission are as shown in the Table below:

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Opening GFA	Closing GFA	Opening GFA	Closing GFA	Opening GFA	Closing GFA
Unit 1						
Land & Land Rights	1.31	1.31	1.31	1.31	1.31	1.12
Building & civil Works of Power Plants	88.67	88.67	88.67	88.67	88.67	88.67
Hydraulic Works	69.08	69.08	69.08	69.08	69.08	69.08
Other civil works	0.00	0.00	0.00	0.00	0.00	0.00
Plant & Machinery	616.88	616.88	616.88	616.88	616.88	616.74
Lines & cable Network	0.30	0.30	0.30	0.30	0.30	0.30
Vehicles	0.17	0.17	0.17	0.17	0.17	0.17
Furniture & Fixtures	0.38	0.38	0.38	0.38	0.38	0.38
Office Equipment	0.14	0.14	0.14	0.14	0.14	0.14
Total	776.93	776.93	776.93	776.93	776.93	776.60
Unit 2						
Land & Land Rights	0.02	0.02	0.02	0.02	0.02	0.02
Building & civil Works of Power Plants	1.96	1.96	1.96	1.96	1.96	1.96
Hydraulic Works	29.72	29.72	29.72	29.72	29.72	29.72
Other civil works	0.34	0.34	0.34	0.34	0.34	0.34
Plant & Machinery	797.75	797.75	797.75	797.75	797.75	793.33
Lines & cable Network	16.74	16.74	16.74	16.74	16.74	16.74
Vehicles	0.00	0.00	0.00	0.00	0.00	0.00
Furniture & Fixtures	0.01	0.01	0.01	0.01	0.01	0.01
Office Equipment	0.04	0.04	0.04	0.04	0.04	0.04
Total	846.58	846.58	846.58	846.58	846.58	842.16

Depreciation

GLPL's Submission

4.52 The depreciation claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below.

Table 24: Depreciation claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	39.23	39.25	39.23	39.26	39.23	39.29
Unit 2	44.65	44.74	44.65	44.90	44.65	44.86
Total	83.88	83.99	83.88	84.16	83.88	84.14

Commission's Analysis:

4.53 The Commission has computed depreciation on the basis of approved GFA for each year in this Order, in accordance with the RERC Tariff Regulations, 2014. The depreciation approved by the Commission is as shown in the tables below:

Table 25: Depreciation approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	39.23	39.25	39.25	39.23	39.26	39.25	39.23	39.29	39.24
Unit 2	44.65	44.74	44.65	44.65	44.90	44.65	44.65	44.86	44.54
Total	83.88	83.99	83.90	83.88	84.16	83.90	83.88	84.14	83.78

Interest and finance charges on term loan

GLPL's Submission

4.54 The interest and finance charges on term loan have been claimed as per Regulation 21 of the RERC Tariff Regulations, 2014. The normative loan approved by the Commission in its Orders dated 12.08.2015 along with the addition/reduction of loan corresponding to the GFA addition/deduction has been considered. The loan repayment has been considered as equal to the depreciation for the year. The interest and finance charges on term

loan claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 26: Interest and finance charges on term loan claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	60.65	64.35	56.63	59.54	53.16	47.26
Unit 2	65.92	66.61	60.18	59.90	54.44	46.99
Total	126.57	130.96	116.81	119.44	107.60	94.26

Commission's Analysis:

- 4.55 The Commission has considered the closing loan balance approved on true up for FY 2013-14 as the opening loan balance for FY 2014-15 for the respective Unit. The repayment of loan has been considered equal to the depreciation approved by the Commission for the respective year. The debt: equity ratio while allowing the Transfer of assets/ deduction in assets has been considered the same as considered by the Petitioner in the petition.
- 4.56 As per Regulation 21 (5) of the RERC Tariff Regulations, 2014, the interest rate for computing interest on loan shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year. The Commission sought the computations of weighted average interest rate for FY 2014-15, FY 2015-16 and FY 2016-17 in accordance with RERC Tariff Regulations, 2014. The Petitioner in response submitted the year wise computation of weighted average interest on loan.
- 4.57 The Commission for computing the rate of interest for actual loans has considered the interest rate as applicable at the beginning of each year and has computed the weighted average rate of interest considering the opening loan balances submitted by the Petitioner.
- 4.58 The Petitioner in its petition has also claimed the finance charges. The Commission directed the Petitioner to submit the basis of claiming finance charges. The Petitioner in response submitted that the financing charges

claimed is the amount actually paid to the government as levy/commission for providing guarantee on working capital loan specific to each station. The Commission has therefore considered the financing charges paid toward funding of working capital loan.

Unit 1	FY 2014-15	FY 2015-16	FY 2016-17
Particulars	Approved on true up	Approved on true up	Approved on true up
Opening balance	527.85	488.60	449.36
Addition	0.00	0.00	-0.26
Repayment	39.25	39.25	39.24
Closing balance	488.60	449.36	409.85
Rate of interest	12.51%	12.55%	10.91%
Interest	63.60	58.85	46.88
Finance charges	0.55	0.45	0.10
Interest and finance charges	64.15	59.31	46.98
Unit 2			
Opening balance	534.97	490.32	445.66
Addition	0.00	0.00	-3.51
Repayment	44.65	44.65	44.54
Closing balance	490.32	445.66	397.61
Rate of interest	12.81%	12.60%	11.00%
Interest	65.65	58.95	46.38
Finance charges	0.74	0.45	0.09
Interest and finance charges	66.39	59.41	46.47

4.59 The interest and finance charges on term loan approved by the Commission is as shown in the Table below:

Table 27: Interest and finance charges on term loan approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	60.65	64.35	64.15	56.63	59.54	59.31	53.16	47.26	46.98
Unit 2	65.92	66.61	66.39	60.18	59.90	59.41	54.44	46.99	46.47
Total	126.57	130.96	130.54	116.81	119.44	118.71	107.60	94.26	93.45

Return on Equity (RoE)

GLPL's Submission

4.60 GLPL has not claimed any RoE for FY 2014-15. GLPL has claimed RoE at the rate of 5.00% and 15.50% for FY 2015-16 and FY 2016-17 respectively.

4.61 The RoE claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 28: RoE claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	0.00	0.00	23.65	7.58	23.65	23.51
Unit 2	0.00	0.00	27.15	8.79	27.15	27.21
Total	0.00	0.00	50.80	16.36	50.80	50.71

Commission's Analysis:

4.62 The Commission has considered the closing equity balance approved on true up for FY 2013-14 as the opening equity balance for FY 2014-15 for the respective Unit. The debt: equity ratio while allowing the Transfer of assets/ deduction in assets has been considered the same as considered by the Petitioner in the petition.

4.63 GoR in its letter dated 18.03.2015 has allowed RoE at the rate of 5% in FY 2015-16, 10% in FY 2016-17 and 15.50% from FY 2017-18 onwards. However, in the revised letter of GoR dated 21.03.2016, the rate of RoE for FY 2016-17 was revised to 15.50% but the rate of RoE for FY 2015-16 remained the same at 5%. Therefore, the Commission has approved the RoE for FY 2015-16 and FY 2016-17 as per the latest order of GoR and in accordance with Regulation 20 of the RERC Tariff Regulations, 2014.

4.64 The RoE approved by the Commission is as shown in the Table below:

Table 29: RoE approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	0.00	0.00	0.00	23.65	7.58	7.63	23.65	23.51	23.65
Unit 2	0.00	0.00	0.00	27.15	8.79	8.76	27.15	27.21	27.08
Total	0.00	0.00	0.00	50.80	16.36	16.39	50.80	50.71	50.72

Insurance

GLPL's Submission

4.65 The actual insurance charges claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 30: Insurance charges claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	0.68	0.68	0.58	0.58	0.58	0.49
Unit 2	0.60	0.60	0.67	0.66	0.67	0.66
Total	1.28	1.28	1.25	1.24	1.25	1.15

Commission's Analysis:

4.66 The Commission has considered the submission of the Petitioner and has allowed the following insurance charges as shown in the Table below.

Table 31: Insurance charges approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	0.68	0.68	0.68	0.58	0.58	0.58	0.58	0.49	0.49
Unit 2	0.60	0.60	0.60	0.67	0.66	0.66	0.67	0.66	0.66
Total	1.28	1.28	1.28	1.25	1.24	1.24	1.25	1.15	1.15

ARR and Tariff Petition Fees

GLPL's Submission

4.67 The ARR and Tariff Petition fees claimed by GLPL for FY 2014-15 to FY 2016-

17 is as shown in the Table below:

Table 32: ARR and tariff petition fees claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	0.06	0.31	0.06	0.06	0.06	0.13
Unit 2	0.06	0.38	0.06	0.06	0.06	0.06
Total	0.13	0.69	0.13	0.13	0.13	0.19

Commission's Analysis:

4.68 The ARR and Tariff Petition Fees shall be allowed at the rate as specified in RERC (Fees for Petitions) Regulations, 2005. Accordingly, the Commission has computed the ARR and Tariff Petition Fees at the rate of Rs. 5000/MW for all the generating stations. The details of Recovery of ARR and Tariff petition fees approved by the Commission for True up of FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 33: ARR and tariff petition fees approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	0.06	0.31	0.06	0.06	0.06	0.06	0.06	0.13	0.06
Unit 2	0.06	0.38	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Total	0.13	0.69	0.13	0.13	0.13	0.13	0.13	0.19	0.13

Interest on Working Capital (IoWC)

GLPL's Submission

4.69 The normative IoWC has been computed in accordance with the RERC Tariff Regulations, 2014. Regulation 27(2) of the RERC Tariff Regulations, 2014 specifies that the rate of IoWC shall be on normative basis and shall be 250 basis points higher than the average Base Rate of SBI prevalent during first six months of the year previous to the relevant year. Accordingly, the normative rate of IoWC has been considered as 12.21%, 12.50% and 12.26% for FY 2014-15, FY 2015-16 and FY 2016-17 respectively. The IoWC at normative rate of interest claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 34: loWC at normative rate of interest claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	4.87	3.17	5.80	2.90	5.90	2.85
Unit 2	5.24	3.69	6.09	3.98	6.07	3.00
Total	10.11	6.86	11.89	6.89	11.97	5.85

4.70 Further, Regulation 9(2)(a) of the RERC Tariff Regulations, 2014 specifies that the variation in loWC on account of actual vis-à-vis the normative rate of loWC shall be shared in the ratio of 50:50 between the generating company and the beneficiary. The actual rate of loWC for GLPL has been considered as the actual rate of loWC for RVUN as a whole for the respective year. The sharing of variation in loWC on account of variation in rate of loWC claimed by GLPL is as shown in the Table below:

Table 35: Sharing of variation in loWC claimed by GLPL (Rs. Crore)

Year	loWC at normative rate of interest	loWC at actual rate of interest	(Gain)/Loss	Sharing of (Gain)/Loss
	A	B	C=B-A	D=50%*C
Unit 1				
FY 2014-15	3.17	3.22	0.04	0.02
FY 2015-16	2.90	2.94	0.04	0.02
FY 2016-17	2.85	3.11	0.25	0.13
Unit 2				
FY 2014-15	3.69	3.73	0.05	0.02
FY 2015-16	3.98	4.04	0.05	0.03
FY 2016-17	3.00	3.26	0.27	0.13

Commission's Analysis:

4.71 The Commission has computed loWC in accordance with Regulation 27 of the RERC Tariff Regulations, 2014. The Commission observed that although GLPL submitted the loWC has been computed in accordance with the Regulations, the working capital requirement has been computed considering the actual fuel cost i.e., fuel cost corresponding to the actual generation as opposed to the fuel cost corresponding to target Availability as specified in the Regulations. The Commission has computed the loWC

considering the fuel cost corresponding to target Availability and normative performance parameters as approved in this Order. The loWC at normative rate of interest approved by the Commission is as shown in the Table below:

Table 36: loWC at normative rate of interest approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	4.87	3.17	4.87	5.80	2.90	3.16	5.90	2.85	3.22
Unit 2	5.24	3.69	5.18	6.09	3.98	5.71	6.07	3.00	3.35
Total	10.11	6.86	10.05	11.89	6.89	8.87	11.97	5.85	6.58

4.72 Further, Regulation 9(2)(a) of the RERC Tariff Regulations, 2014 specifies that the variation in loWC on account of actual vis-à-vis the normative rate of loWC shall be shared in the ratio of 50:50 between the generating company and the beneficiary. The actual rate of loWC for GLPL has been considered as the actual rate of loWC for RVUN as a whole for the respective year. The sharing of variation in loWC on account of variation in rate of loWC approved by the Commission is as shown in the Table below:

Table 37: Sharing of variation in loWC approved by the Commission (Rs. Crore)

Year	loWC at normative rate of interest	loWC at actual rate of interest	(Gain)/Loss	Sharing of (Gain)/Loss
	A	B	C=B-A	D=50%*C
Unit 1				
FY 2014-15	4.87	4.94	0.06	0.03
FY 2015-16	3.16	3.20	0.04	0.02
FY 2016-17	3.22	3.19	-0.04	-0.02
Unit 2				
FY 2014-15	5.18	5.24	0.07	0.03
FY 2015-16	5.71	5.79	0.07	0.04
FY 2016-17	3.35	3.32	-0.04	-0.02

Non-Tariff Income

Petitioner's Submission

4.73 The Petitioner submitted that the main heads of accounts of Non-Tariff

income are sale of scrap, income from rent on land/buildings and miscellaneous receipts (rebates etc.) The Non-Tariff income submitted by the Petitioner is as shown in the table below.

Table 38: Non-tariff income claimed by GLPL (Rs. Crore)

Unit	FY 2014-15		FY 2015-16		FY 2016-17	
	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up	Approved in Tariff Order	Claimed for true up
Unit 1	1.04	1.04	1.09	0.14	1.15	0.14
Unit 2	0.03	0.03	0.03	0.14	0.03	0.14
Total	1.07	1.07	1.12	0.28	1.18	0.28

Commission's Analysis:

4.74 The Commission has considered the non-tariff income as submitted by the Petitioner on the basis of audited accounts. The Non-Tariff income approved by the Commission for is as show in the Table below:

Table 39: Non-tariff income approved by the Commission (Rs. Crore)

Unit	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1	1.04	1.04	1.04	1.09	0.14	0.14	1.15	0.14	0.14
Unit 2	0.03	0.03	0.03	0.03	0.14	0.14	0.03	0.14	0.14
Total	1.07	1.07	1.07	1.12	0.28	0.28	1.18	0.28	0.28

Annual Fixed Charges

4.75 Based on the above analysis, the approved Annual Fixed Charges for FY 2014-15 to FY 2016-17 are as under:

Table 40: Annual Fixed Charges for FY 2014-15 to FY 2016-17 (Rs. Crore)

Particulars	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Unit 1									
O&M expenses	27.56	21.11	26.71	29.17	12.46	28.30	30.81	5.73	29.64
Interest and finance charges on term loans	60.65	64.35	64.15	56.63	59.54	59.31	53.16	47.26	46.98
Depreciation	39.23	39.25	39.25	39.23	39.26	39.25	39.23	39.29	39.24

Particulars	FY 2014-15			FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up	Approved in Tariff Order	Claimed for true up	Approved on true up
Interest on working capital	4.87	3.17	4.87	5.80	2.90	3.16	5.90	2.85	3.22
Return on Equity	0.00	0.00	0.00	23.65	7.58	7.63	23.65	23.51	23.65
Insurance on fixed assets	0.68	0.68	0.68	0.58	0.58	0.58	0.58	0.49	0.49
ARR and tariff petition fees	0.06	0.31	0.06	0.06	0.06	0.06	0.06	0.13	0.06
Less: Non- tariff income	1.04	1.04	1.04	1.09	0.14	0.14	1.15	0.14	0.14
Annual Fixed Charges	132.01	127.83	134.68	154.03	122.23	138.15	152.24	119.11	143.14
Unit 2									
O&M expenses	27.56	15.18	26.71	29.17	12.04	28.30	30.81	5.73	29.65
Interest and finance charges on term loans	65.92	66.61	66.39	60.18	59.90	59.41	54.44	46.99	46.47
Depreciation	44.65	44.74	44.65	44.65	44.90	44.65	44.65	44.86	44.54
Interest on working capital	5.24	3.69	5.18	6.09	3.98	5.71	6.07	3.00	3.35
Return on Equity	0.00	0.00	0.00	27.15	8.79	8.76	27.15	27.21	27.08
Insurance on fixed assets	0.60	0.60	0.60	0.67	0.66	0.66	0.67	0.66	0.66
ARR and tariff petition fees	0.06	0.38	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Less: Non- tariff income	0.03	0.03	0.03	0.03	0.14	0.14	0.03	0.14	0.14
Annual Fixed Charges	144.00	131.17	143.56	167.94	130.20	147.42	163.81	128.37	151.67

4.76 The recovery of full fixed charges is allowed if the actual Availability is equal to or more than the target Availability. If the actual Availability is lower than the target Availability, the approved normative Fixed Charges are reduced proportionately in trueing up.

Table 41: AFC reduction on account of non-achievement of target Availability (Rs. Crore)

Year	Approved AFC	Actual Availability considered by the Commission	Target Availability for full recovery of fixed charges	Reduced AFC	AFC reduced
Unit 1					
FY 2014-15	134.68	9.06%	76.13%	16.02	118.66
FY 2015-16	138.15	0.00%	78.63%	0.00	138.15
FY 2016-17	143.14	0.00%	80.00%	0.00	143.14

Year	Approved AFC	Actual Availability considered by the Commission	Target Availability for full recovery of fixed charges	Reduced AFC	AFC reduced
Unit 2					
FY 2014-15	143.56	19.76%	77.64%	36.55	107.02
FY 2015-16	147.42	21.60%	80.00%	39.80	107.62
FY 2016-17	151.67	0.00%	80.00%	0.00	151.67

Energy Charges

Commission's Analysis:

4.77 The Commission has computed the energy charges for both the units considering the approved performance parameters and actual approved fuel price and calorific value. The energy charges computed by the Commission is as shown in the Tables below:

Table 42: Energy charges for FY 2014-15 (Rs. Crore)

Particulars	Units	FY 2014-15			
		Unit 1		Unit 2	
		Claimed	Approved	Claimed	Approved
Gross Generation	MU	114.51	114.51	242.55	242.55
Auxiliary Energy Consumption	%	23.36%	11.50%	21.04%	11.50%
Net Generation	MU	87.76	101.34	191.53	214.66
Gross Station Heat Rate	kcal/kWh	3737.73	2403.50	3765.13	2403.50
Average Sulphur Content in Lignite	%	5.21%	5.21%	5.21%	5.21%
Weighted average GCV of Lignite	kcal/kg	2948.99	2948.99	2948.99	2948.99
Weighted average GCV of Oil	kcal/ltr.	10600.00	10600.00	10600.00	10600.00
Secondary fuel oil consumption	ml/kWh	0.72	1.00	1.62	1.00
Specific Lignite consumption	kg/kWh	1.26	0.81	1.27	0.81
Lime stone consumption	kg/kWh	0.02	0.24	0.03	0.24
Price of Oil	Rs./kL	62925.83	62925.83	60115.52	60115.52
Price of Lignite	Rs./MT	971.19	971.19	1071.74	1071.74
Price of Lime stone	Rs./MT	611.00	611.00	611.00	611.00
Cost of Oil per unit	Rs./kWh	0.059	0.071	0.124	0.068
Cost of Lignite per unit	Rs./kWh	1.603	0.890	1.725	0.983
Cost of Limestone per unit	Rs./kWh	0.013	0.163	0.021	0.163
Rate of Energy Charge	Rs./kWh	1.674	1.125	1.870	1.214
Energy Charges	Rs. Crore	14.69	11.40	35.81	26.06

Table 43: Energy Charges for FY 2015-16 (Rs. Crore)

Particulars	Units	FY 2015-16	
		Unit 2	
		Claimed	Approved
Gross Generation	MU	254.03	254.03
Auxiliary Energy Consumption	%	17.60%	11.50%
Net Generation	MU	209.33	224.82
Gross Station Heat Rate	kcal/kWh	3936.74	2403.50
Average Sulphur Content in Lignite	%	4.82%	4.82%
Weighted average GCV of Lignite	kcal/kg	2988.09	2988.09
Weighted average GCV of Oil	kcal/ltr.	10600.00	10600.00
Secondary fuel oil consumption	ml/kWh	1.20	1.00
Specific Lignite consumption	kg/kWh	1.31	0.80
Lime stone consumption	kg/kWh	0.01	0.22
Price of Oil	Rs./KL	40461.77	40461.77
Price of Lignite	Rs./MT	1310.99	1310.99
Price of Lime stone	Rs./MT	611.00	611.00
Cost of Oil per unit	Rs./kWh	0.059	0.046
Cost of Lignite per unit	Rs./kWh	2.089	1.186
Cost of Limestone per unit	Rs./kWh	0.004	0.149
Rate of Energy Charge	Rs./kWh	2.153	1.381
Energy Charges	Rs. Crore	45.06	31.05

4.78 As there was no actual generation from Unit 1 in FY 2015-16 and FY 2016-17 and Unit 2 in FY 2016-17, the energy charges have been considered as zero for those Units during the period of non-generation.

4.79 Further, Regulation 57(2) of RERC Tariff Regulations, 2014 states as follows:

"57. Sharing of gains and losses on account of controllable factors

(1) ...

(2) The Financial losses by a generating company on account of Station Heat Rate, Auxiliary Consumption and Secondary Fuel Oil Consumption shall be borne by the Generating Company"

4.80 Therefore, from the Regulation 57(2) of RERC Tariff Regulations 2014, it is clear that any loss on account of controllable factor has to be borne by the generator and no sharing of the same will be done. Therefore, the

Commission in this order has not done the sharing of energy charges in accordance with Regulation 57(2) of RERC Tariff Regulations 2014.

Revenue Side True Up
GLPL's Submission

4.81 The actual revenue from sale of power claimed by GLPL for FY 2014-15 to FY 2016-17 is as shown in the Table below:

Table 44: Revenue from sale of power claimed by GLPL (Rs. Crore)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Fixed Charges	17.63	28.52	33.63	30.74	-2.67	14.56
Energy Charges	9.66	19.25	-1.70	21.04	-0.58	-0.26
FPA	0.33	3.58	-1.79	8.51	0.00	0.00
Total	27.62	51.34	30.14	60.29	-3.25	14.30

Commission's Analysis:

4.82 The Commission has gone through the submissions of the Petitioner. The Commission directed the Petitioner to submit the month wise energy and revenue billed to Discoms for each unit. The Petitioner in response submitted the same. Petitioner in its additional submissions submitted that GLPL Unit-1 during FY 15-16 and 16-17 and GLPL Unit-2 during FY 16-17 was not in operation therefore, revenue from sale of power in these years is zero. Petitioner further submitted that reason for the negative values of revenue is due to non-generation from the Units and drawal of energy from the grid for auxiliary consumption.

4.83 Therefore in light of the revised submissions of the Petitioner, Commission has considered the revenue from sale of power for true up as claimed by GLPL as shown in the Table below:

Table 45: Revenue from sale of power considered by the Commission (Rs. Crore)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Fixed Charges	17.63	28.52	0.00	30.74	0.00	0.00
Energy Charges	9.66	19.25	0.00	21.04	0.00	0.00

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
FPA	0.33	3.58	0.00	8.51	0.00	0.00
Total	27.62	51.34	0.00	60.29	0.00	0.00

Summary of true up

GLPL's Submission

4.84 The summary of true up claimed by GLPL is as shown in the Tables given below:

Table 46: Summary of true up for FY 2014-15 claimed by GLPL for Unit 1 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	132.01	127.67
Variable cost	83.51	14.69
Total Expenses	215.52	142.36
Extra Cost running By GLPL (A)		-73.16
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	215.52	27.62
Total Revenue	215.52	27.62
Extra Amount billed to Discom by GLPL (B)		-187.90
Total Amount Sought from Discom C=(A-B)		114.74
D: Additional gain of saving in interest of IWC		0.02
Total Amount Sought from Discom F=C+D		114.76

Table 47: Summary of true up for FY 2015-16 claimed by GLPL for Unit 1 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	155.12	122.09
Variable cost	2.03	0.00
Total Expenses	157.15	122.09
Extra Cost running By GLPL (A)		-35.06
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	157.15	30.14
Total Revenue	157.15	30.14

Particulars	As per RERC order	As per Audited Accounts /Norms
Extra Amount billed to Discom by GLPL (B)		-127.01
Total Amount Sought from Discom C=(A-B)		91.95
D: Additional gain of saving in interest of IWC		0.02
Total Amount Sought from Discom F=C+D		91.97

Table 48: Summary of true up for FY 2016-17 claimed by GLPL for Unit 1 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	153.39	118.97
Variable cost	1.97	0.00
Total Expenses	155.37	118.97
Extra Cost running By GLPL (A)		-36.39
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	155.37	-3.25
Total Revenue	155.37	-3.25
Extra Amount billed to Discom by GLPL (B)		-158.62
Total Amount Sought from Discom C=(A-B)		122.23
D: Additional gain of saving in interest of IWC		0.13
Total Amount Sought from Discom F=C+D		122.35

Table 49: Summary of true up for FY 2014-15 claimed by GLPL for Unit 2 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	144.00	125.88
Variable cost	93.10	35.81
Total Expenses	237.11	161.69
Extra Cost running By GLPL (A)		-75.41
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	237.11	51.34
Total Revenue	237.11	51.34
Extra Amount billed to Discom by GLPL (B)		-185.76
Total Amount Sought from Discom C=(A-B)		110.35
D: Additional gain of saving in interest of IWC		0.02
Total Amount Sought from Discom F=C+D		110.37

Table 50: Summary of true up for FY 2015-16 claimed by GLPL for Unit 2 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	167.94	124.97
Variable cost	108.16	45.06
Total Expenses	276.10	170.03
Extra Cost running By GLPL (A)		-106.07
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	276.10	60.29
Total Revenue	276.10	60.29
Extra Amount billed to Discom by GLPL (B)		-215.81
Total Amount Sought from Discom C=(A-B)		109.74
D: Additional gain of saving in interest of IWC		0.02
Total Amount Sought from Discom F=C+D		109.77

Table 51: Summary of true up for FY 2016-17 claimed by GLPL for Unit 2 (Rs. Crore)

Particulars	As per RERC order	As per Audited Accounts /Norms
<u>Cost side True Up</u>		
Total Fixed Cost	163.81	123.82
Variable cost	108.16	0.00
Add: PLF Based Incentive		
Total Expenses	271.97	123.82
Extra Cost running By GLPL (A)		-148.15
<u>Revenue Side True up</u>		
Revenue From electricity (fixed And Energy charges)	271.97	14.30
Add: PLF Based Incentive		
Total Revenue	271.97	14.30
Extra Amount billed to Discom by GLPL (B)		-257.67
Total Amount Sought from Discom C=(A-B)		109.52
D: Additional gain of saving in interest of IWC		0.13
Total Amount Sought from Discom F=C+D		109.65

Commission's Analysis:

4.85 The summary of true up approved by the Commission is as shown in the Table below:

Table 52: Summary of true up approved by the Commission (Rs. Crore)

Particulars	FY 2014-15		FY 2015-16		FY 2016-17	
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2
Cost side True Up						
Fixed Cost excluding Non-Tariff Income	135.72	143.59	138.29	147.56	143.28	151.81
Energy charges	11.40	26.06	0.00	31.05	0.00	0.00
Sharing of gain/(loss) in rate of IoWC	0.03	0.03	0.02	0.04	(0.02)	(0.02)
Less: Reduction in AFC due to non-achievement of Target Availability	118.66	107.02	138.15	107.62	143.14	151.67
TOTAL (A)	28.49	62.67	0.16	71.03	0.12	0.12
Revenue Side True up						
Revenue From sale of electricity	27.62	51.34	0.00	60.29	0.00	0.00
Non-tariff income	1.04	0.03	0.14	0.14	0.14	0.14
TOTAL (B)	28.66	51.37	0.14	60.43	0.14	0.14
Revenue Gap/(Surplus) (C=A-B)	(0.17)	11.30	0.02	10.61	(0.02)	(0.02)

4.86 The consolidated revenue gap/(surplus) claimed by GLPL and approved by the Commission is as shown in the Table below:

Table 53: Consolidated revenue gap/(surplus) for FY 2014-15 to FY 2016-17 (Rs. Crore)

Particulars	FY 2014-15			FY 2015-16			FY 2016-17		
	Unit 1	Unit 2	Total	Unit 1	Unit 2	Total	Unit 1	Unit 2	Total
Revenue Gap/(Surplus) claimed for true up	114.76	110.37	225.13	91.97	109.77	201.74	122.35	109.65	232.00
Revenue Gap/(Surplus) approved on for true up	(0.17)	11.30	11.13	0.02	10.61	10.63	(0.02)	(0.02)	(0.04)

4.87 The Commission has accordingly approved year wise revenue gap and surplus for both the units as shown above. The Commission allows GLPL to recover the approved net revenue gap of Rs. 21.72 Crore from the Discoms in the month of June 2018.

SECTION 5

Determination of ARR and Tariff for FY 2018-19

- 5.1 GLPL filed the petition for approval of ARR and Tariff for GLTPP (2x125 MW) for FY 2018-19. The Commission in this section has determined the ARR and Tariff for FY 2018-19.
- 5.2 Unit 1 and Unit 2 were developed by RVUN itself. Unit 1 was handed over to GLPL w.e.f. 01.01.2009 and had achieved COD on 18.10.2011. Unit 2 had achieved COD on 12.03.2011. Thereafter, vide the Resolution passed in the 241st meeting of the Board of Directors of RVUN held on 20.10.2014, it was resolved that approval of Board of Directors is accorded for transfer of Unit 2 of GLTPP to GLPL, a wholly owned subsidiary of RVUN on going concern basis along with all its assets and liabilities on book value at a consideration of Rs. 185 Crore in the form of Equity Shares to be issued by GLPL to RVUN towards the State Government's Equity contribution for setting up of Unit 2 of GLTPP. Such transfer of Unit 2 of GLTPP to GLPL was effective from 01.04.2015.
- 5.3 GLPL has filed the ARR and Tariff petition for the station as a whole. Considering that the COD of both the units have already occurred therefore, the Commission has determined the tariff for both the Units 1 & 2 combined for FY 2018-19.
- 5.4 The stakeholder submitted that as the Units are shutdown, tariff determination for FY 2018-19 need not be carried out. The apprehension of the stakeholder is misplaced in this regard. Tariff determination is a distinct activity from that of recovery of approved tariff for sale of energy to the beneficiaries. The tariff determination of the Petitioner is under Section 62 of the Electricity Act, 2003 based on the Tariff Regulations notified by the Commission from time to time. Under the provisions of the RERC Tariff Regulations, 2014 the Petitioner is required to file the petition for determination of tariff during each year, for the ensuing year. Accordingly, the Petitioner has filed the instant petition. The tariff for a

generating company comprises of two components namely, Annual Fixed Charges and Energy Charges. The recovery of Annual Fixed Charges on month to month basis is linked to Target Availability for the cumulative period upto a particular month during the year. The Energy Charges are recoverable for the actual energy sold to the beneficiaries. Hence, if the generating station is not able to declare Availability and generate energy, the recovery mechanism as stipulated in the Regulations provide ample protection such that the undue cost is not passed on to the beneficiaries.

5.5 The ARR and Tariff Determination Process have been considered in two parts.

- A. Annual Fixed Charges
- B. Variable Charges

5.6 The Annual Fixed Charges comprise of the following elements:

- (i) Operation and Maintenance (O&M) Expenses
- (ii) Depreciation
- (iii) Interest and finance charges on term loan
- (iv) Return on Equity
- (v) Insurance
- (vi) ARR and tariff petition fees
- (vii) Interest on working capital
- (viii) Less: Non-tariff Income

5.7 Each of the annual fixed charges elements has been dealt with in the following paragraphs.

Operation and Maintenance (O&M) Expenses

GLPL's Submission

5.8 GLPL submitted that the normative O&M expenses for FY 2018-19 has been computed as per the norms prescribed under Regulation 47 of the RERC Tariff Regulations, 2014. As per Regulation 24 of RERC Tariff Regulations, 2014, normative O&M expenses allowed at the

commencement of the Control Period (i.e., FY 2014-15) shall be escalated at the rate of 5.85% per annum for each year of the Control Period. The O&M expenses for FY 2018-19 have been claimed accordingly.

- 5.9 Further, as per Regulation 47(4) of the RERC Tariff Regulations, 2014, in case the process water is required to be transported over a distance of more than 50 km, then appropriate special O&M expenses, subject to prudence check by the Commission, shall be allowed in addition to the normative O&M expenses. It shall include O&M expenses related to pipeline beyond 50 km and water pumping station operation cost, and additional power consumption for such pumping stations. GLTPP is bringing the process water from Indira Gandhi Nahar Pariyojana, Mohangarh Jaisalmer located at 170 km from the power plant and there are 4 pumping stations for pumping water from Mohangarh to Giral.

Table 54: Location of Pumping Stations of GLTPP

Pumping Station	Distance from Canal	Total (km)
Mohangarh	located at canal only, push water upto 40 km (0 km-40 km)	40
Kanod	Length 35 km (40 km to 75 km), push water for 35 km.	75
Aakal	Length 30 km (75 km to 105 km), push water for 30 km.	105
Devikot	Length 65 km (105 km to 170 km) till Plant, push water for 65 km.	170

- 5.10 The complete pipeline and pumping stations are maintained by GLTPP, the O&M of pipeline and pumping stations is carried out by GLTPP staff and single contract man power, the spares and consumables are not accounted separately for 50 km and 120 km. Thus, the expenditure is not accounted separately for 50 km and 120 km. Therefore, the expenditure for these heads is taken on prorata basis i.e., per km basis and claimed for 120 km out of 170 km. The electricity consumption of Mohangarh pumping station is not claimed as it is near the canal. The electricity charges for Kanod pumping station are divided in the ratio of 10:25 as this pumping

station pumps water for 35 km out of which 10 km comes under the first 50 km range and rest 25 km is beyond the 50 km range. Further, the electricity for Aakal and Devikot is claimed in full.

5.11 Expenses other than electricity charges have been calculated considering per km pro rata basis, i.e., Total Expenses x 120/170 (120 km=170 km minus 50 km).

5.12 The special O&M expenses claimed by GLPL are as shown in the Table below:

Table 55: Special O&M Expenses claimed by GLPL (Rs. Crore)

Particulars	FY 2018-19
Expense for Man-Power engaged for operation & maintenance for pumping stations	0.00
Expense for maintenance of Raw water pipe line	0.00
Expenses for Spares & Lubrications for R&M of pumping stations	0.00
Expenses for Electricity Consumption of pumping stations (Rs.)	1.89
Total	1.89

5.13 The total O&M Expenses claimed by GLPL is as shown in the Table below:

Table 56: Total O&M expenses claimed by GLPL

Particulars	Units	FY 2018-19
		Claimed
Installed capacity	MW	250
Normative O&M expenses	Rs. lakh/MW	26.56
Normative O&M expenses	Rs. Crore	66.41
Special O&M expenses	Rs. Crore	1.89
Total O&M expenses	Rs. Crore	68.29

Commission's Analysis:

5.14 Regulation 47(2) of the RERC Tariff Regulations, 2014 specifies the normative O&M expenses of Rs. 21.16 Lakh per MW for FY 2014-15 for lignite based generating stations. Further, Regulation 24(3) of the RERC Tariff Regulations, 2014 specifies that the normative O&M expenses allowed for FY 2014-15 shall be escalated at the rate of 5.85% per annum for subsequent each year of the Control Period.

5.15 The Commission has verified GLPL's computations of normative O&M expenses and found it to be in order and accordingly, same has been approved.

5.16 Regulation 47 (4) of RERC Tariff Regulations, 2014 specifies as under:

“(4) In case the process water is required to be transported over a distance of more than 50 km, then appropriate special O&M expenses, subject to the prudence check by the Commission, shall be allowed in addition to the above O&M expenses. It shall include O&M expenses related to pipe line beyond 50 km and water pumping station operation cost, and additional power consumption for such stations.”

5.17 The Commission observed that GLPL has claimed only the electricity charges for the pumping stations, in the special O&M expenses. In line with the approach adopted by the Commission in the approval of tariff for previous years, the Commission has approved the electricity charges for the pumping stations as claimed by GLPL.

5.18 The total O&M expenses approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 57: Total O&M expenses approved by the Commission

Particulars	Units	FY 2018-19	
		Claimed	Approved
Installed capacity	MW	250	250
Normative O&M expenses	Rs. lakh/MW	26.56	26.56
Normative O&M expenses	Rs. Crore	66.41	66.41
Special O&M expenses	Rs. Crore	1.89	1.89
Total O&M expenses	Rs. Crore	68.29	68.29

Additional Capitalisation

GLPL's Submission

5.19 GLPL has considered the closing GFA claimed for FY 2016-17 as the opening GFA for FY 2017-18. GLPL has not claimed any additional capitalisation for FY 2017-18. GLPL has considered the closing GFA claimed for FY 2017-18 as the opening GFA for FY 2018-19. GLPL has not claimed any additional capitalisation for FY 2017-18. Accordingly, the GFA

base considered by GLPL for FY 2018-19 is as shown in the Table below:

Table 58: GFA base considered by GLPL for FY 2018-19 (Rs. Crore)

Particulars	Claimed for FY 2018-19
Land & Land Rights	1.77
Building & civil Works of Power Plants	91.21
Hydraulic Works	99.45
Other civil works	0.34
Plant & Machinery	1416.43
Lines & cable Network	17.24
Vehicles	0.17
Furniture & Fixtures	0.39
Office Equipment	0.22
Total	1627.20

Commission's Analysis:

5.20 The closing GFA approved on true up for FY 2016-17 as the opening GFA for FY 2017-18. The Commission has not approved any additional capitalisation for FY 2017-18. The closing GFA for FY 2017-18 has been considered as the opening GFA for FY 2018-19. The Commission has not approved any additional capitalisation for FY 2018-19. Accordingly, the GFA base approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 59: GFA base approved by the Commission for FY 2018-19 (Rs. Crore)

Particulars	Approved for FY 2018-19
Land & Land Rights	1.14
Building & civil Works of Power Plants	90.63
Hydraulic Works	98.80
Other civil works	0.34
Plant & Machinery	1410.07
Lines & cable Network	17.04
Vehicles	0.17
Furniture & Fixtures	0.39
Office Equipment	0.18
Total	1618.76

Depreciation

GLPL's Submission

5.21 GLPL claimed the depreciation of Rs. 84.06 Crore considering the claimed GFA base for FY 2018-19.

Commission's Analysis:

5.22 The Commission has approved the depreciation for FY 2018-19 considering the approved GFA base in accordance with the provisions of RERC Tariff Regulations, 2014.

5.23 Accordingly, the depreciation approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 60: Depreciation for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Depreciation	84.06	83.66

Interest and finance charges on term loan

GLPL's Submission

5.24 The interest and finance charges on term loan have been worked out as per Regulation 21 of RERC Tariff Regulations, 2014. The normative loan approved by the Commission in its Orders dated 12.08.2015 and addition/reduction in loan corresponding to the capitalisation/write off of gross fixed assets in the respective years has been considered. The loan repayment has been considered equal to the amount of depreciation for the respective year. Accordingly, GLPL has claimed the interest and finance charges of Rs. 75.59 Crore for FY 2018-19.

Commission's Analysis:

5.25 The closing loan balance approved by the Commission in the true up for FY 2016-17 has been considered as the opening loan balance for FY 2017-18. As there is no approved additional capitalisation for FY 2017-18, the

Commission has not considered any loan addition during FY 2017-18. The depreciation for FY 2017-18 has been considered as normative repayment for the year. The closing loan balance for FY 2017-18 has been considered as the opening loan balance for FY 2018-19. As there is no approved additional capitalisation for FY 2018-19, the Commission has not considered any loan addition during FY 2018-19. The depreciation for FY 2018-19 has been considered as normative repayment for the year.

- 5.26 As per Regulation 21(5) of the RERC Tariff Regulations, 2014, the interest rate for computing interest on loan shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year. Accordingly, Commission, for actual loans has considered the interest rate as applicable at the beginning of FY 2018-19.
- 5.27 GLPL has not claimed any finance charges for FY 2018-19.
- 5.28 Accordingly, the interest and finance charges approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 61: Interest and finance charges on term loan for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Opening balance	731.08	723.81
Addition	0.00	0.00
Repayment	84.06	83.66
Closing balance	647.02	640.15
Rate of interest	10.96%	10.96%
Interest	75.49	74.71
Finance charges	0.10	0.00
Interest and finance charges	75.59	74.71

Return on Equity (RoE)

GLPL's Submission

- 5.29 Return on Equity has been computed as per the Regulation 20 of RERC Tariff Regulations, 2014 and accordingly the base rate for the computation of RoE has been taken as 15.5% for FY 2018-19. Accordingly, GLPL has claimed RoE of Rs. 50.67 Crore for FY 2018-19.

Commission's Analysis:

- 5.30 The closing equity balance approved by the Commission in the true up for FY 2016-17 has been considered as the opening equity balance for FY 2017-18. As there is no approved additional capitalisation for FY 2017-18, the Commission has not considered any equity addition during FY 2017-18. The closing equity balance for FY 2017-18 has been considered as the opening equity balance for FY 2018-19. As there is no approved additional capitalisation for FY 2018-19, the Commission has not considered any loan addition during FY 2018-19.
- 5.31 The Commission has considered the rate of 15.5% for FY 2018-19. RoE approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 62: RoE for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Opening balance	326.88	326.75
Addition	0.00	0.00
Closing balance	326.88	326.75
Rate of RoE	15.50%	15.50%
RoE	50.67	50.65

Insurance

GLPL's Submission

- 5.32 Insurance charges have been claimed as per the actual for FY 2016-17 and further, for the year FY 2017-18 and FY 2018-19 the insurance charges are estimated based on actual insurance charges paid in preceding year with an escalation of 5% YOY (Year on Year). Accordingly, GLPL has claimed the insurance charges of Rs. 1.26 Crore for FY 2018-19.

Commission's Analysis:

- 5.33 The Commission has provisionally considered the insurance charges claimed by GLPL for FY 2018-19.

Table 63: Insurance charges for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Insurance charges	1.26	1.26

ARR and Tariff Petition Fees
GLPL's Submission

5.34 The Commission vide its Order dated 10.03.2008 has allowed to pass through the fees levied for filing of ARR & Tariff Petition as expenses in the ARR. Accordingly, GLPL has claimed the ARR & tariff petition fees of Rs. 0.13 Crore for FY 2018-19.

Commission's Analysis:

5.35 The ARR and Tariff Petition Fees shall be allowed at the rate as specified in RERC (Fees for Petitions) Regulations, 2005. Accordingly, the Commission has computed the ARR and Tariff Petition Fees at the rate of Rs. 5000/MW for all the generating stations.

Table 64: ARR and tariff petition fees for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
ARR and tariff petition fees	0.13	0.13

Interest on Working Capital (IoWC)

GLPL's Submission

5.36 GLPL submitted that the IoWC for FY 2018-19 has been claimed in accordance with Regulation 27 of the RERC Tariff Regulations, 2014. Accordingly, GLPL has claimed the IoWC of Rs. 11.06 Crore for FY 2018-19.

Commission's Analysis:

5.37 The Commission has computed IoWC for FY 2018-19 in accordance with the RERC Tariff Regulations, 2014. Regulation 27(2) of the RERC Tariff Regulations, 2014 specifies that the rate of interest on working capital to be computed shall be on normative basis and shall be 250 basis points higher from SBI base rate prevalent during first six months of the year

previous to the relevant year. Accordingly, for working out interest on working capital, weighted rate of interest has been considered as per admissible rates during the previous year. The same works out to 11.55% p.a. which has been used for calculating interest on working capital. The computation of the bank rate is as shown in the Table below:

5.38 The IoWC approved by the Commission for FY 2018-19 is as shown in the Table below:

Table 65: IoWC for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Lignite cost (pit head)	7.55	7.41
Lime cost	3.08	3.02
Secondary fuel oil cost	0.98	0.98
O&M expenses	5.69	5.69
Maintenance spares	13.66	13.66
Receivables	62.79	62.13
Working capital	93.75	92.89
Normative rate of IoWC	11.80%	11.55%
IoWC at normative interest rate	11.06	10.72

Non-Tariff Income **GLPL's Submission**

5.39 The main heads of accounts of Non-Tariff income are sale of scrap, income from rent on land/buildings and miscellaneous receipts (rebates etc.) Accordingly, GLPL has claimed the non-tariff income of 0.39 Crore for FY 2018-19.

Commission's Analysis:

5.40 The Commission has considered the non-tariff income for FY 2018-19 as claimed by GLPL.

Table 66: Non-tariff income for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Claimed	Approved
Non-tariff income	0.39	0.39

Annual Fixed Charges for FY 2018-19

5.41 Based on the above analysis, the approved Annual Fixed Charges for FY 2018-19 are as shown in the Table below:

Particulars	FY 2018-19	
	Claimed	Approved
O&M expenses	68.29	68.29
Interest and finance charges on term loans	75.59	74.71
Depreciation	84.06	83.66
Interest on working capital	11.06	10.72
Return on Equity	50.67	50.65
Insurance	1.26	1.26
ARR and tariff petition fees	0.13	0.13
Less: Non-tariff income	0.39	0.39
Annual Fixed Charges	290.67	289.04

Energy Charges for FY 2018-19

GLPL's Submission

5.42 The Commission in its Order dated 12.08.2015 approved the SHR as 2449.50 kcal/kWh, the same has been considered for FY 2018-19. The auxiliary consumption has been considered as 11.50%.

5.43 The prices and GCV of fuels along with limestone price considered by GLPL for FY 2018-19 are as shown in the Table below:

Table 67: Fuel prices and GCV including limestone price considered by GLPL for FY 2018-19

FY 2018-19				
Lignite		Secondary fuel oil		Limestone
GCV	Price	GCV	Price	Price
kcal/kg	Rs./MT	kcal/lt.	Rs./kL	Rs./MT
3170	1344.37	10600	33395.81	749.68

Commission's Analysis:

5.44 The Unit 2 had achieved COD on 12.03.2011 and Unit 1 had achieved COD on 18.10.2011. Accordingly, the target Availability for full recovery of

fixed charges in accordance with Regulation 45(1) works out to 80% for FY 2018-19. Similarly, the target PLF for incentive in accordance with Regulation 45(2) works out to 80%.

- 5.45 The Commission has considered the normative auxiliary consumption of 11.50%.
- 5.46 The Commission vide its Order dated 04.04.2018 on approval of ARR & Tariff for GLPL for FY 2017-18 had approved the normative SHR of 2403.50 kcal/kWh. Accordingly, the Commission has considered the normative SHR before correction for moisture content in lignite as 2403.50 kcal/kWh. Further, the Commission has not considered any correction for moisture content in lignite as the actual moisture content was less than 30%.
- 5.47 The Commission has considered the normative SFOC of 1 ml/kWh.
- 5.48 The norms of operation approved by the Commission for FY 2018-19 are as under:

Table 68: Norms of operation for FY 2018-19

Particulars	Units	FY 2018-19	
		Claimed	Approved
Target Availability for full recovery of fixed charges	%	80.00%	80.00%
Target PLF for incentive	%	80.00%	80.00%
Auxiliary consumption	%	11.50%	11.50%
Station Heat Rate	kcal/kWh	2449.50	2403.50
Secondary fuel oil consumption	ml/kWh	1.00	1.00

- 5.49 In reply to a query of the Commission, GLPL submitted that the fuel was not received in FY 2017-18 and hence the fuel prices and GCV in the petition have been considered based on the last receipt of fuels.
- 5.50 The Commission has considered the fuel prices and GCV including limestone price as submitted by GLPL.
- 5.51 The energy charges approved by the Commission for FY 2018-19 are as shown in the Table below:

Particulars	Units	FY 2018-19	
		Claimed	Approved
Gross Generation	MU	1752.00	1752.00
Auxiliary Energy Consumption	%	11.50%	11.50%
Net Generation	MU	1550.52	1550.52
Gross Station Heat Rate	kcal/kWh	2449.50	2403.50
Average Sulphur Content in Lignite	%	4.35%	4.35%
Weighted average GCV of Lignite	kcal/kg	3170.00	3170.00
Weighted average GCV of Oil	kcal/ltr.	10600.00	10600.00
Secondary fuel oil consumption	ml/kWh	1.00	1.00
Specific Lignite consumption	kg/kWh	0.77	0.75
Lime stone consumption	kg/kWh	0.19	0.18
Price of Oil	Rs./kL	33395.81	33395.81
Price of Lignite	Rs./MT	1344.37	1344.37
Price of Lime stone	Rs./MT	749.68	749.68
Cost of Oil per unit	Rs./kWh	0.038	0.038
Cost of Lignite per unit	Rs./kWh	1.169	1.147
Cost of Limestone per unit	Rs./kWh	0.159	0.156
Rate of Energy Charge	Rs./kWh	1.365	1.340
Energy Charges	Rs. Crore	211.68	207.80

5.52 The Commission accordingly approves the tariff for 2018-19 as follows:

Table 69: Approved tariff for FY 2018-19

Particulars	Units	FY 2018-19	
		Claimed	Approved
Annual Fixed Charges	Rs. Crore	290.67	289.04
Rate of Fixed Charges	Rs./kWh	1.875	1.864
Energy Charges	Rs. Crore	211.68	207.80
Rate of Energy Charges	Rs./kWh	1.365	1.340
Total Tariff	Rs./kWh	3.240	3.204

5.53 The tariff approved in this Order shall be applicable from 01.04.2018 to 31.03.2019 or till the issue of the next Tariff Order, whichever is later.

5.54 The copy of this order may be sent to the Petitioner, Respondents, Objector, CEA and Government of Rajasthan.

(S.C. Dinkar)
Member

(R.P. Barwar)
Member

(Vishvanath Hiremath)
Chairman

Annexure-1

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