# ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN, PLOT NO. 4, CHUNOKOLI, SHAILASHREE VIHAR, BHUBANESWAR – 751021

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Present: Shri U. N. Behera, Chairperson

Shri A. K. Das, Member Shri S. K. Parhi, Member

**CASE NO. 62/2016** 

**DATE OF HEARING** : 06.02.2017

**DATE OF ORDER** : 23.03.2017

IN THE MATTER OF: Application for approval of Generation Tariff of Odisha Power

Generation Corporation (OPGC) Ltd. for FY 2017-18 under Section 62 & 86 of the Electricity Act, 2003 read with Approved Bulk Supply Agreement, and to the extent applicable, the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 and

**OERC** (Conduct of Business) Regulations, 2004.

## ORDER

The Odisha Power Generation Corporation (OPGC) Ltd. has filed an application before the Commission for determination of Generation Tariff of its 2X 210MW power stations for the financial year 2017-18.

## PROCEDURAL HISTORY (PARA 1 TO 13)

1. OPGC Ltd. is a "Generating Company" incorporated under the Companies Act, 1956 and is also under the meaning of Section 2 (28) of the Electricity Act, 2003 (herein after referred to as 'the Act'). Under the existing arrangement, GRIDCO Ltd. is evacuating powers from the generating stations of OPGC Ltd. and is delivering it to the Distribution Utilities of Odisha. Till FY 2015-16, OPGC had not filed any tariff application before the Commission for determination of generation tariff challenging the jurisdiction of the Commission for determining tariff of generating units of OPGC while there was an there is an existing PPA between it and GRIDCO signed on dated 13.08.1996 effective from 01.01.1995. It had challenged the jurisdiction of the Commission before Hon'ble High Court of Orissa in O.J.C No.13338 of 2001

- wherein the Hon'ble Court had upheld the jurisdiction of this Commission in determination of tariff for the power supplied by the Petitioner to GRIDCO.
- 2. Being aggrieved by the above decision of Hon'ble High Court, OPGC filed a Special Leave Petition No. 6812-13/2005 before Hon'ble Supreme Court. Hon'ble Apex Court in their interim order dated April 29, 2005 stayed the proceeding of tariff determination pending before OERC consequent to the application of GRIDCO in the year 2002 for approval of PPA with OPGC.
- 3. Subsequently, disputes on certain issues had arisen between the parties to the PPA. Therefore, A Task Force was constituted by the Government of Odisha and basing on its recommendation a Tripartite Agreement was reached between Parties and Government of Odisha. This was notified by the State Government in their Notification No.7216 dated 21.06.2008. Pursuant to the above notification OPGC and GRIDCO amended the Agreement on September 6, 2012. OPGC and GRIDCO also amended the existing PPA on 19.12.2012 by amending certain clauses relating to PLF, incentive etc. which were retrospectively brought to effect from 01.04.2007.
- 4. After execution of the amended Tripartite Agreement and PPA, OPGC agreed to withdraw Special Leave Petition pending before Hon'ble Supreme Court. Hon'ble Court vide their order dated 14.02.2013 dismissed appeals pending as withdrawn by OPGC and directed it to file amended PPA before OERC for consideration of the same in accordance with the law. As a result of it OERC in its order dated 27.04.2015 approved the amended PPA and directed that the power purchase process should be settled by OPGC and GRIDCO as per original PPA and its supplement one as approved by the Commission for the period prior to the implementation of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014. Further OERC directed OPGC in the same order to file an application for determination of generation tariff as per the approved PPA each year starting from FY 2016-17 onwards since tariff for FY 2014-15 and 2015-16 which were part of the control period of the Regulation have already been approved by the Commission in the ARR of GRIDCO for the said years basing on the submission of GRIDCO.
- 5. Accordingly, OPGC had filed its generation tariff application for FY 2016-17 before the Commission as per Section 62 and 86 of the Electricity Act, 2003 read with approved Bulk Power Supply Agreement along with Supplementary Agreement

(Together referred as 'Amended PPA'), related provisions of OERC (Terms and Conditions for Determination of Generation Tariff) Regulation, 2014 and OERC (Conduct of Business) Regulations, 2004 for determination of tariff for the power supplied to GRIDCO. While filing the said tariff proposal, OPGC had considered the tariff parameters both from the PPA & OERC Generation Tariff Regulation, 2014 selectively. However, the Commission disposed of the application of the Petitioner OPGC vide their order dated 21.03.2016 in Case No. 53/2015 by approving tariff of the Petitioner for FY 2016-17 basing on OERC Generation Tariff Regulation, 2014.

- 6. The Petitioner challenged above order of the Commission dated 21.03.2016 in Appeal No. 126/2016 before Hon'ble APTEL stating that the Commission has erred mainly by applying Regulation norms for determination of tariff of OPGC for FY 2016-17. The said appeal is pending before Hon'ble APTEL for disposal.
- 7. As per Regulation 61(2) of the OERC (Conduct of Business) Regulations, 2004 and Regulation 2.7 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 a generating company is required to file an application by 30<sup>th</sup> November of each year to the Commission for determination of tariff for any of its generating stations, for sale of energy in the State of Odisha giving details of costs associated with the generation and sale of energy from the generating stations. OPGC has filed the present application on 30.11.2016 before the Commission as per Section 62 and 86 of the Electricity Act, 2003 read with approved Bulk Power Supply Agreement along with Supplementary Agreement (Together referred as 'Amended PPA'), related provisions of OERC (Terms and Conditions for Determination of Generation Tariff) Regulation, 2014 and OERC (Conduct of Business) Regulations, 2004.
- 8. The instant generation tariff application is being filed by OPGC for FY 2017-18 without prejudice to OPGC's rights under law and contentions taken in Appeal No. 126 of 2016 before the APTEL. OPGC further submitted that the instant Petition is subject to the outcome of Appeal No. 126 of 2016 before the APTEL.
- 9. After due scrutiny and admission of the aforesaid application, the Commission directed OPGC Ltd. to publish its application in the approved format. In compliance to the same, public notice was given in leading and widely circulated newspapers and was also posted in the Commission's website in order to invite objections/suggestions

from the general public. The applicant was also directed to file its rejoinder to the objections/suggestions filed by the objectors. In response to the aforesaid public notice the Commission received 7 nos. of objections from the following persons /organizations:-

(1) Shri G. N. Agrawal, Convenor-cum-Gen. Secy., Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur-768003, (2) Shri Ananda Kumar Mohapatra, Power Analyst, S/o-Jachindranath Mohapatra, Plot No. L-II/68, SRIT Colony, Budharaja, Ps-Ainthapali, Dist-Sambalpur-768004., (3) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (4) Shri P. K. Pradhan, S/o. Late Kasta Charan Pradhan, 5R/3, GRIDCO Colony, Po-Bhoinagar, Bhubaneswar-751022, (5) Shri Aditya Kumar Mishra, S/o. Late Laxminarayan Mishra, At/Po- Gudia Sahi, Dist-Puri-752001 (6) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB), Plot No. 775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013 & 7. GRIDCO Limited, Janpath, Bhubaneswar-751022 were filed their suggestions/ objections.

All the above named objectors along with the representative of Department of Energy, Government of Odisha were present during tariff hearing and their written submissions filed before the Commission were taken on record and were also considered by the Commission. The applicant submitted its reply to the issues raised by the various objectors during hearing.

- 10. In exercise of the power u/S. 94(3) of the Electricity Act, 2003 and to protect the interest of the consumers, the Commission had appointed World Institute of Sustainable Energy (WISE), Pune as Consumer Counsel for objective analysis of the applicant's petition for determination of generation tariff proposal for its different power stations for the financial year 2017-18. The Consumer Counsel presented views on the matter during the hearing.
- 11. The date of hearing was fixed as 06.02.2017 at 3.30 PM and was duly notified in the leading and widely circulated newspaper mentioning the list of objectors. The Commission also issued individual notice to the objectors and Government of Odisha through the Department of Energy informing them about the date and time of hearing

- and requesting to send the Government's authorized representative to take part during the proceedings and offer the views/suggestion/proposal of the Govt. as a stakeholder.
- 12. As the part of the consultative process, the Commission conducted a public hearing at its premises at Bhubaneswar on 06.02.2017 and heard the Applicant, Objectors, Consumer Counsel and the Representative of the Dept. of Energy, Government of Odisha at length.
- 13. The Commission convened the State Advisory Committee (SAC) meeting on 20.02.2017 at 3.30 PM to discuss about the application for determination of generation tariff proposal of the present generating company for FY 2017-18. The Members of SAC presented their valuable suggestions and views on the matter for consideration of the Commission.

# GENARATION TARIFF PROPOSAL OF OPGC FOR THE FY 2017-18 (PARA 14 TO 35)

- 14. OPGC submitted that as per Regulation 2.7 of OERC Generation Tariff Regulation.2014, requires to file an application for determination of tariff before the OERC by November 30<sup>th</sup> of every year. Accordingly, it has submitted that the instant petition for approval of generation tariff for FY 2017-18 is prepared and filed in terms of the amended PPA as approved by OERC vide its order dated 27.04.2015.
- 15. The summarized tariff proposal of OPGC is mentioned as under:
- 16. OPGC submitted that the detail computation of annual fixed cost, energy charges and year end charges are as per the terms and conditions of the Amended PPA.

## **Computation of Annual Fixed Cost**

OPGC Submitted that, based on Clause 3.0 of Schedule II of the Amended PPA, the Annual Fixed Cost consists of:

- a. Depreciation;
- b. Return on Equity;
- c. Interest on loan:
- d. Operation and Maintenance Expenses;
- e. Interest on Working Capital;

## **Capital Cost**

- 17. OPGC has proposed to consider Rs. 1060 Crore as capital cost for the purpose of computation of tariff for FY 2017-18 as per the Amended PPA signed between OPGC and GRIDCO and approved by Commission in its Order dated April 27, 2015.
- 18. The applicant submitted that Clause 10 of the Amended PPA and Clause 10 of Schedule II of the Amended PPA inter alia provide that all impositions by statutory authorities on OPGC necessitating the upgradation or installation of new equipment in order to comply with norms for environmental protection are to be billed by OPGC and paid by GRIDCO. Although bills for reimbursement for the actual expenditure incurred in the previous years has been raised, such expenditure has not been reimbursed by GRIDCO to OPGC. Also, tariff computed in accordance with the amended PPA has not included the impact of such expenditure towards environmental protection equipment installation.
- 19. OPGC has proposed of Rs. 66.41 Crore towards expenditure incurred and to be incurred during the period FY 2011-12 to FY 2017-18 for environmental protection equipments installation on account of statutory compliance. Further OPGC has proposed of Rs. 30.10 Crore towards expenditure incurred and to be incurred during the period FY 2013-14 to FY 2016-17 on account of efficient operation of the project and maintaining consistent operation level. Altogether OPGC has claimed additional capitalization of Rs. 96.51 crore on account of environmental protection equipments installation and efficiency improvement, separately, as part of year end expenses through the tariff for FY 2017-18.

#### **Debt – Equity Ratio**

20. OPGC has proposed the debt equity ratio on the basic of the project cost of Rs.1060 Crore as approved in Amended PPA which includes equity of Rs.450 Crore and Loan of Rs.610 Crore.

#### **Return on Equity**

21. Considering the equity capital of Rs.450 crore of the project cost, OPGC has proposed to provide return on equity @ 16% amounting to Rs.72 crore for FY 2017-18 as per the Clause 8.0 (10) of Schedule II of PPA.

## **Depreciation**

22. OPGC submitted that, the assets of Generating Stations are fully depreciated by the financial year ending March 31, 2009. Therefore, OPGC has not claimed any depreciation for FY 2017-18.

## **Interest on Loan Capital**

23. OPGC submitted that the loan amount of Rs. 610 Crore of the project cost has been fully repaid by financial year ending March 31, 2012. Therefore, OPGC has not claimed any Interest on Loan Capital for FY 2017-18.

## **Interest on Working Capital**

24. OPGC has estimated the working capital requirement of Rs.170.68 crore. While estimating the above working capital requirements, OPGC has considered the components of as per the Clause 3.0 (f) of Schedule II of the Amended PPA and rate of interest @14.75%. OPGC has further submitted that above working capital requirement has been managed from internal accruals. Accordingly, OPGC has proposed Rs.25.17 crore towards interest on working capital for FY 2017-18. The detail calculation of working capital requirement and interest on working capital is given below:

Table -1 Computation of interest on working capital for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	FY 2017-18
1.	Cost of Coal for one and half months	48.58
2.	Cost of Secondary Fuel Oil for two month	4.36
3.	O&M Expenses for one month	10.80
4.	Receivables equivalent to two month	106.93
5.	Total Working Capital Requirement	170.68
6.	Interest Rate (%)	14.75
7.	Interest on Working Capital	25.17

## **O&M Expenses**

25. OPGC has proposed O&M Expenses of Rs.129.62 Crore for FY 2017-18 based on the Clause 3.0 (d) and (e) of Schedule II of the Amended PPA. This has been proposed on the basis of capital cost @ 2.5% considered at Rs.1030 crores and escalated @ 8% per annum effective from April 1, 1996.

## **Summary of Annual Fixed Cost**

26. Accordingly to all of the above components of annual fixed cost estimations, OPGC has proposed Annual Fixed Cost of Rs.226.80 Crore for FY 2017-18. The details are given in the table below:

Table - 2 Annual Fixed Cost of OPGC for FY 2017-18

Sr. No.	<b>Particulars</b>	(Rs. Crore)
1.	Return on Equity	72.00
2.	Depreciation	0.00
3.	Interest on Loan Capital	0.00
4.	Interest on Working Capital	25.17
5.	O&M Expenses	129.62
6.	<b>Total Annual Fixed Cost</b>	226.80

# **Variable Costs**

# **Operational Performance Parameters**

27. Based on the operational performance parameters as per amended PPA, OPGC has considered the following performance parameters for generation tariff proposal for FY 2017-18. The same is given in the table below.

Table - 3
Operational Performance Parameters for FY 2017-18

Sl.	Particulars	Unit	Values	Remarks			
No.							
1.	Plant Load Factor	%	83.06%	After considering minor annual overhauling schedule for 21 days for unit 1 and capital overhauling for 35 days for unit 2			
2.	Gross Generation	MU	305594	Based on the above PLF			
3.	Auxiliary Consumption	%	9.50%	As per the provisions of the approved amended PPA			
4.	Net Generation	MU	2765.63	Gross generation minus Auxiliary Consumption			
5.	Station Heat Rate	kcal/ kWh	2500	As per the provisions of the approved amended PPA			
6.	Specific Fuel Consumption	ml/ kWh	3.50	As per the provisions of the approved amended PPA			

## **Fuel Cost**

28. For computation of the landed cost of fuel, OPGC has relied on the provisions of the Amended PPA. As per Clause 7.0 of Schedule II of said PPA, Gross Calorific Value and Price of Coal and Oil shall be considered as delivered to the Power Station. OPGC submitted that for computation of landed price of coal, the price of coal as

billed by MCL has been considered. To arrive at price of coal and oil applicable as on 01.04.2017 OPGC has considered the latest available actual weighted average price of October 2016 and escalated @7% by mentioning actual growth in price from April to October 2016. Further OPGC has submitted that, the weighted average price of Oil has been derived by considering the ratio of 90:10 for FO and LDO.

29. OPGC has considered the weighted average Gross Calorific Value (GCV) of Coal for the period from November 2015 to October 2016 (12 months) and Gross Calorific Value (GCV) of Oil @10,000 kcal/Liter. Accordingly, the proposal of OPGC on GCV and Price of Coal and Oil for FY 2017-18 as given in table below:

Table - 4
Price and Gross Calorific Value of Coal and Oil

Sl. No.	Source of Coal	Projected as on April 1, 2017
1	Price of Coal (Rs. /MT)	1645.04
2	Price of Secondary Oil (Rs./kL)	29649.64
3	Gross Calorific Value of Coal (kCal/kg)	2629.10
4	Gross Calorific value of Secondary Oil (kCal/kg)	10000.00

# **Energy charges**

30. OPGC has proposed that the Energy charges computed for FY 2017-18 as per Clause 7.0 of Schedule II of the Amended PPA. Accordingly it has requested the Commission to approve Energy Charge of Rs.1.819/Kwh for FY 2017-18 as given in the table below:

Table -5 Computation of Energy Charge for 2017-18

Particulars	Unit	Values
GCV of Coal	kCal/kg	2629.10
GCV of Oil	kCal/kg	10000.00
Specific Coal Consumption	kg /kWh	0.94
Specific Oil Consumption	ml/kWh	3.50
Price of Coal	Rs. / MT	1645.04
Price of Secondary Oil	Rs. / kL	29649.64
Variable Charge for Coal	Rs./kWh	1.704
Variable Charge for Oil	Rs./kWh	0.115
Energy Charge	Rs./kWh	1.819

## Reimbursement of other charges

31. Apart from the Annual Fixed Cost and Energy Charges, OPGC has proposed to reimburse other charges of Rs.58.98 crore for FY 2017-18 which comprises of

electricity duty, water cess & charges, Tax and cess on land, Electricity Inspection fees, System Operating Charges (SOC) and Market Operating Charges (MOC) for SLDC, EPRC charges, Income tax, Ash Utilisation Expenses and Recovery of Tariff petition Fee. The details are given in the table below:

Table - 6 Other Charges for 2017-18

Sl. No.	Particulars	(Rs. in Cr)	Basis		
1.	Electricity Duty	8.25	Rs.0.30 P/U on 9% Auxiliary		
			Consumption of generation at		
			83.06% PLF		
2.	Water Cess and Water Charges	6.35	Actual of FY 2015-16		
3.	Tax and Cess on land	0.22	Actual of FY 2015-16		
4.	Electricity Inspection Fees	0.17	Actual of FY 2015-16		
5.	SOC and MOC for SLDC	0.35	OERC order dt. 21.03.2016		
6.	ERPC Charges	0.16	Actual of FY 2015-16		
7.	Income Tax	38.11	Provisional payment of FY		
			2015-16		
8.	Ash Utilisation expenses	5.17	Subsidy @ 150/MT &		
			advertisement for awareness		
			proposal for FY 2017-18		
9.	Recovery of Tariff Petition Fee	0.21	Tariff filing Fees @ 5000/MW		
10.	Total	58.98			

OPGC requested to the Commission to approve the above others charges as reimbursement under the tariff petition for FY 2017-18.

## **Incentives:**

32. OPGC had proposed that incentive shall be calculated and claimed at the end of the year as per clause 4.0 of Schedule II of the Amended PPA i.e. 30% of Project Cost of Rs.1060 crore X 0.35 X {PLF achieved during the year minus 80%}.

## **Fuel Price Adjustment Charges:**

33. OPGC submitted that as per clause 9.0 of Schedule II of the amended PPA provides the mechanism for fuel price adjustment. Accordingly it proposes to compute fuel price adjustment on actual variation in prices of coal and oil on monthly basis and claim such adjustments on half yearly basis.

## Summary of Generation Tariff proposal for FY 2017-18 by OPGC

34. The summary of Generation Tariff proposed by OPGC for FY 2017-18 is given in table below:

Table - 7
Generation Tariff proposed by OPGC for 2017-18 (2765.63 MU)

Sr. No.	Particulars	Rs. Crore	Rs./kWh
1.	Annual Fixed Cost	226.80	0.820
2.	Energy Charges	503.05	1.819
3.	Tariff for Sale of Power	729.85	2.639

35. OPGC has prayed the Commission to approve the generation tariff for FY 2017-18 as mentioned in the above and recovery of the tariff from GRIDCO as per the terms and conditions of "Amended PPA". Further, OPGC has prayed to approve for reimbursement of other charges, costs towards schemes for environment protection equipment installation for the purpose of compliance with statutory requirements, costs incurred to maintain the efficient operation of the project and recovery of upward and downward variation in fuel prices and calorific value including fuel mix through Fuel Price Adjustment as per the provisions of Amended PPA to be paid by GRIDCO Ltd. through tariff of FY 2017-18.

# VIEWS OF THE OBJECTORS ON THE GENERATION TARIFF PROPOSAL OF OPGC FOR FY 2017-18 (PARA 36 TO 67)

#### **Issues related to PPA**

All the objectors mentioned at Para 9 expressed their views on the following issues. Shri G N Agrawal and other submitted that:

- 36. OPGC has submitted the petition void of facts and figures. Since OPGC has sought the review of the last year decision of the Commission before Hon'ble APTEL which is sub-judice there, the present application needs to be considered carefully.
- 37. They contained that OPGC has failed miserably to file applications for Truing-up exercise and performance review before Commission for FY 2015-16 within the stipulated period as mentioned in the Tariff Regulations of OERC. Therefore, in the absence of actual validated data and information for FY 2015-16, the tariff proceedings for FY 2017-18 cannot be completed in transparent manner. Therefore, Petitioners application is liable for rejection.
- 38. In spite of stipulations in generation tariff regulations that the Truing-up exercise shall be done by the Commission in the process of determination of tariff for ensuing financial year. Further this has not been done as per provision of Regulations and is depriving the stakeholders to get actual information and financial statements for

analysis of applicants submitted figures. The intent behind such lackadaisical action of non-filling, violation of protocol and provisions of Regulations, by OPGC indicates their apathy to the process of tariff determination. It further reinforces the view that the generation tariff provided to them is higher in their favour, ensuring further increase the inefficiency in the functioning of OPGC. This needs downward revision to reflect the time cost in the interest of the consumers. Poor accountancy practices in public domain cannot be excused attracting penal actions under Sections 94 & 95 of the Electricity Act, 2003 by the Commission. Therefore, the Commission may dismiss the application of OPGC, revise tariff already allowed in last year downwards and initiate necessary penal action.

- 39. They further stated that OPGC needs to bring out differences between OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 and amended PPA in public interest. OERC Tariff Regulations is a more powerful document than amended PPA. Therefore, if differences arise, then the former prevails. But OPGC has applied more of the provisions of amended PPA without paying any heed to OERC Regulations.
- 40. As per clause no 3.1 of OPGC petition, the annual fixed cost, energy charge and year end charges have been projected as per amended PPA without paying any attention to OERC regulations. In such situation amended PPA prevails over OERC Regulations; this is illegal and offence by OPGC for which needs to be dropped in view of order of the Commission in Clause 80 for FY 2016-17.
- 41. In view of opinion of Hon'ble Supreme Court, Regulations prevail over PPA and the same stand may be adopted by the Commission also for the tariff for 2017-18 as done for FY 2016-17 on normative basis.
- 42. OPGC signed PPA with GRIDCO on 13 August 1996; however, it made effective retrospectively from 1 January 1995 and even before incorporation of GRIDCO itself on 20 April 1995. The specific reasons for giving retrospective effect, notwithstanding the fact that the PPA was signed after the OER Act came into force on 1 April 1996 along with the legal status of such PPA when it was made effective from a date prior to incorporation of GRIDCO should have been furnished. Management of OPGC might have averted the necessity for obtaining approval from the Hon'ble Commission as required under Section 21 read with Section 57 of the

OER Act that have made Section 43A of the ES Act invalid for the State of Odisha. All approvals obtained under Section 43A of the repealed law ES Act was nullified as per Section 185 of EA – 2003 and hence, OPGC was required to get its PPA approved from OERC since 1996-97 under Section 21 of the OER Act. So, the Commission may please direct OPGC to file its tariff application afresh from the FY 1996-97. Till, such time total energy cost recovered by OPGC can be considered as provisional. Since Notification of GoO (vide no 7216 dated 21 June 2008) freezing all the norms and parameters of the PPA was not communicated to the Commission for their approval and was placed before the Commission for their approval after giving effect to the PPA. Hence, the Commission is requested not to consider the said notification of the GoO as it has restricted the authority of the Commission.

- 43. The Commission has not approved the PPA prior to the notification of the Regulations. The Hon'ble Commission never verified the price of power received by GRIDCO as would be established from the facts that:
  - a) The charges were based on PLF of 68.49%; instead of PLF of 80% as per the amended PPA.
  - b) GRIDCO has not accepted the tariff of OPGC, as evident from the GRIDCO letter dated 22.05.2014 where GRIDCO opined the payment to OPGC as provisional subject to OERC approval.
  - c) The order dated 27.04.2015 in case no 13/2002 was not passed after due public notice.
  - d) The Regulation 2.7 of the OERC Generation Tariff Regulations, 2014 does not provide the filling shall be according to the PPA (even if not approved) and not in accordance with the provisions of the said regulations.
  - e) No reasons have been recorded in writing as to why the provisions of these regulations are being relaxed as per Regulations 7.13 of the OERC Generation Tariff Regulations, 2014
- 44. It is abundantly clear that the so called "Amended PPA" shall have no application in determination of the generation tariff.

#### **GRIDCO Views:**

- 45. GRIDCO in its submission before APTEL, against the OPGC petition challenging the tariff order of OPGC passed by OERC dated 21.3.2016, have contended the dual stand taken by OPGC by cherry picking the provisions of PPA / amended PPA and OERC Regulations, 2014, has been beneficial to the generator.
- 46. According to the provisions of OERC (Conduct of Business) Regulations, 2004 the PPA, amended PPA and tripartite agreement have been accorded statutory approval by the Commission.
- 47. GRIDCO submitted that OPGC intends to follow the provisions of approved power purchase agreement citing the clause 7.13 of OERC Generation Tariff Regulations, 2014 regarding "Power to Relax" under which the Commission had directed OPGC to file the tariff applications from FY 2016-17 onwards. The PPA dated 13.8.1996 and amended PPA dated 19.12.2012 signed between GRIDCO and OPGC were based on the Govt of India, Ministry of Power notification dated 30.3.1992.

### **Capital cost and Additional Capitalization**

- 48. Objectors submitted that the capital expenditure of installation for environmental protection and performance improvement may be considered in phased manner under provision of OERC Tariff Regulations, 2014 after prudence check. There is no such provision for additional capitalization under the PPA.
- 49. The Commission may consider to formulate a procedure for extension of useful life of Unit # 1 and 2 of OPGC with infusion of additional capitalization as claimed by OPGC, so that the State could be benefited by availing cheaper power.
- 50. GRIDCO submitted that as per the clause 10.0 of the PPA "Levies, Taxes, Duties, Cess etc", only the levies, taxes, duties and cess etc pertaining to generation, consumption, sale of electricity, and environmental protection can be reimbursed. This expenses are revenue expenses being recurring in nature and excludes reimbursement of any kind of capital expenditure. Till FY 2015-16, GRIDCO reimbursed all the year-end expenses except the claims of capital in nature.
- 51. As per the order dated 27.04.2015 in Case No. 13 of 2002, the tariff determination by the Commission began from FY 2016-17 and for prior period all kinds of issues were to be mutually settled between the parties as per PPA. In the PPA there is no such

provision to reimburse such additional capital expenditure. Therefore, claim of additional capitalization in the form of reimbursement may not be prudent under the PPA relied upon by OPGC. There is no such provision in the PPA and amended PPA based on MOP notification for allowing additional capital expenditure.

52. Capital cost has been freeze at Rs.1060 crore as per Govt. Notification dated 21.6.2008, therefore, there is no scope under PPA to allow additional capital expenditure.

## **Energy generation and PLF**

53. The Commission had considered PLF of 85% for OPGC power stations in the last year, whereas OPGC, which is quite new compare to that of TTPS-NTPC, is projecting only PLF of 83.52%. When TTPS-NTPC has stated PLF of around 88% in its generation plan for FY 2017-18, OPGC should come out with the reasons for which low efficiency. Further the objectors requested that the Commission should direct OPGC to operate with more than 85% PLF.

### **Auxiliary Consumption**

54. Objectors raised that, OPGC proposed auxiliary consumption at the rate of 9.5% whereas central thermal power stations like NTPC achieve auxiliary consumption of as low as 5.5% and needs to be considered prudently by the Commission.

#### **Performance Parameters**

- 55. Objectors sought the Commission directive to OPGC to provide information regarding the GCV of primary fuel i.e. coal which is remaining below 3000 kCal/kg and its sourcing details. Due to stated deterioration of the coal quality and increase in landed price, the energy charge rate is on higher side, they opined.
- 56. Many objectors demanded that, while determining generation tariff of OPGC for FY 2017-18, OERC may consider the operational performance parameters i.e. PLF @ 85%, Secondary Fuel oil Consumption @ 1 ml/kwh, Auxiliary Consumption @ 8.5% /9%, Station Heat Rate @ 2450 kCal/kwh as specified in OERC Regulation 2014 instead of PPA norms as proposed by OPGC.

### **Return on Equity**

57. Objectors submitted that the equity for calculation of RoE should be Rs.318 crore @ 30% of the capital investment of Rs.1060 crore, as per the regulations and should not be based on Rs.450 crore, as submitted by OPGC.

## **Energy cost**

58. One of the objectors requested that OPGC and GRIDCO may be directed to submit separately on actual recovery of energy charges during FY 1996-97 to 2016-17 vis-avis the norms fixed by the Commission with reference to specific oil, incentive and return on equity. The Commission may direct OPGC to refund the excess amount so recovered from GRIDCO along with interest.

#### **Other Issues**

- 59. One of the objector submitted that the applicant on behalf of OPGC acquainted with accountancy and commerce lacks expertise and competency in accountancy and commerce to file ARR and tariff application and that cannot be considered as true. So, the submission of OPGC that the statements and facts of the applications are not true because of the illegal, untruth declaration and incompetency of the applicant. Therefore, the Commission may revoke under Section 94 & 95 of the Electricity Act, 2003 for penal action as assigned by law.
- 60. In the last tariff order of OPGC, Hon'ble Commission has directed under clause no 124, 128 & 131 to 134 to carry out the works within time frame but OPGC did not discharge its huge duties and responsibilities assigned by the Commission.
- 61. Objectors also requested the Commission to take a note of the fuel supply arrangements to Unit III & Unit IV of OPGC, so as to expedite the construction works of the above units in the interest of the People of Odisha.
- 62. OPGC, having 51% government stake, has to audit their receipt and expenditure account through CAG, Government of India. OPGC has to produce all the relevant CAG report before Commission.
- 63. Objector requested the Commission to direct to OPGC to produce
  - (i) The number of force outage with reason taken place in FY 2016-17.

- (ii) Month wise cash flow statement showing sources of inflow and outflow of cash from the FY 2010-11 to 2016-17.
- (iii) Detail action plan they have prepared for development of mini-hydro projects now under their disposal.
- (iv) Salary structure in the company along with the benefits has achieved by paying higher salary.
- (v) The number of cases pending before different courts and amount paid for legal expenses of the said cases from 2014-15, 2015-16 and 2016-17 and year wise dividend paid to government since 2000-01 to 2016-17.
- (vii) The details information relating to share allocation of the joint venture with OHPC i.e. OCPL and other details on the workers working, their salary, grade & other work assigned to the workers working under OCPL.
- 64. Objectors also referred to the CAG Audit report No 1 (PSUs) for the year ended March 2013, where CAG had adversely observed on avoidance of tariff filling before the Commission and excess recovery from the consumers and GRIDCO through reimbursement of various expenses enshrined in PPA to about Rs.207 crore approximately without approval of the Commission.
- 65. Objectors also sought clarification from Government of Odisha on the historical decision favouring the company while issuing the notification to resolve the issues between GRIDCO and OPGC without considering:
  - a) The nature of ambiguity.
  - b) Whether there was any ambiguity in the norms notified by the Hon'ble Commission as far as their applicability to a thermal power station is concerned.
  - c) Whether GRIDCO also objected for adopting Hon'ble CERC / OERC norms for finalization of generation tariff of OPGC.
  - d) Whether it was only OPGC who remained firm not to abide by the changing norms as per CERC / OER regulations
- 66. GoO is also requested to furnish the additional benefit which, but for their notification dated 21 June 2008, would not have been available to the State of Odisha.

Objectors also requested to the Commission to direct to refund the dividend amount received from the surpluses earned by OPGC due to excess recovery on energy charges over and above the applicable norms and utilize in further capacity addition of generating units for the interest of the general public of the State.

#### VIEWS OF CONSUMER COUNSEL (PARA 68)

- 68. WISE, Pune on behalf of the Consumers made a presentation on the Analysis of ARR and tariff filing of OPGC for FY 2017-18. The Consumer Counsel's observations/suggestions are as below:
  - a) Additional capitalization was not approved by the Commission in the last tariff order due to non-submission of details of work done and use of assets created. Further, the audited account for the preceding year does not recognize the amounts on the additional capitalization. The additional capitalization, as claimed, up to FY 2013-14 should not be allowed.
  - b) The additional capitalization amount during FY 15-16 needs prudence check based upon audited account. Also, the projected amount for future years should not be considered in the present tariff. The reimbursement of additional capitalization is not according to the provisions of the OERC Generation Tariff Regulations, 2014.
  - c) Debt: equity ratio proposed by OPGC is Rs 610 cr: Rs 450 cr; i.e. the ratio is 57.55: 42.45. However, as per OERC Regulations, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan. So, equity amount may be considered as 30% of the approved capital cost. RoE @ 16% may be allowed on equity of Rs 318 crore and interest on normative loan can be calculated on remaining amount of Rs 132 crore.
  - d) As per OERC Generation Regulations 2014, interest on working capital shall be equal to the SBI Base Rate plus 300 basis points. So, interest on working capital may be considered as 12.3%, instead of 14.75% as proposed by OPGC.
  - e) As per norms given in the OERC Generation Regulations 2014, O&M expenses @ Rs 28.7 lakh / MW, calculated as Rs 120.54 crore for FY 2017-18. The last six years' actual average O&M expenses is Rs 113.34 crore. These can be considered for calculating the O&M expenses.

- f) PLF of thermal power stations, as per Regulations, should be 85%, whereas proposed PLF of OPGC is much lower than that and should not be considered.
- g) As during the Aug 16 to Oct 16 period, coal price was stable around Rs 1530 / MT; so, Rs 1530 / MT with 5% escalation can be taken for coal price of FY 2017-18.
- h) The secondary fuel oil cost has reduced considerably during FY 2015-16 period (25.76% reduction), so escalation rate proposed in the secondary fuel oil cost (7%) for FY 2017-18 may be reviewed on this background.
- i) Incentive would be available if OPGC achieves excess schedule generation over energy generation as per NAPLF @85% as specified in Regulations 6.9 & 6.10 of OERC generation tariff Regulation 2014. Electricity duty is proposed on 9% auxiliary consumption; that should be based on 8.5% auxiliary consumption as per OERC Generation Tariff Regulations, 2014.
- j) Electricity inspection fees and Ash utilization expenses should not be allowed separately in year-end expenses as O&M expenses provided for the project.

## **OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (PARA 69)**

69. The Commission convened the State Advisory Committee (SAC) meeting on 20.02.2017 at 3.30 PM. The Members of SAC deliberated on different issues related to power sector and the Annual Revenue Requirement of various licensees. However, no specific view was offered relating to Annual Revenue Requirement and Tariff filing of OPGC.

## **VIEWS OF THE GOVT. OF ODISHA (PARA 70)**

70. Govt. of Odisha vide their Letter No. LC-OERC-18/2017/1929 dated 08.03.2017 have communicated their views/suggestions on various issues involving tariff setting for FY 2017-18. With regards to Generation Tariff of OPGC for FY 2017-18, Govt. has not given any specific views.

## OPGC's RESPONSE TO THE OBJECTORS (PARA 71 TO 80)

## Legal issues related to PPA

71. OPGC Submitted that it has adopted a consistent stance before the ATE and the Commission and adopted the norms of the Amended PPA and not relied on any norms

- under the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014. Therefore, there is no question of cherry picking as alleged by the stakeholders.
- 72. Based on above tariff application for FY 2017-18, it has relied on the Amended PPA for all the parameters provided in the approved Amended PPA, including additional capitalization, interest on working capital and landed cost of fuel. However, provisions of OERC Tariff Regulations, 2014 were relied on by OPGC for those three parameters in where the methodology for computation is not elaborately dealt with in the Amended PPA and therefore, followed a consistent approaches based on amended PPA.
- 73. It further denied the fact that OPGC has sought recourse to Regulation 7.13 of the OERC Generation Tariff Regulations, 2014 and has relied solely on the provisions of Amended PPA as approved by the Commission vide order dated 27 April 2015 in Case No 13 of 2002 and not on Clause 7.13.
- 74. GRIDCO's reference to a Notification dated prior to the date of effectiveness of the PPA is misplaced as the Amended PPA supersedes any prior notification. There is no provision in the approved Amended PPA that the tariff will be determined considering the operating parameters on the basis of actuals or norms whichever is lower. The amended PPA clearly provides for the tariff to be determined on the basis of operating parameters as agreed and set out in the Amended PPA, which have been frozen by the Commission for the term of amended PPA.
- 75. OPGC also submitted that the payments of power purchase prior to FY 2016-17 had been in accordance with the normative performance parameters as agreed in the approved Amended PPA.

### **Additional Expenditure**

OPGC stated that in addition to the tariff to be claimed under approved Amended PPA, 'any other kind of impositions whatever imposed / charged by any Government (Central / State) and / or any local bodies / authorities' are reimbursable to OPGC irrespective of the nature of the expenses, whether capital or revenue. Hence, in the petition for FY 2017-18, OPGC has claimed reimbursement of capital expenses incurred by it as a result of environmental impositions by different statutory authorities.

- The claims for reimbursement made under year end charges are as such provided both under Clause 10.0 and Clause 10.0 of Schedule II of the approved Amended PPA. Clause 17.01 of the Amended PPA provides that it is the intent and object of the parties to ensure that no one party should unfairly bear the financial liability of any eventuality. So, OPGC ought not to be made to bear the entirety of expenditure necessitated by statutorily mandated environmental protection measures, which have been claimed in accordance with Clause 10.0 and Clause 10.0 of Schedule II, read with Clause 17.01 of the Amended PPA.
- 78. Further, the claim of expenditure towards environmental protection equipment is well within the provision of the approved Amended PPA as elaborated in the petition. Indeed, GRIDCO had expressly agreed to reimburse the expenses incurred by OPGC for capital expenditure schemes. However, GRIDCO now opposed the same. OPGC had sought GRIDCO's consent prior to undertaking the capital expenditure schemes towards environmental protection for which GRIDCO has principally agreed, subject to the approval of the Commission. GRIDCO was not well aware of the compulsion for implementation but also agreed to reimburse the expenses within the ambit of the PPA.
- 79. During the pendency of the proceeding before Hon'ble Supreme Court, based on the inputs from OPGC, GRIDCO has itself claimed expenditure towards environmental protection equipment in its tariff application for FY 2012-13. The Commission in the tariff order of GRIDCO for FY 2012-13 had approved the expenditure, but the same has not yet been reimbursed to OPGC.
- 80. Subsequently for FY 2013-14 OPGC had intimated its plan for implementation of various measures to comply with mandatory statutory directives and the necessary inputs were provided to GRIDCO to include the same in its tariff application. However, GRIDCO did not include the same in spite of reminders from OPGC. Prior to the tariff application submitted by OPGC as per Commission directive, such capital expenditure was brought to the notice of GRIDCO and acknowledged by them and should have been submitted by GRIDCO, which was however not appropriately taken up with the Commission for regulatory approval.

# COMMISSION'S OBSERVATIONS AND ANALYSIS OF OPGC'S PROPOSAL (PARA 81 TO 142)

- 81. OPGC had filed its first generation tariff application for FY 2016-17 settling jurisdictional issues for the power procured by GRIDCO from OPGC. At the same time, OPGC had considered parameters from both the PPA and OERC Regulation norms on selective basis. Regarding applicability of norms adopted from PPA versus OERC Regulations, the Commission has already taken a view in its order dated 21.03.2016 and disposed of the Case No. 53/2015 approving the Generation Tariff of Unit-I & II of Ib Thermal Power Station of OPGC for FY 2016-17. What the Commission has opined is that once the norms has come into effect through regulation of OERC based on studies by CERC, all such parameters incorporated in PPA through mutual settlement without supporting information or basis, merge into normative parameters and tariff is to be determined accordingly. Transactions already made are protected through honouring the PPA (including amendments also).
- 82. OPGC has challenged the view of the Commission in order dated 21.03.2016 and filed the Appeal No. 126 of 2016 before the Hon'ble APTEL on the issue of deviation from PPA. The said appeal is under consideration of Hon'ble APTEL. Meanwhile the instant petition has been filed by OPGC for FY 2017-18 before the Commission as per Section 62 and 86 of the Electricity Act, 2003 read with approved Bulk Power Supply Agreement along with Supplementary Agreement (Together referred as 'Amended PPA'), related provisions of OERC (Terms and Conditions for Determination of Generation Tariff) Regulation, 2014 and OERC (Conduct of Business) Regulations, 2004 without prejudice to OPGC's rights under law and contentions taken in Appeal No. 126 of 2016 before the Hon'ble APTEL.
- 83. It is to be mentioned here that, while approving the generation tariff order for FY 2016-17 of OPGC, the Commission has clearly explained the grounds of necessity and applicability of OERC generation tariff Regulation 2014 in the OPGC generation tariff order vide Para 74 to 81 dated 21.03.2016. For the sake of clarity we once again reproduce the above relevant paras of the said order:
  - "74. Settling all the matters to rest regarding jurisdiction of the Commission in determination of tariff for the power procured by GRIDCO from OPGC, the present petition has been filed by OPGC in compliance to the Section 62 and 86 (a & b) of the Electricity Act, 2003, OERC (Terms and Conditions for Determination of Generation of Tariff) Regulations, 2014 read with amended

- PPA between the parties and other enabling provisions in OERC (Conduct of Business) Regulations, 2004.
- 75. OPGC has submitted in its application that, as per direction of OERC in its order dated 27-04-2015, it has made this application before the Commission as per the approved PPA for determination of tariff for the rest of the control period starting from FY 2016-17 onwards since the tariff for the FY 2014-15 and 2015-16 have already been approved by the Commission in the ARR of GRIDCO for the said years. Accordingly OPGC has filed its tariff application for FY 2016-17 based on PPA and also requested Commission to include provisions already made in the amended PPA instead of Regulations promulgated latter.
- 76. Prior to determination of tariff, one pertinent question arises whether the guiding parameters mentioned in the PPA as requested by the petitioner or the parameters specified in OERC (Terms and Conditions for Determination of Generation of Tariff) Regulations, 2014 are to be adopted by the Commission for the purpose of tariff determination.
- 77. The Commission in its order dated 27.04.2015 while approving amended PPA of the Petitioner with GRIDCO had observed as follows:
  - "10. The commission in the mean time has published in the gazette OERC (Terms & Conditions for Determination of Generation Tariff) Regulation, 2014 on 10-10-2014 for the control period of FY 2014-19. The Regulation 1.4 of the said Regulations provides as follows:

These Regulations shall come into force on the date of publication in the official gazette, and unless reviewed earlier or extended by the Commission shall remain in force till 31-03-2019.

Provided that, where the Commission has <u>at any time prior to the notification</u> <u>of these Regulations</u>, approved a Power Purchase Agreement (PPA) or arrangement between a generating company and a beneficiary, or has adopted the tariff contained herein for supply of electricity from an existing generating station then the tariff for supply of electricity by the generating company to the Distribution Licensee shall be in accordance with such PPA or arrangement <u>for such period as may be so approved or adopted by the commission</u>, to the extent of existing Installed Capacity as contained in the PPA"

- "11. Since the power purchase by GRIDCO from Unit 1 & 2 of Ib Thermal Power Station has been continuing as per mutual agreement without approved PPA and the Commission has approved the same in the ARR of GRIDCO for the concerned year there is no need to reopen the same as per the above Regulation. The parties should, therefore, settle the power purchase process for the period prior to implementation of the above Regulation taking into account the original PPA and its supplemental one as approved by us now."
- 78. From the above, it can be inferred that the original PPA & its supplemental one which were approved by the commission vide order dated 27-04-2015 are applicable for such period prior to the notification / implementation of OERC Generation Tariff Regulation, 2014.

Further, observation in para 11 & 13 of the OERC order dated 27-04-2015 clarified that the tariff for the FY 2014-15 & FY 2015-16 have already been approved by the Commission in the ARR of GRIDCO basing on the submission of GRIDCO as per mutual agreement without approved PPA and the Commission has approved the same in the ARR of GRIDCO for the concerned year FY 2014-15 & FY 2015-16. Therefore, there is no need to reopen the same as per the above Regulation. That means all power purchase related issues are to be settled between OPGC & GRIDCO till 31-03-2016 as per original PPA and its supplemental one (Amended PPA).

- 79. In their respective objections, all Objectors including GRIDCO have pointed out that the (Terms and Conditions for Determination of Generation of Tariff) Regulations, 2014 has an universal applicability and has greater legal force than the PPA made between OPGC & GRIDCO. They argued that, similar PPA's were also made between GRIDCO and other Thermal Power Station and Power station of OHPC earlier. After promulgation of Electricity Act, 2003, and consequential Regulations all such parameters mentioned in the respective PPA's were modified as per rule and Regulation framed in pursuance of the Electricity Act. Therefore, departure from Regulation is unjustified.
- 80. The Commission has carefully examined the submission of the Petitioner and views of the objectors regarding applicability of tariff parameter as mentioned in the PPA after a new Regulation is promulgated. This has also been dealt with in our order dated 27.04.2015 where the Commission has approved the power transaction between GRIDCO and OPGC and also observed that the Petitioner OPGC is to file tariff petition as per our Generation Regulation, 2014 from 2016-17 onwards. If our Generation Regulation, 2014 is of no consequence to the tariff of OPGC then it would not have filed the present petition because there already exists a PPA. The norms followed in the Generation Regulation, 2014 are set basing on the empirical studies by CEA and CERC etc. and views of different stakeholders. These norms are set to bring about certainty and efficiency in the fixation of tariff which is ultimately passed on to the consumers. Any bilateral agreement which is beyond the scrutiny through Regulation by the beneficiaries who are the consumers of the State cannot be accepted by the Commission since it violates Section 61(b), (c) and (d) of the Act. The Electricity Act, 2003 is a comprehensive piece of legislation. Cherry picking of the provisions of the Act would lead to chaos in the Regulatory regime. When a cost plus tariff is determined under a particular provision of the Act and its related Policies it is not possible to overlook other provisions of the same Act to the advantage of the Petitioner. Moreover agreements cannot override statutory provisions. The Petitioner cannot take the shelter of the agreement to insulate itself from the statutory norms. The Notification of the Government dated 21.06.2008 also favours tariff fixation in line with CERC Regulation in absence of any Regulation by OERC. Since in the meantime OERC Generation Regulation, 2014 has come into force we have to be guided by the same. Accordingly, we proceed to determine the tariff of power purchased by GRIDCO from OPGC under Section 62 of the Act. OERC has carefully examined and analysed the tariff proposal of OPGC. The written and oral submissions of the objectors have been taken into consideration while deciding the generation tariff of OPGC

- for FY 2016-17. The response of OPGC on the points raised by objectors have also been considered.
- 81. Regarding submissions of OPGC, that only DISCOMs purchasing power have the right to disagree and not GRIDCO, we observe that OPGC has already made the PPA with GRIDCO, recognising it as a legal entity for supply of power to DISCOMs in a single buyer model. We see no ground to accept the views of OPGC, now."
- 84. The Commission has carefully examined the present submission of the Petitioner and views of the objectors regarding applicability of tariff parameters as mentioned in the PPA after a new Regulation is promulgated. In spite of forceful arguments by the Petitioner we still see some reasons in the arguments presented by objectors in favour of determination of tariff as per the Commission's Regulations. Moreover, the matter is being deliberated at a higher forum. Therefore, we continue to hold the view that all parameters enshrined into the PPA converge into the normative parameters after certain point of time once the latter come into effect in accordance with such regulations since normative parameter based on observation and studies are more reliable for recovery of costs equitably by all generators and user consumer compared to PPA signed between parties based on bi-lateral understanding, without any valid documents, benefitting each other. Therefore, once again we proceed to determine the tariff as per norms contained in concerned OERC Regulation(s).
- As per clause 4.1 of OERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2014 the tariff for supply of electricity from a thermal generating station comprises of two parts, (a) Capacity Charges (recovery of annual fixed cost) & (b) Energy Charges (recovery of primary and secondary fuel cost).

### **Computation of Annual Fixed Cost**

- 86. As per clause 4.3 of OERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2014, the Capacity Charges (recovery of annual fixed cost) consists of the following:
  - a. Return on Equity;
  - b. Interest on loan Capital;
  - c. Depreciation;
  - d. Interest on Working Capital;
  - e. Operation and Maintenance Expenses

## Capital Cost and additional capitalisation

- 87. The project cost of Rs. 1060 crore proposed by OPGC and accepted by Government of Odisha for existing IB TPS I & II has been accepted by the OERC for determination of Generation Tariff of OPGC for FY 2017-18. This Project cost of Rs.1060 crore includes equity of Rs.450 Crore and Loan of Rs.610 Crore and accepted by the Commission earlier.
- 88. OPGC has proposed Rs. 66.41 Crore towards expenditure incurred and to be incurred during the period FY 2011-12 to FY 2017-18 for installation of environmental protection equipments as a part of statutory compliance and Rs. 30.10 Crore towards expenditure incurred and to be incurred during the period FY 2013-14 to FY 2016-17 on account of efficient operation of the project and maintaining consistent operation level. Altogether OPGC has claimed additional capitalization of Rs.96.51 crore separately, as part of year end expenses through the tariff for FY 2017-18.
- 89. Regulation 3.3 & 3.4. of OERC (Terms and Conditions of Generation tariff)
  Regulation 2014 stipulates circumstances under which additional capitalisation will
  be admitted by the Commission in its discretion subject to prudence check.
- 90. Since the Commission is approving the generation tariff of OPGC as per OERC (Terms and Conditions of Generation Tariff) Regulation 2014, claim of additional capitalisation by OPGC as per any specific norms of amended PPA has no relevance here.
- 91. The Commission has sought all information and documents evidencing proposal of OPGC for additional capitalisation. But OPGC is yet to respond with supporting information. The Commission is of the view that equipments/ structures must have to be installed, utilised / operated with recorded evidence and must have entered into the accounts under capital investment head verified/ certified by auditors so that the same can be accepted along with other checks if necessary. No such paper has been placed before us in its favour. No provision exists in the Regulation to consider a proposed future expenditure and approve the additional capitalisation as a part of year end expenses in the particular year.
- 92. Accordingly the Commission does not consider and agree to the proposal of additional capitalisation of OPGC. The same shall be considered as and when laid down conditions are met.

## **Debt – Equity Ratio**

- 93. As per clause 3.7 of OERC (Terms & Conditions for Determination of Generation Tariff) Regulation, 2014, it is stipulated that, "in case of the generating stations declared under commercial operation prior to 01-04-2014, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31-03-2014 shall be considered."
- 94. The generating Station Ib TPS I & II of OPGC achieved COD in the year 1996 & 1997 respectively. The project cost of Rs.1060 crore consists of debt of Rs.610 crore & equity of Rs.450 crore. Accordingly, in line with the OERC Generation Tariff Regulations, 2014, the Commission accepts the debt and equity of Rs.610 crore & Rs.450 crore respectively for the purpose of tariff. We do not agree with the views of the Consumer Counsel and objectors on this as the matter has been settled earlier without any objections and has assumed finality.

## **Return on Equity (RoE)**

95. As per clause 4.5 of OERC (Terms & Conditions for Determination of Generation Tariff) Regulation, 2014, RoE shall be computed in rupee terms, on the equity base determined in accordance with regulation 3.7 of said provisions @ 16% of the Equity Capital. Accordingly, Rs.72 crore at the rate of 16% of equity capital of Rs.450 crore, is approved as return on equity in the tariff FY 2017-18.

## **Depreciation**

96. The assets of Generating Stations of OPGC has fully depreciated by the financial year ending March 31, 2009 and OPGC has not claimed any amount under depreciation head in its tariff proposal for FY 2017-18. Therefore, the Commission does not approve any amount under depreciation head in the tariff of OPGC for FY 2017-18.

#### **Interest on Loan Capital**

97. OPGC in its tariff application submitted that the loan amount of Rs. 610 Crore has been fully repaid by financial year ending March 31, 2012 and hence OPGC has not claimed any Interest on Loan Capital for FY 2017-18. Therefore the Commission has not approved any amount under interest on loan capital head in the tariff of OPGC for FY 2017-18.

## **Interest on Working Capital**

- 98. OPGC in its application mentioned that it has been meeting the working capital requirement from internal accruals. OPGC has estimated working capital requirement of Rs.170.68 on the basis of PPA parameters, i.e. Coal Cost of one & half months, Secondary Fuel Oil cost of two months, O& M Expenses of one month and Receivables of two months. Accordingly, OPGC in its submission has requested the Commission to approve Rs.25.17 crore towards interest on working capital by considering rate of interest @ 14.75% (collected from Union Bank of India).
- 99. The Commission has determined the working capital requirement as per clause 4.24 (a) of the Generation Regulation, 2014 and has allowed interest on same as per subsequent clause 4.26. The detailed working capital requirements and interest on working capital calculated by the commission are given in table below:

 $Table-8 \\ Calculation of Interest on Working Capital of OPGC for FY 2017-18$ 

	Calculation of Interest on Working Capital of Of GC for F1 2017-16								
Sl No	Particulars	OERC Approved for FY 2016-17	OPGC Pr for FY 20	-	OERC Approval for FY 2017-18				
NO		Amts (In Cr.)	Norms	Amts (In Cr.)	Norms	Amts (In Cr.)			
1	Cost of Coal	27.78	One & half months	48.58	One month	28.78			
2	Cost of Secondary Fuel Oil	0.87	Two months	4.36	One month	0.72			
3	O& M Expenses	9.63	One month	10.80	One month	10.27			
4	Maintenance Spare	23.10	-	-	20% of O&M	24.65			
5	Receivables	45.37	Two months	106.93	One month	46.92			
6	Total Working Capital Requirements	106.75		170.68		111.34			
7	Interest Rate (SBI Base Rate + 300 basis points)	12.30%	6 14.75% (SBI base rate from Feb., 201						
8	Interest on working Capital	13.13		25.17		12.25			

Hence, the Commission approves Rs.12.25 crore towards interest on working capital against OPGC proposal of Rs.25.17 crore for FY 2017-18.

100. Further the Commission clarifies that, the above approved interest rate is based on SBI one year tenure base rate @ 8% effective from February 2017. As per OERC

Generation Tariff Regulation 2014, base rate shall be fixed as on 1<sup>st</sup> April of the tariff year. Any variation on account of base rate from what we are approving now shall be treated as pass through in the coming year.

## **Operation & Maintenance Expenses**

- 101. OPGC has considered 2.5% of original project cost of Rs.1030 crore for base year FY 1996-97 and escalated @8% p.a for subsequent years basing on PPA executed between GRIDCO & OPGC towards O&M expenses. Accordingly for the 21<sup>st</sup> years of operation, OPGC had proposed O&M Expenses of Rs.129.62 Crore for FY 2017-18.
- 102. Since the Commission adopts the generation tariff of OPGC for FY 2017-18 as per Regulation, the operation and maintenance expenses is being considered as per the provisions in the clause 4.28 of OERC (Terms & Conditions for Determination of Generation Tariff) Regulation, 2014 @ Rs.28.70 lakh/MW/Year for the FY 2017-18. Accordingly, the normative Operation & Maintenance expenses of Rs.120.54 crore i.e. (420MW x Rs.28.70 lakh/MW) have been calculated and the Commission approves the same for FY 2017-18.

#### **Special Compensation Allowance for O&M**

- 103. OPGC has not claimed any expenditure towards compensation allowances since there was no such provision in the PPA. Since the Commission proceeds in accordance with the Generation Tariff Regulation 2014, it allows special compensation allowance for higher level of operation and maintenance of the generating stations.
- Clause 4.28(b) of the Generation Regulation, 2014 provides for special compensation allowance @ Rs.0.15 lakh/MW/year, Rs.0.35 Lakh/MW/year & Rs.0.65lakh/MW/ year for the projects that have completed 10, 15 and 20 Years of useful life respectively. Since IB TPS I & II of OPGC were commissioned in 1996 and 1997 respectively and completed more than 20 years, it is eligible for special compensation allowance @ Rs.0.65 lakh/MW for FY 2017-18. Accordingly, the Commission approves Rs.2.73 crore (420MW x Rs.0.65 lakh/MW) towards special compensation allowance in the tariff of OPGC for FY 2017-18 in addition to the above normative O & M expenses of Rs.120.54 crore. Therefore, Rs.123.27 crore is allowed by the Commission towards Operation & Maintenance expenses for FY 2017-18. The detailed calculations are given in table below:

Table -9
Calculation of Operation & Maintenance Expenses of OPGC for FY 2017-18
(Rs. in Crore)

Sl. No	Particulars	OERC Approval for FY 2016-17	OPGC Proposal for FY 2017-18	OERC Approval for FY 2017-18
1	Normative	113.40	129.62	120.54
	O& M		(Rs.1030 Cr consider as	
	Expenses		Capital Cost of the	(420 MW x Rs.28.70
			Project for O&M	Lakh / MW for FY
			Expenses based on PPA	2017-18)
			x O & M Expenses for	
			first Year i.e. FY 1996-97	
			considered as 2.5% x	
			annual growth @ 8% for	
			21 <sup>st</sup> year)	
2	Special	2.10	-	2.73
	Compensation			(420MW x Rs.0.65
	Allowance			lakh/MW for Station
				IBTPS I and II
				respectively)
	Total	115.50	129.62	123.27

# **Summary of Total Annual Fixed Cost**

105. On the basis of the above estimations, the Commission approves of Rs.207.52 crore towards total annual fixed cost of OPGC plants against Rs.226.80 crore proposed by Petitioner for FY 2017-18. The annual fixed cost charges are summarized in the table below:

Table - 10 Annual Fixed Cost of OPGC for FY 2017-18

(Rs. in Crore)

Sl.		OERC	OPGC	OERC	
No.	Particulars	Approval	Proposal	Approval	
		for FY 2016-17	for FY 2017-18	for FY 2017-18	
1.	Return on Equity	72.00	72.00	72.00	
2.	Depreciation	0.00	0.00	0.00	
3.	Interest on Loan Capital	0.00	0.00	0.00	
4.	Interest on Working Capital	13.13	25.17	12.25	
5.	O&M Expenses	115.50	129.62	123.27	
6.	<b>Total Annual Fixed Cost</b>	200.63	226.80	207.52	

## **Operational Parameters**

106. OPGC in its tariff proposal has Submitted PLF @ 83.06%, Auxiliary Consumption @9.50%, Station Heat Rate @2500 kCal/kwh & Secondary Fuel Oil Consumption @ 3.5ml/Kwh based on PPA. For efficient and economical cost of operation, the

Commission has followed the norms stipulated in the OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014. Accordingly, and in line with views of objectors/ Consumer Counsel, the Commission is approving PLF @ 85%, Auxiliary Consumption @8.50%, Station Heat Rate @2450 kCal/kwh & Secondary Fuel Oil Consumption @ 1ml/Kwh (CERC -0.5ml/kwh) based on OERC Generation Tariff Regulation 2014 similar to previous tariff order. Accordingly the Commission has computed the level of estimated generation, price & GCV of Coal and secondary fuel oil etc to determine the energy charges (Paise/Kwh) of OPGC for FY 2017-18. The same is explained below:

#### **Generation of Power**

107. We do not agree with the Petitioner and go with objectors/ Consumer Counsel that more efficient plant is in best interest of all stakeholders and climate. Therefore, the Commission has calculated gross generation of power from 2 x 210 MW power station as 3127.32 MU during for FY 2017-18 with Normative PLF @ 85% in accordance with OERC generation tariff Regulation 2014 against OPGC projection of 3055.947MU by taking average PLF of 83.06%. Deducting auxiliary Consumption @ 8.50%, the Commission estimates and approves net generation available for beneficiary (GRIDCO) as 2861.50 MU for the FY 2017-18 against OPGC estimation of 2765.63MU (after considering auxiliary consumption @ 9.5%).

#### **Station Heat Rate**

108. The Commission has considered Station Heat Rate @ 2450 kCal/kwh for the FY 2017-18 as laid down in clause 5.3 (c) (i&ii) of OERC generation Tariff Regulation, 2014 against OPGC proposal @ 2500 kCal/kwh based on PPA.

## Price & GCV of Coal

109. In the instant petition, OPGC has proposed GCV of Coal at 2629.10 kCal/kg by considering weighted average GCV of coal from November 2015 to October 2016. It is mentioned here that, OPGC had filed its first tariff application for FY 2016-17 and while approving the same the Commission had considered weighted average Price and GCV of coal on the basis of information provided by OPGC in its tariff application as well as subsequent queries raised by the Commission. In the present application for FY 2017-18 the Commission has carefully examined and analyzed the information submitted by OPGC

- 110. After analysing the instant petition, the Commission observes that even though the weighted average price of coal is gradually increasing year after year, the weighted average GCV of coal claimed by OPGC is constantly reducing over the successive years. Considering the same the Commission had raised certain queries. In compliance to the queries raised by the Commission, OPGC has replied that it is using a particular grade of coal (Grade-13) from Mahanadi Coalfields Limited (MCL) whose base price is Rs.720/MT and the GCV of Coal is in the range of 3400 kcal/kg 3700 kcal/kg as notified by Coal India Limited (CIL) on 29.05.2016.
- 111. Further OPGC has tried to clarify that, with depletion of good quality coal and large scale open cast mining the quality of coal as is being supplied to OPGC has deteriorated over the years and price and GCV of coal under Coal Supply Agreement are beyond the control of OPGC (uncontrollable factors).
- 112. OPGC continued that, to bring improvement in the quality of coal it has entered in to a tripartite agreement with MCL and Central Institute of Mining and fuel Research (CIMFR) on 26.10.2016 for third party analysis and sampling of coal "as received".
- 113. From the above, the Commission observed that, while procuring a particular grade of coal (Grade-13) from MCL, OPGC is paying price for a higher range of GCV of coal (exceeding 3400 kcal/kg and below 3700 kcal/kg) whereas actual weighted average GCV is found to be 2708 kcal/kg for FY 2015-16 and 2617 kcal/kg for first seven months of FY 2016-17 (upto October 2016) at its generating stations which is lesser compared to the standard GCV range fixed by CIL. The month wise landed price of coal and GCV for FY 2015-16 and FY 2016-17 (upto October 2016) as submitted by OPGC are presented in table below:

Table - 11
Trend of Price and GCV of Coal

Months	FY 2015-16				FY 2016-17			
	Consumption (MT)	Price (Rs./MT)	% Change in Price over base month	GCV (kCal/Kg)	Consumption (MT)	Price (Rs./MT)	% Change in Price over base month	GCV (kCal/Kg)
April	2,37,789.00	1,124.53	-	2,825.00	2,57,452.00	1439.70	-	2686.00
May	2,23,277.00	1,136.58	1.07	2,787.00	1,80,711.00	1406.80	(2.29)	2690.00
June	2,41,583.00	1,143.53	1.69	2,790.00	2,30,373.00	1497.41	4.01	2765.00
July	2,12,305.00	1,147.90	2.08	2,827.00	2,60,546.00	1520.80	5.63	2614.00
August	2,53,961.00	1,151.15	2.37	2,552.00	2,54,281.00	1532.55	6.45	2622.00

Months		FY 2015-16				FY 2016-17			
	Consumption (MT)	Price (Rs./MT)	% Change in Price over base month	GCV (kCal/Kg)	Consumption (MT)	Price (Rs./MT)	% Change in Price over base month	GCV (kCal/Kg)	
September	2,39,700.00	1,153.26	2.55	2,702.00	2,53,081.00	1537.15	6.77	2435.00	
October	2,56,249.00	1,160.86	3.23	2,782.00	2,55,976.00	1538.95	6.89	2544.00	
November	2,51,456.00	1,174.51	4.44	2,690.00					
December	2,46,344.00	1,179.96	4.93	2,494.00					
January	1,97,254.00	1,181.72	5.09	2,747.00					
February	1,76,152.00	1,182.19	5.13	2,711.00					
March	2,62,870.81	1,554.35	38.22	2,629.00					
Wtg Avg.	2,33,245.07	1,194.50	6.22	2,708.00	2,41,774.29	1,500.00	4.19	2,617.00	

- 114. The Commission observed that since OPGC is paying price of coal for a particular range of GCV (exceeding 3400 kcal/kg and not exceeding 3700 kcal/kg), OPGC should ensure all quality checks in procurement of coal. GRIDCO should also satisfy itself of the quality of coal and its price against the specified standards. The GCV of coal for which the price is being paid by OPGC should not be less than the minimum of the range of GCV specified in the standard. Accordingly the Commission decided to consider the GCV of coal @ 3400 kcal/Kg as against its proposal of 2629.10 kcal/kg for FY 2017-18.
- 115. The Commission finds that during the last three months of information filed with the Commission the coal price has more or less remained stable and reached a maximum level of Rs.1539.00/MT during October 2016. Therefore, the Commission considers the same price to continue for the next financial year as against OPGC proposal of Rs.1645.04/MT for determination of energy charges for the FY 2017-18.
- 116. Price variation shall be adjusted through Fuel Price Adjustment (FPA) on submission of relevant evidential supporting documents to GRIDCO.

## Price & GCV of Secondary Fuel oil

117. OPGC, in its submission, has proposed Secondary fuel oil price as Rs.29,649.64/Kl based on weighted average price of FO and LDO in the ratio of 90:10 of October 2016 and 6.92% escalation factor (Rs.27,730.02 /Kl plus 6.92 % escalation of cost) for FY 2017-18. The Commission has carefully examined and analyzed the information submitted by OPGC of actual Price of FO & LDO trend during FY 2015-

16 and first seven months of current FY 2016-17( April-16 to Oct-16) and the same is presented in table below:

Table - 12 Price and GCV of Secondary Fuel oil

FY	Month	Month Consumption LDO Price FO Price Price of LDO &				% Change
	1,1011011	(kL)	(Rs./kL)	(Rs./kL)	FO Mix	in
		()	(====)	(===;	(1:9 ratio)	oil mix Price
						over the
						base month
	April	133.03	50,609.36	34,650.44	36,246.33	0.00
	May	285.67	49,452.52	34,600.75	36,085.93	-0.44
	June	86.65	48,858.97	35,061.23	36,441.00	0.54
	July	136.51	48,763.18	35,008.97	36,384.39	0.38
	August	8.82	46,649.05	33,627.06	34,929.26	-3.63
16	September	87.94	46,649.05	33,627.06	34,929.26	-3.63
2015-16	October	3.90	46,649.05	33,627.06	34,929.26	-3.63
70	November	22.15	46,649.05	33,627.06	34,929.26	-3.63
	December	141.41	45,316.00	32,095.23	33,417.30	-7.81
	January	12.36	42,623.47	29,583.61	30,887.59	-14.78
	February	246.36	38,965.49	26,980.37	28,178.88	-22.26
	March	158.77	37,653.23	25,583.59	26,790.56	-26.09
	Wtg Avg.		45,325.61	31,773.03	33,128.28	(8.60)
	April	17.20	37,213.74	24,681.46	25,934.68	-
	May	12.82	37,356.80	24,707.43	25,972.37	0.15
	June	449.69	38,211.11	25,128.11	26,436.41	1.93
17	July	69.98	39,143.23	26,059.43	27,367.81	5.53
2016-17	August	-	38,905.94	26,055.54	27,340.58	5.42
	September	78.73	39,034.70	26,378.47	27,644.09	6.59
	October	90.48	38,965.72	26,481.61	27,730.02	6.92
	Wtg. Avg. (Apr-Oct)	718.90			26,802.00	3.34

- 118. From the above table, it is observed that, the weighted average price of FO and LDO in ratio of 90:10 has been reduced by 26.09% (from Rs.36,246.33/Kl to Rs.26,790.56/Kl) during FY 2015-16 whereas during first seven months of current FY 2016-17, the weighted average price of FO and LDO has increased by 6.92% (from Rs.25934.680/Kl to Rs.27730.02/Kl). The Commission finds that during the last three months of information filed with the Commission the weighted average price of FO and LDO in ratio of 90:10 has reached a maximum level of Rs.27730.00/KL during October 2016. Therefore, the Commission considers the same price to continue for the next financial year as against OPGC proposal of Rs.29,649.64/KL for determination of energy charges for the FY 2017-18.
- 119. Price variation shall be adjusted through Fuel Price Adjustment (FPA) mechanism.

  OPGC shall submit the relevant evidential document to GRIDCO for verification.

120. OPGC has proposed GCV of Secondary Fuel Oil @ 10000 kCal/kl for FY 2017-18 and the Commission approves the same as GCV of Secondary Fuel Oil @ 10000 kCal/kl for FY 2017-18 as per our Regulation.

# **Consumption of Secondary Fuel Oil**

OPGC in its tariff submission has proposed Secondary Fuel oil Consumption @3.5ml/kwh based on PPA executed with GRIDCO. As in previous year, stakeholders objected to the same in the public hearing this year also. They had mentioned that, the oil consumption rate proposed by OPGC is much more than the actual consumption and consumption rate stipulated in OERC Generation Tariff Regulation, 2014. CERC Regulation provides only 0.5ml/kwh. The Commission has examined the past four years' Secondary fuel oil consumption information submitted by OPGC and computed the rate of oil consumption during the said periods as given in table below:

Table - 13 Computation of Actual Secondary Fuel Oil Consumption of OPGC

FY	Total Oil	<b>Gross Generation</b>	Oil Consumption				
	Consumption (Kl)	(MU)	(ml/Kwh)				
2012-13	2,131.43	3,181.59	0.67				
2013-14	2,052.09	2,855.90	0.72				
2014-15	1,618.35	2,798.92	0.58				
2015-16	1,323.56	3,066.93	0.43				

From the above table, it is observed that, the actual oil consumption rate during the past four years is always less than 1ml/kwh. Therefore the Commission do not intend to deviate from the norm of OERC Generation Tariff Regulation 2014 { clause 5.3(d)(i & iii)} and approves the secondary fuel oil consumption rate @1ml/kwh for OPGC generation tariff of FY 2017-18.

# Summary of Norms & parameters approved for computation Energy Charges of OPGC for FY 2017-18.

122. The following operational norms & parameters are approved by the Commission for FY 2017-18. The details are given in the table below:

Table-14 Operational Parameters for FY 2017-18

Operational Parameters for FY 2017-18								
Sl. No	Particulars	Unit	OERC Approval for FY 2016-17	OPGC Proposal for FY 2017-18		OERC Approval for FY 2017-18		
			Value	Basis	Value	Basis	Value	
1.	Plant Load Factor	%	85%	After considering minor annual overhauling schedule for 21 days for unit-1 and capital overhauling for 35 days for unit-2	83.06%	clause 5.3 (a)& (b) of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	85%	
2.	Gross Generation	MU	3,127.32	Based on the above PLF	3,055.94	Based on the above PLF	3,127.32	
3.	Auxiliary Consumption	%	8.50%	As per the provisions of the approved PPA	9.50%	clause 5.3 (e) (iⅈ) of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	8.50%	
4.	Net Generation	MU	2,861.50	Gross generation minus Auxiliary Consumption	2,765.63	Gross generation minus Auxiliary Consumption	2,861.50	
5.	Station Heat Rate	kcal/ kWh	2,450	As per the provisions of the Original PPA (as it no change in Amended PPA)	2,500	clause 5.3 (c) (iⅈ)of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	2,450	
6.	Specific Fuel Consumption	ml/ kWh	1.00	As per the provisions of the Original PPA (as it no change in Amended PPA)	3.50	clause 5.3(d) (i & iii) of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	1.00	
7.	Price of Coal	(Rs. /MT)	1,186.62	Estimated	1,645.04	Estimated	1,539.00	
8.	Price of Secondary Oil	(Rs./ Kl	33,338.76	Estimated	29,649.64	Estimated	27,730.00	
9.	Gross Calorific Value of Coal (GCV)	(kCa l/ kg)	2,716.00	Estimated	2,629.10	Minimum Standard range fixed by CIL for Grade-13 Coal	3,400.00	
10.	Gross Calorific value of Secondary Oil	(kCa l/ Kl)	10,000	As per the provisions of the Original PPA (as it no change in Amended PPA)	10000	As proposed by OPGC	10,000	

# **Energy charges**

123. During FY 2016-17, the Commission had approved energy charges @ 120.15 paise/kwh against OPGC proposal of @133.02 paise/kwh. In the present petition OPGC has proposed an energy charges @ 181.90 paise/kwh for FY 2017-18. After consideration of the factors mentioned above, the Commission now approves energy charge of OPGC @ 123.74 paise/kwh for FY 2017-18. The details are given in the table below:

Table - 15 Computation of Energy Charge for 2017-18

	Computation of Energy Char				
Particulars	Unit	OERC Approval for FY 2016- 17	OPGC Proposal for FY 2017-18	OERC Approval for FY 2017-18	
Gross Generation of Power	MU	3,127.32	3,055.94	3,127.32	
Auxiliary Consumption	MU	265.82	290.31	265.82	
Generation After Aux. Cons.	MU	2,861.50	2,765.63	2,861.50	
GCV of Coal	kCal/kg	2,716.00	2,629.10	3,400.00	
GCV of Oil	kCal/kg	10,000	10,000	10,000	
Specific Coal Consumption	kg /kWh	0.90	0.94	0.72	
Specific Oil Consumption	ml/kWh	1.00	3.50	1.00	
Price of Coal	Rs./MT	1,186.62	1,645.04	1,539.00	
Price of Secondary Oil	Rs./kL	33,338.76	29,649.64	27,730.00	
Variable Charge for Coal	Paise/kwh	116.51	170.43	120.71	
Variable Charge for Oil	Paise/kwh	3.64	11.47	3.03	
<b>Energy Charge</b>	Paise/kwh	120.15	181.90	123.74	
<b>Total Energy Cost</b>	Rs. Crore	343.81	503.05	354.08	

# **Reimbursement of Other Charges**

124. The Commission has gone through the proposals on claim of other charges of Rs.58.98 crore comprising of reimbursement of Electricity duty, water cess & charges, Tax and cess on land, Electricity Inspection fees, SOC and MOC for SLDC, EPRC charges, Income tax, Ash Utilisation Expenses and Recovery of tariff petition fees. The above components are discussed below:

## **Electricity Duty**

125. OPGC has proposed Electricity Duty of Rs.8.25 crore @ 0.30 per unit on 9% auxiliary Consumption of Gross Generation of 3055.94 as per provisions of PPA. Since the Commission has estimated Gross generation of OPGC to be 3127.32 MU during FY 2017-18, after considering 8.50% auxiliary Consumption of Gross Generation of 3127.32 MU, the Commission approves Electricity duty of Rs.7.97 crore for FY 2017-18 as per Regulation 7.10 to7.12 of OERC generation tariff Regulation 2014. During previous year 2016-17 the Commission had approved the amount of Rs.7.97 crore as against OPGC proposal of Rs.8.09 crore.

## Water Cess & Water Charges:

126. OPGC had proposed water cess & water charges of Rs.6.35 crore (water charges of Rs. 6.15 crore & water cess of Rs.0.20 crore) basing on actual amount incurred during FY 2015-16. Therefore the Commission provisionally allows water cess & water charges of Rs.6.35 crore for FY 2017-18 as per clause 7.10 to 7.12 of OERC generation tariff Regulation 2014. During previous year 2016-17 the Commission had approved an amount of Rs7.08 crore as against OPGC proposal of same amount of Rs.7.08 crore.

## Tax and Cess on land:

127. The Commission allows tax and cess on land basing on the actual amount incurred by the Petitioner during the FY 2015-16. Accordingly, an amount of Rs.0.22 crore is allowed as tax and cess on land for FY 2017-18 as per Regulation 7.10 to7.12 of OERC generation tariff Regulation 2014. During previous year 2016-17 the Commission had also approved same amount of Rs.0.22 crore as proposed by OPGC.

## **Inspection fees:**

128. On the proposal of OPGC for reimbursement of inspection fees of Rs.0.17 crore on actual basis incurred during FY 2015-16 it is clarified in the previous tariff order for FY 2016-17 that, it is a part of O & M Expenses and be met accordingly from the provisions already made.

# System Operation Charges (SOC) & Market Operation Charges (MoC) for SLDC:

129. OPGC has proposed Rs.0.35 crore towards SoC & MoC charges for SLDC as the same amounts of Rs.0.35 crores was approved in the tariff order dated 21.03.2016 for FY 2016-17. The Commission now approves Rs.0.33 crore @ Rs.7806/MW/year as approved in our SLDC Charges order for FY 2017-18 in Case No. 65/2016.

## **ERPC Charges:**

130. As Proposed by OPGC, Rs.0.16 crore on actual basis incurred during FY 2015-16, the Commission accepts the same amount for FY 2017-18 as per clause 7.10 to 7.12 of OERC Generation Tariff Regulation 2014 towards ERPC charges.

#### **Income Tax:**

131. Even though income tax will be claimed on the basis of actual payment, OPGC has proposed provisional income tax of Rs.38.11 Crore for FY 2017-18 as the same has been provisionally paid in FY 2015-16. The Clause 4.7 & 4.8 of OERC Generation Tariff Regulations, 2014 has stipulated that, the actual income tax paid by the generating company shall be recovered from the beneficiaries on account of generating business income only. Since the Commission has allowed RoE of Rs.72 crore (@16% on Equity Capital Rs.450.00 crore) and by considering the same as generating business income of OPGC, the Commission provisionally approves Income tax of Rs.37.07 crore for FY 2017-18 at same level for FY 2016-17.

#### **Ash Utilisation Expenses:**

132. In the present petition for FY 2017-18 OPGC has proposed to extend subsidy @ Rs.150/MT to all ash off takers and promised to take initiatives for awareness through advertisement for ash utilization. Accordingly OPGC had proposed Rs.5.17 crore towards Ash utilization Expenses for FY 2017-18. As the Commission has already clarified in its previous tariff order for FY 2016-17 that ash utilization expenses is a part of O& M expenses and so there is no need to allow it under a separate head. Therefore the Commission disagrees with the above proposal as a separate expense and directs OPGC to meet the ash utilization expenses from approved O & M Expenses for FY 2017-18.

## **Recovery of ARR and Tariff Petition Fees:**

133. The Commission, at Clause 7.9 of the OERC (Terms & Conditions of Generation Tariff) Regulation, 2014 under the head Application & Publication Expenses has stipulated the following:

"The application fees and the expenses incurred on publication of notices in the application for approval of Tariff, may in discretion of the Commission, be allowed to be recovered by the generating company, directly from the beneficiaries"

Accordingly the Commission approves Rs. 0.21 crore (@Rs.5000/MW for 420 MW) towards tariff petition fees proposed by OPGC for FY 2017-18 similar amount to that of FY 2016-17.

# **Summary of Year end Charges:**

134. A comparative summary statement of OPGC proposal on reimbursement of other charges and approval of the Commission is given below:

Table - 16
Reimbursement of Other Charges for 2017-18 (Rs. in Crore)

Sl.		OERC	OPGC	OERC	
No.	Particulars	Approval	Proposal	Approval	
		for FY 2016-17	for FY 2017-18	for FY 2017-18	
1	Electricity Duty	7.97	8.25	7.97	
2	Water Cess and Water Charges	7.08	6.35	6.35	
3	Tax and Cess on land	0.22	0.22	0.22	
4	Electricity Inspection Fees	-	0.17	-	
5	SOC and MOC for SLDC	0.35	0.35	0.33	
6	ERPC Charges	0.16	0.16	0.16	
7	Income Tax	37.07	38.11	37.07	
8	Ash Utilisation expenses	-	5.17	-	
9	Recovery of ARR and Tariff	0.21	0.21	0.21	
9	Petition Fees				
	Total	53.06	58.98	52.31	

Thus, the Commission provisionally approves yearend charges of Rs.52.31 crore as against OPGC proposal of Rs.58.98 crore for FY 2017-18. The Commission has included the same in the ARR of GRIDCO for FY 2017-18 and directs OPGC to reimburse the above fee, charges and expenses from GRIDCO as per Regulation 7.10 as and when incurred with appropriate documentary evidences.

#### **Incentives:**

135. Since the Commission has considered the PLF @ 85% for operational performances norms based on OERC generation tariff Regulation 2014, the Commission decided to allow incentives, if OPGC achieves excess Schedule generation (Kwh) over Energy generation as per NAPLF @85% as specified in Regulations 6.9 & 6.10 of OERC generation tariff Regulation 2014. Therefore for the time being, the Commission has not considered anything towards incentives in the tariff order for FY 2017-18 and disallowed the methodology proposed by OPGC to calculate incentives based on PPA. Further, it is also mentioned here that, the Commission had not approved any incentives by exercising the above stipulations of the Regulation in the previous tariff order of FY 2016-17.

# **Fuel Price Adjustment Charges:**

136. As against the proposal of OPGC for fuel price adjustment charges, the Commission does not feel to consider the same separately as the same shall be made pass through in the FPA mechanism as mentioned against each.

# Summary of Generation Tariff Proposal and Approval of the Commission for OPGC for FY 2017-18

137. The details of two part generation tariff proposed by OPGC and approved by the Commission for FY 2017-18 are depicted in the table below:

Table - 17
Generation Tariff Proposal of OPGC & Approval of OERC for FY 2017-18

Sr.	Particulars	Unit	FY 2016-17		FY 2017-18	
No.			Proposed	Approved	Proposed	Approved
			by	by OERC	by OPGC	by OERC
			OPGC			
1	Net Generation	MU	2712.25	2861.50	2765.63	2861.50
2	Total Annual Fixed Cost	Rs Cr	208.58	200.63	226.80	207.52
3	Total Energy Charges	Rs Cr	360.79	343.81	503.05	354.08
4	Total Generation tariff	Rs Cr	569.37	544.44	729.85	561.60
	(2+3)					
5	Capacity Charges (2/1)	Paise/kwh	76.90	70.11	82.00	72.52
6	Energy Charges (3/1)	Paise/kwh	133.02	120.15	181.90	123.74
7	Total Generation tariff	Paise/kwh	209.92	190.26	263.90	196.26
	excluding yearend					
	charges tariff (5+6)					

#### **DIRECTIVES OF THE COMMISSION:**

- 138. The recovery of Capacity Charges and the Energy Charges for a calendar month shall be made as per the Regulations 4.30 to 4.33 of OERC (Terms & Conditions for Determination of Generation Tariff) Regulations, 2014 and GRIDCO ltd shall make payment after prudence check.
- 139. The Commission has also provisionally approved for reimbursement of other charges of **Rs.52.31 Crore** against OPGC proposal of Rs.58.98 crore. The above charges have been included in GRIDCO's ARR to be reimbursed to OPGC on production of documentary evidence.
- 140. Rebate and late payment surcharge will be applicable as per Regulations 6.6 to 6.8 of OERC (Terms & Conditions for determination of Generation Tariff) Regulations, 2014.
- 141. The tariff now approved shall be effective from 01.04.2017 and shall be in force until further orders.
- 142. The application of OPGC in Case No. 62 of 2016 for approval of its Generation tariff of IBTPS I & II units for the FY 2017-18 is accordingly disposed of.

Sd/- Sd/- Sd/- (S. K. PARHI) (A. K. DAS) (U. N. BEHERA) MEMBER MEMBER CHAIRPERSON