## ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN, UNIT – VIII, BHUBANESWAR – 751 012

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Present: Shri S. P. Nanda, Chairperson

Shri S. P. Swain, Member Shri A. K. Das, Member

#### **CASE NO.53/2015**

**DATE OF HEARING** : **04.02.2016** 

**DATE OF ORDER** : 21.03.2016

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

Generation Corporation (OPGC) Ltd. for FY 2016-17 under Section 62 & 86 of the Electricity Act, 2003 read with OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 and OERC (Conduct of Business) Regulations,

2004.

#### ORDER

Odisha Power Generation Corporation (OPGC) Ltd. for the first time has filed this application before the Commission for determination of Generation Tariff of its 2X 210MW power stations for the financial year 2016-17 after withdrawal of Special Leave Petition (Civil) Nos.6812-13 of 2005 from the Hon'ble Supreme Court.

#### **PROCEDURAL HISTORY (Para 1 to 10)**

1. OPGC Ltd. is a "Generating Company" incorporated under the Companies Act, 1956 and is also under the meaning of Sec.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. This is the first application of OPGC to determine tariff for the power supplied to GRIDCO. OPGC had not filed its application for determination of generation tariff before the Commission challenging the jurisdiction of the Commission in determination of tariff filed by GRIDCO while there was an existing PPA between it and GRIDCO as per agreement dated 13.08.1996 effective from 01.01.1995. However, Hon'ble High Court of Orissa in O.J.C No.13338 of 2001 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, certain disputes had arisen between the parties to the PPA. Tripartite Agreement was reached between Parties and Government of Odisha on the recommendation of a Task Force constituted for the purpose. 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. 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. Since the applicant OPGC is filing tariff application for the first time, it sought extension of time

for filing of application for generation tariff for FY 2016-17 on November 28, 2015. On grant of extension by the Commission OPGC has filed the present application on 05.12.2015 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.

- 6. After due scrutiny and admission of the aforesaid application, the Commission directed OPGC to publish its application in the approved format. In compliance to the same; public notice was given in leading and widely circulated newspaper 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 6 nos. of objections from the following persons /organizations:-
  - (1) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No. 302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (2) Shri Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Apartments, Telenga Bazar, Cuttack-753009, (3) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB, Plot No. 775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (4) Shri Ananda Kumar Mohapatra, Power Analyst, S/o-Jachindranath Mohapatra, Plot No. L-II/68, SRIT Colony, Budharaja, Ps-Ainthapali, Dist-Sambalpur-768004, (5) Chairman-cum-Managing Director GRIDCO Limited, Janpath, Bhubaneswar, (6) Shri G. N. Agrawal, Convenor-cum-Gen. Secy, Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur-768003 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 except Objector No. 2 and his written submissions filed before the Commission was taken on record and considered. The applicant submitted its reply to issues raised by the various objectors.

7. In exercise of the power u/S. 94(3) of the Electricity Act, 2003 and to protect the interest of the consumers, the Commission appointed World Institute of Sustainable Energy (WISE), Pune as Consumer Counsel for objective analysis of the applicant's Aggregate Revenue Requirement and determination of generation tariff proposal for its different power stations for the financial year 2016-17. They made presentations on the matter during the hearing from consumer's point of view.

- 8. The date of hearing was fixed as 04.02.2016 at 3.00 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 soliciting presence of Government to take part in the proceedings and offer the views/suggestion/proposal of the Govt. as a stakeholder.
- 9. In its consultative process, the Commission conducted a public hearing at its premises at Bhubaneswar on 04.02.2016 and heard the Applicant, Objectors, Consumer Counsel and the Representative of the Dept. of Energy, Government of Odisha at length.
- 10. The Commission convened the State Advisory Committee (SAC) meeting on 18.02.2016 at 3.30 PM to discuss about the Aggregate Revenue Requirement (ARR) application and generation tariff proposal of the generating company for FY 2016-17. 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 2016-17 (Para 11 to 29)

- 11. At the outset, OPGC submitted stating the background of the cases (in the line mentioned above) and brought out a case for considering tariff under PPA and amended PPA saving issues ignored in PPA under OERC Generation Tariff Regulation 2014.
- 12. The summarized tariff proposal of OPGC is mentioned as under:

#### **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. 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

OPGC submitted that, considering the Amended PPA signed between OPGC and GRIDCO, Rs. 1060 Crore has been taken as the capital cost of the project for the purpose of computation of tariff for FY 2016-17 and the same was admitted by OERC while approving Amended PPA in Order dated April 27, 2015.

14. The applicant has proposed additional capitalisation of Rs.95.65 Crore towards statutory compliance and efficiency improvement. This additional capitalization is required for environmental stipulations of Rs. 63.84 crore and efficiency improvement of Rs. 31.81 crore. OPGC further submitted that, out of the said additional capitalization, Rs.4.95 Crore was undertaken during FY 2014-15 and Rs.7.79cr & Rs.82.91 crore to be undertaken during FY 2015-16 & FY 2016-17 respectively. Therefore, OPGC has claimed additional capitalization of Rs. 95.65 Crore on account of statutory compliance and efficiency improvement, separately, as part of Year end expenses through the tariff for FY 2016-17.

#### **Debt – Equity Ratio**

15. OPGC submitted that, the project cost of Rs. 1060 Crore as approved in Amended PPA includes equity of Rs. 450 Crore and Loan of Rs. 610 Crore.

#### **Return on Equity**

16. OPGC proposed to consider Rs. 72 crore @ 16% Return on equity based on the Clause 8.0 (10) of Schedule II of PPA.

#### **Depreciation**

17. 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.

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

18. OPGC submitted that the loan amount of Rs. 610 Crore has been fully repaid by financial year ending March 31, 2012. Therefore, OPGC has not claimed any Interest on Loan Capital for FY 2016-17.

#### **Interest on Working Capital**

19. For the purpose of Interest on working capital, OPGC submitted that this has been met through internal accruals and requested to allow Interest on Working Capital Requirement on normative basis based on OERC generation tariff Regulation 2014. Accordingly based on the Clause 3.0 (f) of Schedule II of the Original PPA (as it no change in Amended PPA), OPGC has claimed Rs. 16.56 crore as interest on working capital requirement.

#### **O&M Expenses**

20. OPGC has proposed O&M Expenses of Rs.120.02 Crore for FY 2016-17 based on the Clause 3.0 (d) and (e) of Schedule II of the Original PPA (as it is not changed in Amended PPA). This has been proposed by OPGC based on the O&M expenses for first year of operation @ 2.5% of the capital cost considered at Rs.1030 crores and escalated at 8% per annum effective from April 1, 1996.

## **Summary of Annual Fixed Cost**

21. Based on the above estimation, OPGC has proposed Annual Fixed Cost of Rs.208.58 Crore for FY 2016-17. The details are given in the table below.

Table -1 Annual Fixed Cost of OPGC for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Return on Equity	72.00
2.	Depreciation	0.00
3.	Interest on Loan Capital	0.00
4.	Interest on Working Capital	16.56
5.	O&M Expenses	120.02
6.	<b>Total Annual Fixed Cost</b>	208.58

## **Variable Costs**

## **Operational Performance Parameters**

22. OPGC has considered the following performance parameters for generation tariff proposal for FY 2016-17. The same is given in the table below.

Table - 2 Operational Performance Parameters for FY 2016-17

Sl.	Particulars	Unit	Values	Remarks		
No.						
1.	Plant Load Factor	%	81.46%	Weighted average PLF for last five years		
				from FY 2011-12 to FY 2015-16 (upto Nov		
				2015) after considering minor overhauling		
				schedule for 21 days for unit 2		
2.	Gross Generation	MU	2996.97	Based on the above PLF		
3.	Auxiliary	%	9.50%	As per the provisions of the approved PPA		
	Consumption					
4.	Net Generation	MU	2712.25	Gross generation minus Auxiliary		
				Consumption		
5.	Station Heat Rate	kcal/	2500	As per the provisions of the Original PPA		
		kWh		(as it no change in Amended PPA)		
6.	Specific Fuel	ml/	3.50	As per the provisions of the Original PPA		
	Consumption	kWh		(as there is no change in Amended PPA)		

#### **Fuel Cost**

23. As per Clause 7.0 of Schedule II of the existing PPA, Gross Calorific Value and Price of Coal and Oil shall be considered as delivered to the Power Station. For computation of the landed cost of fuel, OPGC has relied on the provisions of the Amended PPA and Regulation 4.34 of OERC Generation Tariff Regulations, 2014. It has considered the latest available actual weighted average price of Coal and Oil (for September 2015) as computed on the basis of opening stock and purchase during the month. The submission is given in the table below:

Table -3
Computation of Weighted Average price for Coal and Oil

Sl. No.	Particulars	Quantity (MT for Coal and Kl for Oil)	Amount (Rs.)		
	Coal				
1	Opening Balance for Sept 2015	1,12,158	12,90,39,077		
2	Purchase during Sept 2015	2,74,742	31,65,60,266		
3	Weighted Average Price (Rs./MT)	1151.72			
	LDO				
4	Opening Balance for August 2015	400	1,95,10,009		
5	Purchase during August 2015	155	63,61,423		
6	Weighted Average Price (Rs./kL)	46648	.98		
	FO				
7	Opening Balance for August 2015	400	1,40,04,874		
8	Purchase during August 2015	155	46,42,479		
9	Weighted Average Price (Rs./kL)	33623.13			

- 24. Further, the transportation of coal from loading point located at mine to unloading point at the station spanning around 11 km is handled by OPGC by rail. Hence, fuel transportation cost of Rs. 4.17 /MT on operation of Merry-Go-Round system (MGR) has been considered over and above the coal cost. OPGC has considered the loss in quantity of coal as 0.38% based on weighted average from FY 2011-12 to FY 2014-15, excluding FY 2013-14.
- 25. Considering the impact of fuel cost of MGR and loss in coal quantity, OPGC has estimated the weighted average price of coal as Rs. 1160.20/MT. The price of Secondary fuel Oil is proposed at Rs.34925.72 (Rs.46648.98 x 10% + Rs.33623.13 x 90%) per Kiloliter based on weighted average price of FO and LDO in ratio of 90:10. These prices of Coal and Oil have been further escalated by escalation factor of 6% to arrive at anticipated Price of coal and Oil as on April 1, 2016 at Rs 1232.56 and Rs.37100.90 respectively. OPGC has also considered weighted average Gross Calorific Value of Coal for the period from October 2014 to September 2015 (12 months). Accordingly, it has

estimated price of coal & secondary fuel oil as on 01-04-2016 and GCV of coal & secondary fuel oil for FY 2016-17 as mentioned in Table below:-

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

Sl. No.	Source of Coal	Projected as on April 1, 2016
1	Price of Coal (Rs. /MT)	1232.56
2	Price of Secondary Oil (Rs./kL)	37100.90
3	Gross Calorific Value of Coal (kCal/kg)	2828.92
4	Gross Calorific value of Secondary Oil (kCal/kg)	10000.00

## **Energy charges**

26. In accordance with the above stipulations of Operational Performance Parameters and fuel cost based on the Clause 7.0 of Schedule II of the Original PPA (as there is no change in Amended PPA), OPGC has requested the Commission to approve Energy Charge of Rs.1.330/Kwh for FY 2016-17 as given in the table below:

Table -5 Computation of Energy Charge for 2016-17

	Charge for	
Particulars	Unit	Values
GCV of Coal	kCal/kg	2828.92
GCV of Oil	kCal/kg	10000.00
Specific Coal Consumption	kg /kWh	0.87
Specific Oil Consumption	ml/kWh	3.50
Price of Coal	Rs. / MT	1232.56
Price of Secondary Oil	Rs. / kL	37100.90
Variable Charge for Coal	Rs./kWh	1.187
Variable Charge for Oil	Rs./kWh	0.143
Energy Charge	Rs./kWh	1.330

## **Year End Charges**

27. Apart from the Annual Fixed Cost and Energy Charges, OPGC has proposed the Year end charges of Rs.197.44 crore comprising which comprises of Incentive, reimbursement of Electricity duty, water cess & charges, Tax and cess on land, Electricity Inspection fees, SOC and MOC payable to SLDC, Establishment fund to EPRC, Income tax, Ash Utilisation Expenses, Fuel Adjustment Charges, tariff petition fees amounting to Rs.101.79 crore and reimbursement of additional capitalization of Rs.95.65 crore. The details are given in the table below:

Table - 6 Year End Charges for 2016-17 (Rs. in Crore)

Sl. No.	Particulars	Amounts	Basis
1.	Incentive	1.62	
2.	Electricity Duty	8.09	@30 paise/kwh
3.	Water Cess and Water Charges	7.08	Actual of FY 2014-15
4.	Tax and Cess on land	0.22	Actual of FY 2014-15
5.	Electricity Inspection Fees	0.17	Actual of FY 2014-15
6.	SOC and MOC for SLDC	0.38	OERC tariff order FY 2015-16
7.	ERPC Charges	0.16	Actual of FY 2014-15
8.	Income Tax	37.07	Provisional payment of FY 2014-15
9.	Ash Utilisation expenses	3.50	Subsidy @ 150/MT & advertisement for awareness proposal for FY 2016-17.
10.	Fuel Price Adjustment Charges	43.29	Estimated for FY 2016-17 based on discovered Price of coal & oil as on 31st March 2017.
11.	Recovery of ARR and Tariff Petition Fees	0.21	Tariff filing Fees
12.	Sub-total of Year End Charges	101.79	-
13.	Reimbursement of Addl. Capitalisation	95.65	OERC tariff
	•		Regulation 2014
14.	Grand Total	197.44	-

## Summary of Generation Tariff proposal for FY 2016-17

28. The summary of Generation Tariff proposed by OPGC for FY 2016-17 is given in table below:

Table -7 Generation Tariff proposed by OPGC for 2016-17 (2712.25 MU)

Sr.	Particulars	FY 2016-17		
No.		Rs. Crore	Rs./kWh	
1.	Annual Fixed Cost	208.58	0.769	
2.	Energy Charges	360.79	1.330	
3.	Tariff for Sale of Power	569.37	2.099	
4.	Year End Charges excluding additional capitalization	101.79	0.375	
5.	Reimbursement of Additional Capitalisation	95.65	0.353	
6.	Total Tariff for Sale of Power	766.81	2.827	

29. OPGC has prayed the Commission to approve the tariff, including annual fixed cost, variable charges, Year-end charges, additional capitalisation incurred by OPGC Ltd. during FY 2014-15 and FY 2015-16 and projected for FY 2016-17 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 between OPGC Ltd. and GRIDCO Ltd. through tariff of FY 2016-17.

# VIEWS OF THE OBJECTORS ON THE GENERATION TARIFF PROPOSAL FOR FY 2016-17 (Para 30 to 48)

#### **Overall approach:**

- 30. Most objectors have appreciated that OPGC has filed its tariff application for the first time since its inception. Some objectors stated that, till date, in the absence of any formal ARR application, tariffs were not based on the actual figure up to March of previous financial year.
- 31. The tariff estimated in the respective ARR application of GRIDCO and the tariff at which the OPGC is actually paid against the monthly energy bills are different. The provision of "Power to Relax" should not be allowed to OPGC which has been availing the fruits of relaxed operational norms even remaining out of the regulated system for the thermal generators.
- 32. Objectors further mentioned that while filing the tariff proposal OPGC has considered the parameters both from PPA & OERC Regulation selectively. Therefore, as per the statutory provisions, the Regulations in force from time to time overrides the provisions laid down in the bilateral PPA and accordingly tariff should be determined as per the OERC Tariff Regulations 2014.
- 33. GRIDCO has contended that, after initiating process of withdrawal of its Special Leave Petition before Hon'ble Supreme Court, OPGC did not file the ARR application for FY 2014-15 and FY 2015-16 before OERC and delayed till approval of Amended PPA by OERC.
- 34. GRIDCO submitted that if interpretation of OPGC regarding OERC Order dated April 27, 2015 be accepted as true then OERC would not have directed to file ARR for FY 2016-17 and determination of tariff is not required in view of the para 3 (a) of Task Force Notification dated June 21, 2008, which reads as under:

"In order to avoid the ambiguity with regard to tariff norms and parameters for Unit 1&2, all terms and parameters for determination of tariff for 1& 2 shall be as per this PPA as amended upto date. All tariff parameters will stand frozen till validity of this PPA as amended upto date notwithstanding modification in tariff norms by the CERC from time to time. Accordingly all references in other provisions of this PPA to change in tariff parameters in future shall be deemed to have been deleted. The Tariff shall however be subject to revision at the time of renewal, replacement or extension of this

- Supplementary agreement or on further enhancement of the generation capacity of Units 1 and /or 2, if any" (emphasis added).
- 35. OERC in its Order dated April, 27, 2015 recognised that the above said clause provides for settlement of issues if any arising due to implementation of Amended PPA in future date. The relevant extract of Order is as under:
  - "9. The above stipulation in PPA provides for settlement of issues if any arise due to implementation of this PPA in a future date the same shall be resolved basing on mutual discussion keeping intent and objects of the PPA intact. Therefore, the Commission has no objection to approve the PPA including its amendment between GRIDCO and OPGC for purchase of power from Unit 1&2 of Ib Thermal Power Station as it stands now." (emphasis added)
- 36. In summary, objectors requested the Commission to adhere to the OERC (Terms and Conditions for Determination of Generation Tariff) Regulation 2014 instead of PPA while determining the generation tariff of OPGC for FY 2016-17.

#### **Capital Cost and additional capitalisation**

37. GRIDCO, Shri R. P. Mohapatra & WISE objected that additional capitalization proposed by OPGC may be scrutinised properly as per norms specified in OERC (Terms and Conditions for Determination of Generation Tariff) Regulation 2014 and considered accordingly since certain expenses have not yet been incurred. OPGC on one side is pleading to the provision of amended PPA but on the other hand requesting additional capitalization as per Regulations, which are contradictory. If additional capital expenditure is allowed then other provisions related to operational norms stipulated in the regulations shall also have to be considered.

#### **Interest on Working Capital**

38. GRIDCO submitted that, Interest on working capital should be allowed as per norms specified in OERC (Terms and Conditions for Determination of Generation Tariff) Regulation 2014.

## **O&M Expenses**

39. Some objectors submitted that proposed O&M expenses may be examined with the past audited figures and be allowed as per norms at clause 4.28 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulation 2014 to maintain uniformity. OPGC may be directed to submit their O&M expenses since 2002-03 to 2014-15 before deciding on their tariff proposal. OPGC has to produce details of the manpower employed and their salary component since FY 2005-06 to FY 2015-16.

#### **Operational Performance Parameters**

- 40. Objectors mentioned that, there is a disparity in proposed gross generation plan submitted by OPGC (2996.97 MU) and GRIDCO (3218.04 MU) in their respective tariff application for FY 2016-17.
- 41. Many objectors demanded that, while determining generation tariff of OPGC for FY 2016-17, 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.
- 42. Some objectors pointed out that, OPGC has projected high fuel prices for FY 2016-17 compared to actual consumption shown in audited accounts. Further, OPGC projected more consumption compared to CERC norms (0.5ml/kwh) for NTPC stations.

#### **Energy cost**

43. Opposite parties contended that, OPGC has projected unusually high increase in fuel prices during FY 2016-17 and has taken these projected costs for determination of tariff which is not acceptable. OPGC has to abide by the provisions of Regulations 4.34 only for deriving the landed cost of coal considering the normative transit loss percentage. To derive the Energy Charge Rate (ECR), base price as on 1st April 2015 and weighted average landed price as on 30<sup>th</sup> September 2015 may be considered and necessary instruction may be given to OPGC to determine the ECR every month considering the actual cost and approved operational parameters. OPGC may clarify the cost pertaining to MGR and the same may be allowed under O&M. Regarding the price of FO and LDO in ratio of 90:10, the same may be considered as per the actual monthly usage basis as followed by NTPC stations and TTPS in compliance to CERC Regulations 2014.

#### **Tariff**

44. Objectors placed that, tariff proposed by OPGC for the FY 2016-17 is 282.7 P/U, which is an increase of more than 34% and therefore, unacceptable. Generation tariff of OPGC is very much affordable in comparison to central sector power stations. This power has been very much helpful to keep retail supply tariff low. Considering this, GRIDCO has estimated and requested to the Commission to restrict the generation tariff at Rs 2.1006 / kWh (fixed charges – Rs 0.88 / kWh, energy charges – Rs 1.073 / kWh and year end charges – Rs 0.1476 / kWh).

45. Summarily, majority of objectors requested the Commission to adhere to the OERC (Terms and Conditions for Determination of Generation Tariff) Regulation 2014 instead of PPA while determining the generation tariff of OPGC for FY 2016-17.

#### **Other Issues**

- 46. The objectors mentioned some other issues. OPGC has to produce all the CAG audited balance sheet since 2009-10 till 2015-16 as the Govt has 51% share of the company. OPGC has to submit month wise cash flow statement showing sources of inflow and outflow of cash from the FY 2010-11 to 2015-16. For the first time OPGC has filed application for determination of generation tariff which would be very much useful to find sustainable electricity & an integrated power policy for Odisha.
- 47. In spite of repeated pressure, the Unit III and Unit IV of OPGC have not been operational till date, causing abnormal delay for which people of Odisha have been deprived of electricity at reasonable rates. Actions as deemed fit may be initiated expeditiously for commissioning of Unit III and Unit IV so as to supply reasonable and reliable electricity to the people. Department of Energy, Govt of Odisha may be impleaded as a respondent for intervention in view of Task Force notification.
- 48. SLDC may be instructed to carry out monthly SEA in respect of OPGC based on the normative parameters. Further, monthly incentive / disincentive can also be derived in the SEA for energy generated beyond 85% PLF at a rate of 50 paisa / kWh, as is being done for TTPS.

#### **VIEWS OF CONSUMER COUNSEL (Para 49)**

- 49. WISE, Pune on behalf of the Consumers made a presentation on the Analysis of ARR and tariff filing of OPGC for FY 2016-17. The Consumer Counsel's observations/suggestions are as below:
  - a. Proposed Capital cost by OPGC needs prudence check including reasonableness of the capital expenditure, components of cost including interest during construction, pre-operative expenses, use of efficient technology, and issues related to cost over-run and time over-run.
  - b. Additional capitalization needs prudence check. The proposed additional capitalization amount during FY 16-17 need not be included in this tariff. Repayment of additional capitalization may not be allowed. Approved additional capitalization may be added to the approved capital cost.

- 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.
- d. Working capital expenses may be considered as per the OERC Generation Regulations, 2014.
- e. Average of actual O&M expenditure in last five years is Rs 107.05 crore, which can be considered for O&M expenses of OPGC.
- f. PLF of thermal power stations, as per Regulations, should be 85%, whereas proposed PLF of OPGC is much lower than that.
- g. The cost related to MGR operation and loss in transportation for coal cost estimation need prudence check by the Commission. The loss proposed is higher than loss given in the Regulations. The escalation considered in coal cost should be reviewed.
- h. The secondary fuel oil cost has reduced considerably in the past few years, so escalation rate proposed in the secondary fuel oil cost for FY 2016-17 may be reviewed on this background.

#### **OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (Para-50)**

50. The Commission convened the State Advisory Committee (SAC) meeting on 18.02.2016 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 51)**

51. Govt. of Odisha vide their Letter No. 2091 dated 11.03.2016 have communicated their views/suggestions on various issues involving tariff setting for FY 2016-17. In regards of Generation Tariff, OPGC, Govt. Stated that original PPA including amended one are outcome of settlement reached between the different stakeholders including Government. It may be prudent to preserve the terms of that settlement. Accordingly the Commission may take suitable decision.

## OPGC'S RESPONSE TO THE OBJECTORS AND CONSUMER COUNSEL'S VIEW (Para 52 to 73)

In response to the objection raised by the Objectors and Consumer Counsel, OPGC has submitted its Rejoinders which are summarized below:

### **Overall Approach**

- 52. OPGC has filed the present Petition primarily on the basis of the provisions of existing PPA between OPGC and GRIDCO and amendment to existing PPA signed on December 19, 2012 (together called as "Amended PPA") and further, wherever there is no provision or lack of clarity in the agreement, in such cases only OERC Generation Tariff Regulations, 2014 have been considered.
- 53. The Amended PPA has been signed with GRIDCO, only after all terms and conditions of Amended PPA were agreed by both Parties. Hence, at one side GRIDCO has agreed upon terms and conditions of Amended PPA and at other side, in its response, GRIDCO is suggesting to consider the terms and conditions for determination of generation Tariff as per OERC Generation Tariff Regulations, 2014, ignoring the terms and conditions of amended agreement.
- 54. OERC in its Order dated April 27, 2015 has made it clear that OPGC has to make an application for determination of generation tariff before OERC as per approved Amended PPA for rest of Control Period starting from FY 2016-17 onwards since the tariff for the FY 2014-15 and 2015-16 has already been approved by OERC in the ARR of GRIDCO for the said year basing on the submission of GRIDCO.
- 55. OPGC would like to submit that the tariff estimated in the respective ARR application and the tariff at which OPGC is actually paid against the energy bills are totally different due to variation in fuel prices and other charges like income tax, cess, statutory levies etc., which are allowed as per PPA. OPGC has been raising the bills in accordance with the provisions of Amended PPA. The variation in tariff estimated while approving the ARR and tariff actually payable is not specific to OPGC and is applicable for all the generating stations including generating stations of NTPC.
- 56. As per Notification No. 7216 dated June 21, 2008 issued by Government of Odisha the following have been decided:
  - a. The provision for calculation of incentive in the existing PPA shall be amended to enhance PLF from 68.49% to 80%. All other terms and conditions of tariff for Unit 1 & 2 shall be as per the existing PPA.

- b. The Amended PPA shall be filed before OERC for approval.
- c. OPGC shall withdraw Special Leave Petition filed before Hon'ble Supreme Court against the Judgement of Hon'ble Orissa High Court regarding the jurisdiction of OERC for approval of PPA of Units 1 & 2.
- d. OPGC to take expeditious steps to commission Unit 3 & 4 and shall make half of the power generated from these units available to GRIDCO, subject to approval of PPA by OERC.
- 57. The above said Notification of Government of Odisha made it amply clear that terms and conditions of tariff for Unit 1 & 2 shall be as per the Amended PPA, subject to approval of the OERC and GRDICO cannot question the same now. It may be noted that above said Notification of Government of Odisha was issued well before the notification of the OERC Generation Tariff Regulations, 2014.
- 58. In view of the Notification of Government of Odisha, OPGC had first initiated to withdraw its Special Leave Petition. Hon'ble Supreme Court vide its Order dated February 14, 2013 has dismissed Appeals as withdrawn by OPGC and in the said order Hon'ble Supreme Court has directed OPGC to file the Amended PPA before OERC and also has directed that the OERC shall consider the same appropriately in accordance with law. Accordingly, OPGC and GRIDCO have jointly filed the Amended PPA before OERC for approval.
- 59. Wherever there is no supply of power by generating company to distribution licensee, tariff cannot be determined by OERC. In view of the Section 86(1)(b) read with Section 62(1)(a) of the Act, OERC shall determine the tariff for supply of electricity to distribution licensee only after approval of power purchase arrangement.
- 60. The operational performance parameters cannot be changed at this stage as per the OERC Generation Tariff Regulations, 2014. If the performance parameters will be changed at this stage, this will create regulatory uncertainty.

#### Additional capitalization

61. Clause 10.0 of the existing PPA stipulates that any other kind of imposition whatsoever imposed by any Government (State or Central) and /or any other local bodies in environmental protection shall be billed by OPGC and will be paid by GRIDCO. The capitalisation has to be undertaken in order to comply the direction of State Pollution Control Board and schemes which are essential for operation of the plant. Regulation 2.4

of OERC Generation Tariff Regulation, 2014 also provides for the additional capitalisation after cut off date.

#### **Energy generation and PLF**

62. OPGC has proposed the gross generation considering the weighted average PLF for last five years from FY 2011-12 to FY 2015-16 (upto November 2015). The gross generation of 3218.04 MU proposed by GRIDCO was based on preliminary projections made by OPGC, which were forwarded to GRIDCO.

#### **Auxiliary Consumption**

63. The Amended PPA stipulates Auxiliary Consumption of 9.5% for the contract period, which has been considered by OPGC in the present Petition.

#### **O&M Expenses**

64. OPGC does not agree with the submission of GRIDCO that O&M Expenses may be considered to be allowed as per normative lakh/MW fixed for Unit size of 210 MW as per Regulation 4.28 of OERC Generation Tariff Regulations, 2014. Since, all expenses and tariff parameters have to be considered as per Amended PPA, there cannot be pick and choose regarding the individual items such as O&M expenses, where the principle for computing the O&M expenses for each year of contract period has already been stipulated in the Amended PPA.

#### **Interest on Working Capital and Performance Parameter**

- 65. The computation of Interest on working capital and performance parameters shall be done in accordance with the provisions of the Amended PPA and not basing on OERC Generation Tariff Regulations, 2014.
- OPGC does not agree with the submission of GRIDCO that recovery of full annual fixed charges shall be at 85% of PLF and incentive shall be given above 85% of PLF, as per provisions of OERC Generation Tariff Regulations, 2014. It may be noted that GRIDCO has misunderstood the provisions of Regulation 5.3 of OERC Generation Tariff Regulations, 2014, wherein recovery of full Annual Fixed charges has been linked to Normative Plant Availability Factor (NAPAF), not PLF. However, as per the Amended PPA approved by the Hon'ble OERC, the recovery of fixed cost is linked to net Availability, which is akin to PLF.

#### **Fuel Price and GCV**

- 67. For computation of Energy charges, OPGC has considered weighted average Gross Calorific Value of Coal for the period from October 2014 to September 2015 (12 months) and latest prices of fuel as on September 2015. It is the practice adopted in the most of the States in the country to consider the latest available prices of Fuel for computation of energy charges. OPGC has also provided the latest actual GCV and Prices of fuel upto December, 2015 to OERC. Further any upward /downward variation in fuel price and GCV after the computation of energy charge shall be passed through Fuel Price Adjustment (FPA) Mechanism.
- 68. For computing the landed price of coal, OPGC has considered the basic price, royalty, excise duty, clean energy cess, VAT and entry tax. The transportation of coal from loading point located at mine to unloading point at the station for the span of 11 km is handled by OPGC by rail transport. Hence, only fuel cost of Rs. 4.17 /MT pertaining to operation of Merry-Go-Round system (MGR) has been considered to arrive landed cost of fuel. OPGC reiterates that it has not considered O&M expenses of Rs. 3.53 crore of MGR under fuel cost since it has already been covered under fixed cost.
- 69. OPGC appreciate the suggestion of GRIDCO that the normative transit loss shall be allowed as per Regulation 4.34 of OERC Generation tariff Regulations, 2014. However, in the present Petition, OPGC has considered the loss in quantity of coal of 0.38% based on weighted average from FY 2011-12 to FY 2014-15, excluding FY 2013-14.

#### **Year End Charges**

70. OPGC in its Petition has estimated various year end charges as per terms and conditions of Amended PPA. Further, OPGC has submitted the Year end charges on provisional basis and charges shall be considered during the year on actual basis as and when it occurs.

#### **Tariff**

71. OERC in GRIDCO Tariff Order has approved annual fixed of Rs. 0.706 /kWh, energy charges of Rs. 1.22/kWh and total charges of 193.15/kWh, however, it has proposed the annual fixed cost of Rs. 0.769/kWh and energy charges of Rs. 1.33/kWh, total amounting to Rs. 2.099/kWh which is 9% higher than the previous years, which is primarily on account of increase in fuel prices.

72. In summary, OPGC does not agree with the computation of energy charges made by GRIDCO as the same is done by considering provisions of OERC Generation Tariff Regulations, 2014, not as per Amended PPA, which was approved by Hon'ble OERC.

#### **Other Issues**

73. OPGC has already submitted the audited accounts from FY 2010-11 to FY 2014-15. The same is available on the website of OERC and OPGC.

#### COMMISSION'S OBSERVATIONS AND ANALYSIS OF OPGC'S PROPOSAL (Para 74 - 134)

- 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:

<sup>&</sup>quot;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 at any time prior to the notification of these Regulations, 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 for such period as may be so approved or adopted by the commission, 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.
- 82. 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 shall comprise 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**

- 83. 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) of a generating station shall consist 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**

- 84. 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 2016-17. This Project cost of Rs.1060 crore includes equity of Rs.450 Crore and Loan of Rs.610 Crore.
- 85. OPGC has proposed additional capitalisation of Rs.95.65 Crore towards statutory compliance and efficiency improvement of the plant. This additional capitalization is required for complying with latest environmental parameters requirement amounting to Rs.63.84 Ccrore and efficiency improvement of plant and machineries of Rs.31.81 Crore. OPGC further submitted that, out of the said additional capitalization, Rs.4.95 Crore was incurred during FY 2014-15 and Rs.7.79cr & Rs.82.91 crore have been planned to be incurred during FY 2015-16 & FY 2016-17 respectively. It is to be mentioned here that, as per clause 3.3 & 3.4 of OERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2014 additional capitalisation is to be admitted on specific cases after cut-off date by the Commission subject to prudence check.
- 86. The Commission has sought all evidential documents on the above proposal of OPGC for additional capitalisation. In compliance to the same OPGC in its reply had submitted that only Rs.8.40 crore, i.e, for FY 2014-15 Rs. 4.95 crore and Rs.3.45 crore for FY 2015-16 (till November 2015) has been incurred on account of additional capitalization against Rs.95.65 crore proposed. Balance works have been proposed to be taken up latter.

- 87. In the regulation, the additional capitalisation has been treated as capital expenditure incurred or projected to be incurred after the date of commercial operation and admitted by the Commission after prudence check subject to Regulation 3.3 & 3.4. of OERC Generation Regulations, 2014. It is stated here that the assets forming part of the project but not put to use shall not be considered for the purpose of additional capitalization as per the said Regulation. In addition to that, any expenditure on acquiring the minor items of the assets after the cut off date shall not be considered for additional capitalisation while determining the generation tariff.
- 88. The petitioner has not submitted any details of work done and use of assets created after the cut off date to be considered as additional capitalisation in tariff. Further, the audited statement for the preceding year does not recognise the amounts on the additional capitalisation proposed by the petitioner. Therefore, the Commission is not inclined to consider this amount of Rs.95.65 Cr. as additional capitalisation for the purpose of determination of generation tariff for FY 2016-17. In case any expenditure is incurred during FY 2015-16 satisfying the conditions of the Regulation the same shall be considered in subsequent years by the Commission.

#### **Debt – Equity Ratio**

- 89. 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."
- 90. 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. As per Clause 3.7 of the Generation Regulation, 2014 in case of the Generating Station declared under commercial operation prior to 01.04.2014 debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.03.2014 shall continue. We do not agree with Consumer Counsel on this. Therefore, in accordance with Clause 3.7 of Regulation, the Commission accepts a debt-equity ratio as Rs.610 crore & Rs.450 crore respectively for the purpose of tariff.

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

91. 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 above clause 3.7 and RoE shall be computed @ 16% of the Equity Capital. Accordingly, Rs. 72 crore at the rate of 16% of equity capital of Rs. 450 crore, is allowed as return on equity.

### **Depreciation**

92. 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 2016-17. Therefore, the Commission does not approve any amount under depreciation head in the tariff of OPGC for FY 2016-17.

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

93. 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; hence OPGC has not claimed any Interest on Loan Capital for FY 2016-17. Therefore the Commission has not approved any amount under interest on loan capital head in the tariff of OPGC for FY 2016-17.

#### **Interest on Working Capital**

- 94. OPGC in its submission has requested the Commission to approve Rs.16.56 crore towards interest on working capital requirement on the basis of PPA parameters. i.e., one & half months of Coal Cost, two months of Secondary Fuel Oil cost, one month O& M Expenses and two months of Receivables. OPGC has requested to allow Interest on Working Capital @ 12.30% (SBI Base Rate plus 300 basis points) on normative basis based on OERC generation tariff Regulation 2014.
- 95. Therefore the Commission has determined the working capital requirement as per clause 4.24 (a) of the Generation Regulation, 2014 and has allowed interest on working capital as per clause 4.26 of the same Regulation. The detail 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 2016-17 (Rs. Cr)

Sl No	Particulars	OPGC Prop for FY 201		OERC Approved for FY 2016-17		
		Norms Amts		Norms	Amts	
			(In Cr.)		(In Cr.)	
1	Cost of Coal	One & half		One month	27.78	
		months	33.83			
2	Cost of Secondary Fuel Oil	Two months	5.45	One month	0.87	
3	O& M Expenses	One month	10.00	One month	9.63	
4	Maintenance Spare	-	-	20% of O&M	23.10	

5	Receivables	Two months	85.32	One month	45.37
6	<b>Total Working Capital</b>		134.60		106.75
	Requirements				
7	Interest Rate		12.30%		12.30%
	(SBI Base Rate+300 basis				
	points)				
8	<b>Interest on working Capital</b>		16.56		13.13

Hence, the Commission approves Rs.13.13 crore towards interest on working capital against OPGC proposal of Rs.16.56 crore for FY 2016-17. Further the Commission clarifies that, the above approved interest rate is based on SBI base rate as on 31.01.2016. 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**

- 96. For Calculation of O&M Expenses, OPGC has considered 2.5% of original project cost of Rs1030 crore for base year FY 1996-97 and escalated @8% p.a for subsequent years based on PPA executed between GRIDCO & OPGC. Accordingly for the 20<sup>th</sup> years of operation, OPGC had proposed O&M Expenses of Rs.120.02 Crore for FY 2016-17.
- 97. Since the Commission has decided to determine the generation tariff of OPGC for FY 2016-17 as per Regulation, the operation and maintenance expenses are to be calculated as per the provisions in the clause 4.28 of OERC (Terms & Conditions for Determination of Generation Tariff) Regulation, 2014. The same for FY 2016-17 is Rs.27lakh/MW/Year. Accordingly, the normative Operation & Maintenance expenses of Rs 113.40 crore has been calculated and the Commission approves the same for FY 2016-17.

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

- 98. OPGC has not claimed any expenditure towards compensation allowances since there was no such provision in the PPA. Since the Commission has decided to abide by the Generation Tariff Regulation 2014, it allows special compensation allowance for better operation and maintenance of the generating stations.
- 99. In clause 4.28(b) of the Generation Regulation, 2014 there is a provision to consider special compensation allowance @ Rs.0.15 lakh/MW/year, Rs.0.35 Lakh/MW/year & Rs.0.65lakh/MW/year for the project which have completed 10, 15 or 20 Years of useful life respectively. Since the date of Commercial operation (CoD) of IB TPS I & II of OPGC is 1996 and 1997 and completed more than 20 years and 19 years useful life

respectively till FY 2015-16, special compensation allowance @ Rs.0.65 lakh/MW and Rs.0.35 Lakh/MW is to be considered for IBTPS I and IBTPS II for FY 2016-17. Accordingly, the Commission approves Rs.2.10 crore towards special compensation allowance in the tariff of OPGC for FY 2016-17 in addition to the above normative O & M expenses of Rs.113.40 crore. Taken together, Rs.115.50 crore is allowed by the Commission under Operation & Maintenance expenses head for FY 2016-17. The detail calculation are given in table below:

Table -9
Calculation of Operation & Maintenance Expenses of OPGC for FY 2016-17
(Rs. in Crore)

Sl.	Particulars	OPGC Proposed	OERC Approved
No		for FY 2016-17	for FY 2016-17
1	Normative O& M	120.02	113.40
	Expenses	(Rs.1030 Cr consider as Capital Cost of the Project	(420 MW x Rs.27 Lakh /
		1 0	*
		for O&M Expenses based	MW for FY 2016-17)
		on PPA x O & M Expenses	
		for first Year i.e. FY 1996-	
		97 considered as 2.5% x	
		annual growth @ 8% for	
		20 <sup>th</sup> year)	
2	Special	-	2.10
	Compensation		(210 MW x Rs.0.65
	Allowance		lakh/MW + 210 MW x
			Rs.0.35 lakh/MW for
			Station IBTPS I and II
			respectively)
	Total	120.02	115.50

#### **Summary of Total Annual Fixed Cost**

100. On the basis of the above estimations, the Commission approves of Rs.200.63 crore towards total annual fixed cost of OPGC plants against Rs.208.58 crore proposed by Petitioner for FY 2016-17. The annual fixed cost charges are summarized in the table below:

Table -10
Annual Fixed Cost of OPGC for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	OPGC Proposed for FY 2016-17	OERC Approved for FY 2016-17
1.	Return on Equity	72.00	72.00
2.	Depreciation	0.00	0.00
3.	Interest on Loan Capital	0.00	0.00
4.	Interest on Working Capital	16.56	13.13
5.	O&M Expenses	120.02	115.50
6.	<b>Total Annual Fixed Cost</b>	208.58	200.63

#### **Operational Performance Parameters**

101. OPGC in its tariff proposal had Submitted PLF @ 81.46%, 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 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. 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 2016-17. The same is explained below:

#### **Generation of Power**

102. The Commission has calculated gross generation of power from 2 x 210 MW power station as 3127.32 MU during for FY 2016-17 with Normative PLF @ 85% in accordance with OERC generation tariff Regulation 2014 against OPGC projection of 2997.97MU by taking last five year average PLF of 81.46%. Deducting auxiliary Consumption @ 8.50%, the Commission has estimated and approved net generation available for beneficiary (GRIDCO) as 2861.50 MU for the FY 2016-17 against OPGC estimation of 2712.25MU (after considering auxiliary consumption @ 9.5%).

#### **Station Heat Rate**

103. The Commission has considered Station Heat Rate @ 2450 kCal/kwh for the FY 2016-17 as laid down in clause 5.3 (c)(i&ii) of OERC generation Tariff Regulation,2014 against OPGC Submission @ 2500 kCal/kwh based on PPA.

#### Price & GCV of Coal

104. The Commission has carefully examined and analyzed the information submitted by OPGC on actual trend of price and GCV of coal during the FY 2014-15 and FY 2015-16 (upto January 2016) and the same are presented in table below:

Table-11
Trend of Price and GCV of Coal

Months		FY 2014-1	5			FY 2015-1	6	
	Consumption (MT)	Price (Rs./MT)	% Change in Price	GCV (kCal/Kg)	Consumption (MT)	Price (Rs./MT)	% Change in Price	GCV (kCal/Kg)
April	255293.00	995.99	0.00	2629.00	237789.00	1124.53	0.00	2825.00
May	241837.00	990.63	-0.54	2880.00	223277.00	1136.57	1.07	2787.00
June	216112.00	989.69	-0.63	2952.00	241583.00	1143.53	1.69	2790.00
July	218996.00	1009.45	1.35	3173.00	212305.00	1147.90	2.08	2827.00
August	228128.00	1027.48	3.16	2934.00	253961.00	1150.52	2.31	2552.00
September	99037.00	1031.55	3.57	2759.00	239700.00	1151.72	2.42	2702.00
October	208702.00	1037.12	4.13	2972.00	256249.00	1152.03	2.45	2782.00
November	209501.00	1039.80	4.40	3020.00	251456.00	1160.78	3.22	2690.00
December	92695.00	1040.61	4.48	3154.00	246344.00	1175.29	4.51	2494.00
January	157518.00	1041.21	4.54	2956.00	197254.00	1179.96	4.93	2747.00
February	133778.00	1041.68	4.59	2910.00				
March	271640.62	1095.80	10.02	2792.00				
Wtg Avg.		1,027.38	3.15	2,915.14	_	1,152.06	2.45	2,716.00

From the above table it is indicated that the price of coal has increased by 10.02% during 2014-15 and 4.93% during the first nine months of the current financial year 2015-16. Therefore, taking weighted average price of coal for first nine months and 3% escalations, the price of coal is calculated as Rs.1186.62/MT for determination of energy charges of OPGC for the FY 2016-17.

- 105. Further, if any further price variation takes place during FY 2016-17 from the approved rate of Rs.1186.62/MT, OPGC shall recover/adjust the same through Fuel Price Adjustment (FPA) with relevant evidential supporting documents.
- 106. The Commission does not find any reason to accept the proposal of OPGC towards extra cost of transportation charges @ Rs.4.17/MT for operation of Merry –Go-Round (MGR) system since it is a part of Operation & Maintenance expenses.
- 107. The GCV of Coal has been observed to be fluctuating from month to month during FY 2014-15 & FY 2015-16 (till January 2016). By considering the above fluctuation the Commission has decided to consider actual weighted average GCV of coal, based on available nine months data of Current FY 2015-16. Accordingly, the Commission has approved GCV of Coal @ 2716.00 kCal/kg taking weighted average value of first nine month (Apr-Jan'16) for FY 2016-17 against OPGC proposal of GCV of Coal @ 2828.92 kCal/kg.

#### Price & GCV of Secondary Fuel oil

108. OPGC in its submission has proposed Secondary fuel oil price as Rs.37100.9/Kl based on weighted average price of FO and LDO in the ratio of 90:10 of September 2015 and 6% escalation factor (Rs. 34925.72/Kl plus 6% escalation of cost) for FY 2016-17. Commission has carefully examined and analyzed the information submitted by OPGC of actual Price of FO & LDO trend during FY 2014-15 and first nine month of current FY 2015-16( April-15 to Jan-16) and the same is presented in table below:

Table-12
Price and GCV of Secondary Fuel oil

The and Gev of Secondary Fuer on								
FY	Month	Consumption (kL)	LDO Price (Rs. /kL)	FO Price (Rs. /kL)	Price of LDO & FO Mix (1:9 ratio)	% Change in price of LDO & FO mix		
	Apr-14	36.55	66968.48	51539.57	53,082.46	0.00		
	May-14	92.99	66968.48	51539.57	53,082.46	0.00		
	Jun-14	129.96	67642.74	50297.35	52,031.89	-1.98		
	Jul-14	169.07	67422.30	50057.31	51,793.81	-2.43		
w	Aug-14	5.58	66917.31	49535.43	51,273.62	-3.41		
2014-15	Sep-14	124.23	65790.84	48624.60	50,341.23	-5.16		
017	Oct-14	344.97	65325.12	48350.38	50,047.86	-5.72		
7	Nov-14	8.54	63373.26	46355.47	48,057.25	-9.47		
	Dec-14	0.00	63373.26	46355.47	48,057.25	-9.47		
	Jan-15	270.31	60431.17	43822.36	45,483.24	-14.32		
	Feb-15	285.94	54572.44	38537.89	40,141.34	-24.38		
	Mar-15	150.20	50609.36	34650.44	36,246.33	-31.72		
	Apr-15	133.03	50609.07	34650.44	36,246.30	0.00		
	May-15	285.67	49452.32	34600.75	36,085.91	-0.44		
	Jun-15	86.65	48858.86	35055.50	36,435.84	0.52		
9	Jul-15	136.51	48763.07	35003.52	36,379.48	0.37		
5-1	Aug-15	8.82	46648.98	33623.13	34,925.71	-3.64		
2015-16	Sep-15	87.94	46648.98	33623.13	34,925.71	-3.64		
7	Oct-15	3.90	46648.98	33623.13	34,925.72	-3.64		
	Nov-15	22.15	46648.98	33623.13	34,925.72	-3.64		
	Dec-15	141.41	45315.94	32945.48	34,182.53	-5.69		
	Jan-16	12.36	42623.42	32307.13	33,338.76	-8.02		

109. 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 31.72% (from Rs.53,082.46/Kl to Rs.36,246.33/Kl) during FY 2014-15 and 8.02% (from Rs.36246.30/Kl to Rs.33,338.76/Kl) during first nine months of current FY 2015-16. The Commission anticipates that price henceforth shall be stable. Therefore, the Commission approves the weighted average price of FO and LDO at Rs.33,338.76/Kl considering January 2016 price for determination of Energy charge of OPGC stations for FY 2016-17.

- 110. In case of any price variation is observed during FY 2016-17 from the approved rate of Rs. 33,338.76/Kl, OPGC shall recover/adjust the same through Fuel Price Adjustment (FPA) mechanism. Along with the above FPA bills, OPGC shall submit the relevant evidential supporting document to GRIDCO.
- 111. OPGC has also proposed GCV of Secondary Fuel Oil @ 10000 kCal/kl for FY 2016-17 and the Commission approves the same as GCV of Secondary Fuel Oil @ 10000 kCal/kl for FY 2016-17.

#### **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. This has been objected by stakeholders in the public hearing. They have pointed out that, the oil consumption rate proposed by OPGC is much more than the actual consumption and rate stipulated in OERC Generation Tariff Regulation, 2014. They have also clarified that CERC Regulation provides only 0.5ml/kwh. The Commission has examined the past three years Secondary fuel oil 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
r i	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

From the above table, it is observed that, the actual oil consumption rate during the past three years is always less than 1ml/kwh. Therefore the Commission adheres to the norm of OERC generation tariff Regulation 2014 { clause 5.3(d)(i & iii)} to approve the secondary fuel oil consumption rate @1ml/kwh for OPGC generation tariff of FY 2016-17.

# Summary of Norms & parameters approved for computation Energy Charges of OPGC for FY 2016-17.

113. The following operational performance norms & parameters are approved by the Commission for FY 2016-17. The details are given in the table below.

Table -14 Operational Parameters for FY 2016-17

Sl.		Орегис	OPGC Propo		OERC Approved		
Si. No.	Particulars	Unit	for FY 2016		for FY 2016-17		
			Basis	Value	Basis	Value	
1.	Plant Load Factor	%	Weighted average PLF for last five years from FY 2011-12 to FY 2015-16 (upto Nov 2015) after considering minor overhauling schedule for 21 days for unit 2	81.46%	clause 5.3 (a)& (b) of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	85%	
2.	Gross Generation	MU	Based on the above PLF	2996.97	Based on the above PLF	3127.32	
3.	Auxiliary Consumption	%	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	Gross generation minus Auxiliary Consumption	2712.25	Gross generation minus Auxiliary Consumption	2861.50	
5.	Station Heat Rate	kcal/ kWh	As per the provisions of the Original PPA (as it no change in Amended PPA)	2500	clause 5.3 (c) (iⅈ)of OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014	2450	
6.	Specific Fuel Consumption	ml/ kWh	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)	Estimated	1232.56	Estimated	1186.62	
8.	Price of Secondary Oil	(Rs./Kl	Estimated	37100.90	Estimated	33338.76	
9.	Gross Calorific Value of Coal (GCV)	(kCal/ kg)	Estimated	2828.92	Estimated	2716.00	

Sl. No.	Particulars	Unit	OPGC Propo for FY 2016		OERC Approved for FY 2016-17	
NO.			Basis	Value	Basis	Value
10.	Gross Calorific value of Secondary Oil	(kCal/ Kl)	As per the provisions of the Original PPA (as it no change in Amended PPA)	10000	As proposed by OPGC	10000

#### **Energy charges**

114. OPGC has proposed an energy charges @ 133.02 paise/kwh for FY 2016-17. After consideration of the factors mentioned above, the energy charge of OPGC is arrived at @ 120.15 paise/kwh. The same is accepted and approved by the Commission. The details are given in the table below:

Table -15
Computation of Energy Charge for 2016-17

Particulars	Unit	OPGC Proposed for FY 2016-17	OERC Approved for FY 2016-17
Gross Generation of Power	MU	2,996.97	3,127.32
Auxiliary Consumption	MU	284.72	265.82
Generation After Aux. Cons.	MU	2,712.25	2,861.50
GCV of Coal	kCal/kg	2,828.92	2,716.00
GCV of Oil	kCal/kg	10,000.00	10,000.00
Specific Coal Consumption	kg /kWh	0.87	0.90 *
Specific Oil Consumption	ml/kWh	3.50	1.00
Price of Coal	Rs./MT	1,232.56	1,186.62
Price of Secondary Oil	Rs./kL	37,100.90	33,338.76
Variable Charge for Coal	Paise/kwh	118.67	116.51
Variable Charge for Oil	Paise/kwh	14.35	3.64
<b>Energy Charge</b>	Paise/kwh	133.02	120.15

<sup>(\*</sup> Higher rate of Coal Consumption arising out of lower GCV of Coal)

### **Year End Charges**

115. The Commission has gone through the proposals on claim of year end Charges of Rs.197.45 crore which comprises of Incentive, reimbursement of Electricity duty, water cess & charges, Tax and cess on land, Electricity Inspection fees, SOC and MOC paid to SLDC, Establishment fund to EPRC, Income tax, Ash Utilisation Expenses, Fuel Adjustment Charges, tariff petition fees amounting to Rs.101.80 crore and reimbursement of additional capitalization of Rs.95.65 crore. Those are discussed below:

#### **Incentives:**

116. OPGC had proposed Incentive of Rs.1.62 Crores on the basis of PPA i.e. 30% of Project Cost of Rs.1060 crore X 0.35 X {Proposed PLF(81.46%)-80%}. Since the Commission

has considered the PLF @ 85% for operational performances norms based on OERC generation tariff Regulation 2014, the Commission has allowed 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 approved any incentive while approving the tariff of OPGC for FY 2006-17 as against the OPGC proposal.

#### **Electricity Duty:**

117. OPGC had proposed Electricity Duty of Rs.8.09 crore by considering @ 0.30 per unit on 9% auxiliary Consumption of Gross Generation of 2996.97 as per provisions of PPA. Since the Commission has estimated Gross generation of OPGC to be 3127.32 MU during FY 2016-17, 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 2016-17 as per Regulation 7.10 to 7.12 of OERC generation tariff Regulation 2014.

#### **Water Cess & Water Charges:**

118. OPGC had proposed water cess & water charges of Rs.7.08 crore (water cess of Rs.6.95 crore & water charges of Rs. 0.13 crore) basing on actual amount incurred during FY 2014-15. Therefore the Commission provisionally allows water cess & water charges of Rs.7.08 crore for FY 2016-17 as per clause 7.10 to 7.12 of OERC generation tariff Regulation 2014.

#### Tax and Cess on land:

119. The Commission allows tax and cess on land basing on the actual incurred by the Petitioner during the FY 2014-15. Accordingly, an amount of Rs.0.22 crores is allowed as tax and cess on land for FY 2016-17 as per Regulation 7.10 to 7.12 of OERC generation tariff Regulation 2014.

#### **Electrical Inspection fees:**

120. On the proposal of OPGC for inspection fees of Rs.0.17 crore on actual basis incurred during FY 2014-15, the Commission feels that it is a part of O & M Expenses and be met first as statutory levies from O&M expenses already provided. Therefore, Commission is not inclined to make a separate provision for this.

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

121. OPGC has proposed Rs.0.38 crore towards SoC & MoC charges, the Commission now approves Rs.0.35 crore @ Rs.8260/MW/year as approved in our SLDC Charges for FY 2016-17 dated 21-03-2016.

#### **ERPC Charges:**

122. As Proposed by OPGC, ERPC charges of Rs.0.16 crore on actual basis incurred during FY 2014-15, the Commission accepts ERPC charges of Rs.0.16 crore for FY 2016-17 as per clause 7.10 to 7.12 of OERC generation tariff Regulation 2014.

#### **Income Tax:**

OPGC has proposed Provisional Income Tax of Rs.37.07 Crore @ 33.99% for availing Rs.72 crore for FY 2016-17 as post-Tax Return on Equity. The clause 4.7 & 4.8 of OERC generation tariff Regulation 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 excluding non-generation business income. 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 2016-17 as proposed by OPGC.

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

124. 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.3.50 crore towards Ash utilization Expenses for FY 2016-17. The Commission feels 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 disallows the above proposal and directs OPGC to meet the ash utilization expenses from approved O & M Expenses for FY 2016-17.

#### **Fuel Price Adjustment Charges:**

125. The Commission does not allow fuel price adjustment of Rs.43.29 crore as estimated by OPGC since the same shall be made pass through in the FPA mechanism as discussed elsewhere in this order.

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

126. 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 2016-17.

#### **Additional Capitalisation:**

127. Since the Commission has already elaborated this issue in separate paras as above, there is no need for further consideration.

#### **Summary of Year end Charges:**

128. A comparative summary statement of OPGC proposal on year end charges and approval of the Commission is given below in tabular form:

Table-16
Year End Charges for 2016-17 (Rs. in Crore)

Sl. No.	Particulars	OPGC Proposed for FY 2016-17	OERC Approved for FY 2016-17
1	Incentive	1.62	1
2	Electricity Duty	8.09	7.97
3	Water Cess and Water Charges	7.08	7.08
4	Tax and Cess on land	0.22	0.22
5	Electricity Inspection Fees	0.17	1
6	SOC and MOC for SLDC	0.38	0.35
7	ERPC Charges	0.16	0.16
8	Income Tax	37.07	37.07
9	Ash Utilisation expenses	3.50	-
10	Fuel Price Adjustment Charges	43.29	-
11	Recovery of ARR and Tariff Petition	0.21	0.21
11	Fees		
12	<b>Sub-total of Year End Charges</b>	101.79	53.06
13	Reimbursement of Addl. Capitalisation	95.65	-
14	Grand Total	197.44	53.06

Thus, the Commission provisionally approves yearend charges of Rs.53.06 crore as against OPGC proposal of Rs.197.44 crore for FY 2016-17. The Commission has included the same in the ARR of GRIDCO for FY 2016-17 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.
- 129. 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.

## Summary of Generation Tariff Proposal and Approval of the Commission for OPGC for FY 2016-17

130. The details of two part generation tariff proposed by OPGC and approved by the Commission for FY 2016-17 are depicted in the table below:

Table -17
Generation Tariff Proposal & Approval for OPGC for FY 2016-17

Sr. No.	Particulars	Unit	Proposed by OPGC for	Approved by OERC for FY
			FY 2016-17	2016-17
1	Net Generation	MU	2712.25	2861.50
2	Total Annual Fixed Cost	Rs Cr	208.58	200.63
3	Total Energy Charges	Rs Cr	360.79	343.81
4	Total Generation tariff (2+3)	Rs Cr	569.37	544.44
5	Capacity Charges (2/1)	Paise/kwh	76.90	70.11
6	Energy Charges (3/1)	Paise/kwh	133.02	120.15
	<b>Total Generation excluding</b>			
7	yearend charges tariff (5+6)	Paise/kwh	209.92	190.26

#### **Directives of the Commission:**

- 131. 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.
- 132. The Commission has also provisionally approved for reimbursement of yearend charges of Rs.53.06 Crore against OPGC proposal of Rs.197.44 crore. The above charges have been included in GRIDCO's ARR to be reimbursed to OPGC on production of documentary evidence.
- 133. The tariff now approved shall be effective from 01.04.2016 and shall be in force until further orders.
- 134. The application of OPGC in Case No. 53 of 2015 for approval of its Generation tariff of IBTPS I & II units for the FY 2016-17 is accordingly disposed of.

(A. K. DAS) (S. P. SWAIN) (S. P. NANDA)
MEMBER MEMBER CHAIRPERSON