

**BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION**  
**BIDYUT NIYAMAK BHAWAN, UNIT – VIII, BHUBANESWAR – 751012**

Filing No. : 2  
Case No. : 52/2015

IN THE MATTER OF REJOINDER TO APPLICATION FOR APPROVAL OF AGREEGATE REVENUE REQUIREMENT AND TARIFF OF INDIVIDUAL POWER STATIONS OF OHPC FOR THE FINANCIAL YEAR 2016-17 IN TERMS OF SECTION 61 & 62 READ WITH SECTION 86 OF THE ELECTRICITY ACT, 2003; OERC(TERM & CONDITIONS FOR DETERMINATION OF GENERATION TARIFF) REGULATIONS,2014 & IN ACCORDANCE WITH THE TERMS & CONDITIONS OF THE APPROVED PPA BETWEEN OHPC & GRIDCO.

AND  
IN THE MATTER OF ODISHA HYDRO POWER CORPORATION LTD., REGD. OFFICE: JANPATH, BHUBANESWAR-751022.

AND  
IN THE MATTER OF The Suggestions/Objections filed by .....Applicant

- 1) M/s GRIDCO Limited, Regd. Office: Janpath, Bhubaneswar,751022  
.....Respondent
- 2) Shri R.P. Mahapatra, Retd. Chief Engineer & Member (Gen. OSEB), Plot No. 775(Pt.), Lane-3, Jayadev Vihar, BBSR-751013.  
.....Respondent
- 3) Shri Ramesh Ch. Satpathy, Secretary, National Institute of IndianLabour, Plot No. 302 (B), Beherasahi, Nayapalli, BBSR - 751012.  
.....Respondent
- 4) Sri Ananda Kumar Mohapatra, Power Analyst, Proprietor, Mohapatra & Associates, Cost Accountant, Plot No: L-II/68, SRIT Colony, P.S Ainthapali, Dist:Sambalpur-768004.  
.....Respondent
- 5) Shri. Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Appartments, Telenga Bazar, Cuttack-753009  
.....Respondent
- 6) M/s Swain & Sons Power Tech Private Limited, Swati Villa, Surya Vihar, Link Road, Cuttack-753012. ... Respondent
- 7) Sri G.N. Agrawal, Convener-cum-General Secretary, Sambalpur District Consumers Federation, Balajee Mandir Bhawan, Khetrajpur, Dist-Sambalpur-768003, Mob No. 9438334049. ....Respondent

**AFFIDAVIT VERIFYING THE APPLICATION**

I, Shri Pranab Kumar Mohanty, Son of Shri Prafulla Kumar Mohanty , aged 47 years residing at Bhubaneswar do solemnly affirm and say as follows:

- (1) I am the Company Secretary of Odisha Hydro Power Corporation Ltd., the applicant in the above matter and am duly authorized to make this affidavit on its behalf.
- (2) The statements made in this petition are true to my knowledge and the statements made in paragraphs are based on information and I believe them to be true.

**DEPONENT**

**Verification:**

I, the deponent above named do hereby verify that the contents of my affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at \_\_\_\_\_ on the day of \_\_\_\_\_

**DEPONENT**

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District Consumers Federation, Balajee Mandir Bhawan, Khetrajpur,  
Dist-Sambalpur-768003, Mob No. 9438334049. ....Respondent

**THE HUMBLE PETITIONER ABOVE NAMED MOST RESPECTFULLY SHOWETH  
THAT:**

- 1) The application for approval of Annual Revenue Requirement (ARR) and Tariff for the  
financial year 2016-17 in respect of individual power stations of OHPC was filed before  
the Hon'ble Commission on 30.11.15. As directed by the Hon'ble Commission, Public  
Notice was published on 12.12.15 in English text in the local English & Odia daily news  
papers The Samaj & The Times of India and in Odia text in Odia Daily The Dharitri. The  
above mentioned respondents from Sl. No. 1 to 7 have raised objections and given

suggestions on the ARR and Tariff application of OHPC for the FY 2016-17. The compliance to the objections/suggestions raised by aforesaid respondents are furnished herewith.

- 2) Besides this OHPC vide Lr. No. 166, Dtd. 06.01.2016 has submitted before the Hon'ble Commission, the replies to the Queries made by Director(Tariff) and Secretary OERC vide their Lr. No. 1635 dtd. 22.12.2015 and Lr. No. 1671 dtd. 29.12.2015 respectively. The copies of the same have been supplied to all the individuals/ Organizations who had purchased Application of ARR for the FY 2016-17 from OHPC within scheduled date including the DoE, GoO for their kind information.
- 3) Hon'ble OERC in the Tariff Order of OHPC for the FY 2015-16 did not consider the CERC (Terms and Conditions of Tariff) Regulations, 2014 norms for determination of ARR & Tariff of OHPC Power Stations (that overruled the terms & conditions of OERC approved PPA executed between OHPC & GRIDCO for determination of tariff of OHPC Power Stations as per the CERC tariff norms). In this connection Hon'ble Commission viewed at Clause No. 106 of the OHPC Tariff Order for the FY 2015-16 as under:

***“The Clause 2.1 of OERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2014 stipulates that “Notwithstanding anything contained in these Regulations, the Commission shall at all times have the authority, either on suo motu basis or on a Petition filed by the applicant, to determine the tariff, including terms and conditions thereof, of any generating company”. Further, as per Clause 4.4 of the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014, the annual fixed cost for OHPC will be determined by the Commission by taking into account the notification(s) issued by the Govt. of Odisha from time to time. Accordingly the Annual Revenue Requirement of OHPC power stations for FY 2015-16 has been determined.”*** Accordingly the ARR & Tariff of OHPC Power Stations for FY 2015-16 was determined by Hon'ble OERC on 23.03.2015 in Case No 65 of 2014 as per OERC's considerations.

But OHPC had submitted its ARR & tariff in two ways for the FY 2015-16 as per the norms of the CERC Tariff Regulations 2014 which commensurate with the provisions (Schedule No.5) of the vetted PPA between OHPC & GRIDCO, considering the Up-valued Asset and other considering Historic Cost of Asset. On receipt of the Office Order No. 3060 dtd. 31.03.2015 and letter no. 3061 dtd. 31.03.2015 of DoE, GoO, OHPC submitted the Review Petition considering the tariff implication of the said Order of DoE, GoO which was effective from FY 2015-16.

But Hon'ble OERC disposed the Review Petition without considering the impact of the above said Office Order of DoE, GoO.

- 4) Meanwhile, the Dept. of Energy, Govt. of Odisha has notified the contents & provisions of its earlier Office Order No. 3060 dtd 31.03.2015 vide its recent Notification No. 5843 dtd 03.07.2015, which is enclosed at (Annexure-8(i)a) of the Tariff Application 2016-17 for kind perusal. Hon'ble Commission at clause no. 4.4 of the OERC( Terms and Conditions for Determination of Generation Tariff) 2014 & at clause no. 106 of the OHPC tariff order for the FY 2015-16 has mentioned that, “the annual fixed cost for OHPC will be determined by the Commission by taking into account the notification(s) issued by the Govt. of Odisha from time to time”.

As per the State Govt. decision in Dept. of Energy vide Notification No.5843 Dtd. 03.07.2015 regarding principal & interest repayment on Restructured Govt. investment at UIHEP, Convertible Bond issued by OHPC for Rs 766.20 Crores converted to loan and RoE on Rs 300 Crs relating to Old Power Stations effective from the FY 2015-16, OHPC has considered the impact of this notification in the ARR & Tariff of OHPC Power Stations for FY 2016-17 as shown in the Table below, has been submitted before Hon'ble OERC for approval.

**Proposed Station wise ARR and Tariff for the FY 2016-17:-**

Details expenses	RHEP	UKHEP	BHEP	HHEP	CHEP	Sub Total	UIHEP	Total
Proposed Saleable Design Energy (MU)	519.75	823.68	1171.17	662.50	469.31	3646.41	1942.38	5588.79
(Rs. in Crs.)								
Return on Equity	15.181	15.680	26.343	15.888	10.160	83.253	47.955	131.208
Interest on Loan	24.87	26.96	30.75	11.47	14.83	108.88	25.61	134.49
Depreciation	25.76	28.40	44.13	11.88	16.06	126.22	63.04	189.26
O&M Expenses	48.56	38.59	73.87	73.38	18.55	252.95	64.84	317.79
Interest on working capital	4.04	3.62	6.17	4.77	1.89	20.50	6.47	26.97
<b>Total ARR</b>	<b>118.41</b>	<b>113.26</b>	<b>181.26</b>	<b>117.39</b>	<b>61.489</b>	<b>591.810</b>	<b>207.91</b>	<b>799.724</b>
<b>Average Tariff (p/u)</b>	<b>227.82</b>	<b>137.50</b>	<b>154.77</b>	<b>177.20</b>	<b>131.02</b>	<b>162.30</b>	<b>107.04</b>	<b>143.09</b>

OHPC in the Tariff application has submitted the proposal of annual revenue requirement for FY 2016-17 considering the following:

- 1) (Revalued cost as on 01.04.1996 + New Addition from 01.04.1996 to 31.03.2015- Asset reduction upto 31.03.2015) is considered for computation of normative loan & interest, depreciation & RoE as per Govt. Notification No. 5843 dtd.03.07.2015.
- 2) Total salable D.E of OHPC is considered as 5588.79 MU for FY 2016-17.

- As per the decision taken in the DoWR GoO the generation at HHEP is not allowed below RL 595ft. According to DoWR, 0.233M.Ac.ft. of water available between RL 595ft to RL 590ft at Hirakud Reservoir which could have generated a total power of 31MU(14.81MU from Burla and 15.95MU from Chiplima Power House) shall not be available for generation.
  - Accordingly, OHPC has reduced 14.81MU from the D.E of HHEP, Burla & 15.95MU from the D.E of CHEP, Chiplima in the Tariff proposals of OHPC for FY 2016-17.
- 3) Rate of RoE is 16.0% with the provision of income tax reimbursement paid for the FY 2014-15 as per OERC Generation Tariff Regulation' 2014.
- 4) UIHEP Govt Loan & Equity were restructured as per the Govt. Notification No.5843 dtd.03.07.2015: Equity= Rs298.85Cr; Govt Loan= Rs 522.62Cr.
- 5) Interest on Indravati Govt. Loan & Normative loan are considered for FY 2016-17.
- 6) Rs 766.2Cr Convertible Bond converted to Govt. Loan bearing interest @7% from FY 2015-16 as per Govt. Notification No.5843, Dtd 03.07.2015 whose tariff impact has been considered for FY 2015-16 & FY 2016-17.
- 7) Rs 766.2Cr Convertible Bond Cost is apportioned in the same ratio among all old power stations of OHPC as per the Revalued Transferred Cost as on 01.04.1996 for computation of interest @7% and loan repayment to the State Govt. over a repayment period of 15 years.
- 8) For calculation of O&M Expenses for the FY 2016-17, Escalation @ 5.72% has been considered as per OERC Tariff Regulation' 2014.

OHPC prays before the Hon'ble OERC to approve the ARR & Tariff of OHPC Power Stations for the FY 2016-17 as above.

**Installed Capacity(IC) of OHPC Power Stations for Computation of PAFM and payment of SLDC Charges:**

OHPC for the purpose of computation of PAFM and payment of SLDC Charges for the FY 2016-17 has submitted the information on installed capacities available from the OHPC power stations in Table No. 1 of the Original ARR & Tariff Application, considering the R&M of different generating units . However for the PAFM purpose the reduction of installed capacities on account of Capital Maintenance of different Units, have not been deducted which will be considered depending upon actual shut down period as allowed by SLDC.

**Compliance to the Objections/Suggestions raised by M/s GRIDCO Limited, Janpath, Bhubaneswar- 751022 on the ARR application of OHPC for the FY 2016-17**

**Para 1:- Reduction in Design Energy(DE):**

In the proceeding of the 72<sup>nd</sup> meeting of Hirakud Co- Ordination Committee held on 04.12.2013 at Rajiv Bhawan, Bhubaneswar it was decided that, “ The reservoir level is aimed to attain R.L. 595.00ft on 25<sup>th</sup> June 2014 after effective utilization of reservoir water for

irrigation & power generation. The Khariff water supply starts from 16<sup>th</sup> June to facilitate raising of paddy seedling in the entire Hirakud command area of about 1.59 lakh hectare. **The minimum water level of R.L 595.00ft is required for a driving head to push water through the canal network which runs for about 150Kms”.**

Further in the 1<sup>st</sup> meeting of the committee on Dtd. 03.07.2012 in the Conference Hall of DoWR taken by Principal Secretary, DoWR on policy for optimum utilization of water in the reservoirs by industries and running of Hydro Electric Project with their optimum capacity it was decided at Sl. No. 13 of the minutes of meeting that, **“The minimum water level in Hirakud Reservoir is maintained at 595ft against the draw down level of 590ft. This is due to inadequate pressure in the end reaches of canal below RL 595ft, which is hampering irrigation. It is decided that DoWR shall issue necessary circular/ letter to OHPC for maintaining minimum RL at 595ft. OHPC will apprise the revised Design Energy of Hirakud and Chiplima Power House and inform accordingly to OERC.”**

In view of the above restriction in generation from Hirakud Reservoir up to 595ft only instead of MDDL 590ft, OHPC has proposed a reduction of 14.81MU from the design energy of HHEP, and 15.95MU from the design energy of CHEP, Chiplima.

As per Power Purchase Agreement of all the individual power stations of OHPC executed between GRIDCO & OHPC and duly vetted by Hon’ble Commission has the following provision,

**“Any statutory order issued by the Govt. of Odisha duly endorsed by the Commission shall be binding on both parties and the provisions of the PPA shall be interpreted accordingly”.**

In consideration of the above, the views of GRIDCO that OHPC in association with DoWR may explore the ways for better utilization of water below 595ft from Hirakud Reservoir is quite contradicting. In this context Hon’ble Commission may like to advise Govt. to allow OHPC to generate up to 590ft at HHEP, Burla keeping aside the decision taken in the 72<sup>nd</sup> meeting of Hirakud Co- Ordination Committee dtd. 04.12.2013 and the 1<sup>st</sup> meeting of the committee on water utilization policy dtd.03.07.2012. Other wise OHPC may be allowed to generate up to RL 595ft with reduction in Design Energy of HHEP & CHEP, which may kindly be decided by Hon’ble Commission.

As proposed by GRIDCO regarding separate accounting of secondary generation, this is to intimate that as per direction of the Hon’ble Commission, OHPC has already computed the Secondary Fund & submitted in the Tariff application which is a deficit fund and unable to meet the less generation from HHEP, Burla & CHEP, Chiplima.

**Para 2:- Escalation Rate of O&M Expense of Machhkund Tariff:**

It is true that tariff of Machhkund is calculated on Cost Reimbursement basis, hence escalation rate @5.72% or @6.64% make no sense. Since MHEP (Jt.) Scheme is an inter-state project, OHPC has considered the O&M escalation rate of 6.64% as per CERC norms. However, Hon'ble Commission may take a suitable decision on the matter while approving the Tariff of OHPC for FY 2016-17.

**Para 3:- Reimbursement claim of ERPC for the period FY2006-07 to FY 2014-15:**

Hon'ble Commission at clause no.138 of the final tariff order of OHPC for the FY 2015-16 has observed as follows:

*“The Commission does not approve the reimbursement claim of OHPC for the period from FY 2006-07 to FY 2013-14 at present and only approves Rs.0.16 Cr. contribution to ERPC for the FY 2015-16.”*

Thus, Hon'ble OERC had not disapproved the OHPC claim of reimbursement of the contribution made to ERPC fund for the period FY 2006-07 to FY 2013-14 but had deferred the same. Further, both OHPC & GRIDCO have agreed at Clause No. 11.5.2(Levies, Taxes, Duties etc.) of the long term PPA that any payment made to the Statutory Bodies/ Authorities of Electricity shall be reimbursed by GRIDCO.

Further Clause No. 7.10 & 7.11 of the OERC Tariff regulation 2014 provides as under:

**Reimbursement of Fees, Charges & Expenses:**

*7.10 Fees and charges paid by the generating companies under the prevailing Regulation/ Notification on Fees for filing of petitions or applications before the Commission, as amended from time to time, shall be reimbursed directly by the beneficiaries in proportion of their allocation in the generating stations.*

*7.11 The generating company shall be entitled to recover the fees and charges as mentioned in Regulation 7.10 of this regulation which have been paid till the notification of these regulations.*

So, OHPC has made these claim in the present tariff of OHPC for FY 2016-17. OHPC prays before the Hon'ble commission for approval of Rs1.2346Crs (including the arrears & current dues) the same.

**Para 3:- Compensation claim of OHPC towards hydrology failure and towards restriction in generation:**

The compensation claimed by OHPC for an amount of Rs145.62Crs (approximately) for the period from FY1996-97 to FY 2014-15 is only for non recovery of Energy Charges due to non-

availability of water in the reservoirs during the years of Hydrology failure, and does not include any claim for shortfall in recovery of Capacity Charges.

Moreover Hon'ble Commission in its Tariff Order for the FY 2014-15 at para no. 143 had observed the following:

*“The Commission has examined the submission of OHPC and observed that the compensation claimed towards hydrology failure is not to be allowed in view of the Commission's earlier orders dt.10.06.2005 & dt.23.03.2006 wherein OHPC was directed to maintain a separate fund to deposit the revenue earnings out of sale of secondary energy which shall be utilized to replenish the shortfall in revenue due to lesser generation by OHPC in years of hydrology failure to provide necessary comfort to the consumers of the state. {Para 6.5(e) of Order dt.10.06.2005}.”*

Accordingly OHPC has updated the Status of Secondary Energy Fund of OHPC from the FY1996-97 to FY 2014-15 which has a deficit of Rs 145.62Cr approximately. OHPC has prayed Hon'ble Commission to consider it as regulatory asset and requested for realization of the same.

The contention of GRIDCO that, “OHPC is recovering the total annual fixed charges based only on availability of machines” is not correct.

As per the direction of the Hon'ble Commission the recovery of Annual Fixed Cost of OHPC comprises of Capacity Charges & Energy Charges on 50:50 basis. Accordingly 50% of the AFC is recovered through energy charges only when the design energy is achieved and sold.

### **Compliance to the Objections/Suggestions raised by M/s Swain & Sons Power Tech Private Limited, Cuttack on the ARR application of OHPC for the FY 2016-17**

**Para 1:-** About the Respondent.

**Para 2:-** Prayer for review of OHPC Tariff for FY2016-17.

**Para 3:-** OHPC had received clarification of revision of rule curve of Hirakud Reservoir vide Lr No. 277 Dtd. 18.11.2014 from Chief Engineer & Basin Manager, Upper Mahanadi Basin, Burla for generation of electricity below 595ft. which had been submitted before Hon'ble Commission. According to DoWR 0.233M.Ac.ft. of water between RL 595ft to RL 590ft can be utilized for power generation, which can generate only 31 MU only. In HHEP, Burla there will be 14.81MU and for CHEP, Chiplima can generate 15.95MU.

Accordingly, OHPC in its Original ARR & Tariff application for FY2016-17 has considered, the following for reduction in Design Energy for HHEP, Burla & CHEP, Chiplima due to restriction in generation below RL 595ft at Hirakud by DoWR, GoO.

- i) Design Energy of HHEP, Burla changed from 684MU to 669.19MU (684MU-14.81MU).
- ii) Design Energy of CHEP, Chiplima changed from 490MU to 474.05MU (490MU-15.95MU).

The objector has claimed that Hon'ble Commission has already rejected the proposal of OHPC for reduction of D.E vide its order dated 30.01.2013 in case no 121/2009 so the present proposal of OHPC may be rejected. The decision taken by the Hon'ble Commission in case no. 121/2009 is different from the present proposal of reduction in D.E in case of HHEP & CHEP.

In the Case No. 121/2009 OHPC had made a claim for reduction in Design Energy based on the previous direction of Hon'ble Commission for Reassessment of D.E of different Power stations of OHPC. OHPC carried out the Reassessment of D.E of different power station through an independent agency and submitted the report before Hon'ble OERC for approval of the same but the same was deferred for the time being. In the same order Hon'ble Commission had also made a provision that any shortfall in Generation due to Hydrology failure shall be recovered in the subsequent years as per CERC Tariff Regulations. Accordingly as per CERC norm, OHPC submitted the power station wise tariff proposal to meet the revenue shortfall due to hydrology failure(whenever applicable) in the FY 2014-15.

Hon'ble Commission in its Tariff Order for the FY 2014-15 at para no. 143 had observed the following:

*“The Commission has examined the submission of OHPC and observed that the compensation claimed towards hydrology failure is not to be allowed in view of the Commission's earlier orders dt.10.06.2005 & dt.23.03.2006 wherein OHPC was directed to maintain a separate fund to deposit the revenue earnings out of sale of secondary energy which shall be utilized to replenish the shortfall in revenue due to lesser generation by OHPC in years of hydrology failure to provide necessary comfort to the consumers of the state. {Para 6.5(e) of Order dt.10.06.2005}.”*

But in the present case, the reduction in Design Energy of HHEP, Burla & CHEP, Chiplima is due to restriction in generation from HHEP, Burla below 595ft RL against the MDDL of 590ft by DoWR. The D.E approved for HHEP Burla by the Hon'ble Commission is in consideration

of MDDL of 590ft. Further the proposal of OHPC is in accordance to the clause no. 11 of the Electricity Act' 2003.

**Accordingly OHPC prays before the Hon'ble Commission to approve the Design Energy proposed for 669.19MU & 474.05MU for HHEP, Burla and CHEP, Chiplima respectively.**

Regarding OHPC's co-ordination with DoWR for optimum generation from its Hydro Units considering all eventuality, this is to intimate that Irrigation & Flood control are the priorities of the State Govt. in the DoWR. So the hydro generation from OHPC units are always decided on the basis of the availability of water, irrigation requirement and peak load requirement of power in co-ordination with DoE, DoWR, GRIDCO and SLDC.

The detail outage of Units for FY2015-16 during the Monsoon Period is enclosed at **Annexure-I.**

Anticipated Generation of FY2015-16 & Estimated Energy Generation for FY2016-17:

The actual generation of different Power Stations under OHPC from 01.04.2015 up to 18.01.2016 and anticipated generation up to 31.03.2016 for the FY 2015-16 prepared on the basis of the availability of water, irrigation requirement and peak load requirement of power in co-ordination with DoE, DoWR, GRIDCO and SLDC is furnished below.

Sl. No.	Name of the power stations	Actual generation from 01.04.15 up to 18.01.16 (MU)	Anticipated generation from 19.01.16 to 31.03.16 based on DoWR & DoE Schedule	Total Anticipated generation for the FY 2015-16 based on DoWR & DoE Schedule
1.	RHEP	564.70	60.72	625.42
2.	UKHEP	523.96	162.00	685.96
3.	BHEP	513.41	137.88	651.29
4.	HHEP	427.28	46.32	473.60
5.	CHEP	197.56	30.36	227.92
6.	UIHEP	1468.11	186.48	1654.59
<b>Total</b>		<b>3695.02</b>	<b>623.76</b>	<b>4318.78</b>

So, in the FY 2015-16 there will be a shortfall in Generation by 1300MU(approx.) due to the Hydrology Failure condition.

The rainfall during FY2016-17 cannot be predicted at this stage and in the past OHPC has observed that, Generation beyond the Design Energy has never happened in consecutive for a period of 3 years due to lean period of hydrology. Since the approved Design Energy of OHPC Power Stations is considered for tariff determination for the ensuing FY 2016-17 as per the Regulatory provisions, accordingly, OHPC has considered the approved D.E for all its power stations except HHEP & CHEP for the reasons cited above. Thus, OHPC have

judiciously considered and submitted the Saleable Design Energy of 5588.79MU for calculation of Tariff for the FY 2016-17.

**Para 4:- (Development of New Hydro Project)**

OHPC will consider for development of large hydro project only after decision on construction of multipurpose dam is taken by DoWR as it involves flood control, irrigation, submergence of villages with R&R, forest and environment issues. However, the report on the status of new small hydro projects being looked after by GEDCOL is furnished at **Annexure-II**.

**Para 5- (Application of OHPC for FY 2016-17)**

The norms adopted by OERC in determining the ARR & Tariff of OHPC Power Stations for the FY 2015-16 have been considered by the OHPC for computation of ARR & Tariff for FY 2016-17. Accordingly, the Schedule No. 5 of the vetted PPA between OHPC & GRIDCO has been considered amended as per the observation of the Hon'ble Commission at clause no.106 of the OHPC Tariff order for FY 2015-16.

Also the effect of the State Govt. decision in Dept. of Energy vide Notification No.5843 Dtd. 03.07.2015 regarding principal & interest repayment on Restructured Govt. investment at UIHEP, Convertible Bond issued by OHPC for Rs 766.20 Crores converted to loan and RoE on Rs 300 Crs relating to Old Power Stations effective from the FY 2015-16, has been considered for calculation of ARR & Tariff of OHPC Power Stations for FY 2016-17.

Hence OHPC has submitted its tariff proposal for the FY 2016-17 before the Hon'ble Commission as per the OERC norms adopted in the ARR Tariff Order for FY 2015-16 and direction of the State Govt. in the DoE vide Notification No. 5843 dated 03.07.2015.

**Compliance to the Objections/Suggestions raised by Sri Ramesh Ch.Satpathy on the ARR application of OHPC for the FY 2016-17**

**Para 1:-** About OHPC.

**Para 2:-** About OHPC.

**Para 3:-** The design energy of a hydro electric project is a basic design criteria which is calculated prior to the project inception considering statistical data of rainfall over the catchment and gross total inflow from all source and generator-turbine capacities. Accordingly, the D.E has been defined in OERC (Terms & Conditions for determination of Generation Tariff) Regulations 2014 as follows:

*“design energy” means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station.”*

So, actual generation from a hydroelectric project depend on the rainfall pattern, availability of water in the reservoir & machines for generation, demand of the state. Further the water available in a carry over reservoir is very often carried over to the next year due to uncertainty and irregular pattern of rainfall which affects the actual generation in a particular year. Therefore there is always a mismatch between actual generation & design energy.

**Para 4:-** The business plan of OHPC for 12<sup>th</sup> five year is under preparation.

**Para 5:-. Proposed Installed Capacity of OHPC:-**

OHPC has proposed reduction in the Installed Capacity as per Clause No. 4.1.3 of the agreed PPA between OHPC & GRIDCO which was also duly vetted by Hon'ble OERC. Accordingly OHPC has proposed to reduce the Installed Capacity of different power stations considering the R&M programmes from the zero date till the scheduled completion period. However the reduction on account of approved Capital Maintenance will be considered depending upon the shut down approval of SLDC.

**Para 6:-** Details of Man power planning of all projects & OHPC as a whole is furnished at Annexure-III .

**Para 7:-** Details list of Engineers OHPC managing the Power Houses is furnished at Annexure-IV.

**Para 8:-** A comparative statement on Actual O&M Expenses of OHPC against the Approved O&M Expense is shown in the Table below:

Sl. No.	Financial Year	O&M approved in ARR (Rs. in Crs.)	Actual Expenditure of OHPC (Rs. in Crs.)
1	2010-11	208.92	212.07
2	2011-12	210.97	224.69
3	2012-13	221.18	249.95
4	2013-14	216.67	233.62
5	2014-15	294.46	254.87

**Para 9 & 10:-** The information related to Para-9&10 is enclosed at Annexure-V.

**Para 11:-** The information regarding the actual generation status of OHPC power stations since FY 2009-10 to FY2015-16(upto December 2015) is enclosed at Annexure-VI.

**Para 12:-** OHPC has formed joint venture companies with OTPCL, BWCL, and OCPL. The details of expenditure may be collected from these companies directly. However, the Investment made by OHPC till December 2015 in these JV companies are furnished below.

OTPCL: Rs 114.2047Crs

BWCL: Rs 10 Crs.

OCPL: Rs 0.0245Crs.

**Compliance to the Objections/Suggestions raised by Prashanta Kumar Das, President, State Public Interest Protection Council, Telengabazar, Cuttack.**  
All objections/suggestions are not related to OHPC Ltd.

**Compliance to the Objections/Suggestions raised by Sri R. P. Mohapatra, Retd. Chief Engineer & Member (Gen.) OSEB, Jayadev Vihar, Bhubaneswar on the ARR application of OHPC for the FY 2016-17**

**Para 1:-** OHPC has submitted its tariff proposal for the FY 2016-17 before the Hon'ble Commission as per the OERC Tariff Regulation 2014 as adopted in the ARR Tariff Order for FY 2015-16 and the tariff impact of Notification No. 5843 dated 03.07.2015 of DoE, GoO.

**Para 2(i) & 2(ii):-** Para No. 03 & 04 of OHPC's submission (page no 3 &4 of this Rejoinder) as above may please be referred for compliance of these para.

**Para 2(iii):-** Respondent has rightly acknowledged the concern of OHPC that there would be heavy impact as advance tax in each quarter is to be paid irrespective of payment received from GRIDCO. Hon'ble Commission may consider the suggestion of the respondent and direct GRIDCO to reimburse the quarterly advance tax , on receipt of deposited challan copies from OHPC.

But at present, OHPC is getting the reimbursement of Income Tax paid in FY2014-15 in FY 2016-17 after a gap of two years which leads to loose of interest for the above period. Further, it may be noted that OHPC is now making normal income tax payment instead of minimum alternate tax(MAT) since 2014-15. If Hon'ble commission approves the respondent's suggestion then OHPC will be able to get the reimbursement of Income Tax deposited for the 1<sup>st</sup> Quarter in the 2<sup>nd</sup> Quarter and so on of the financial year on production of documentary evidence towards deposit. OHPC prays before the Hon'ble Commission to address on Reimbursement of Income Tax as suggested by the respondent and approve the Reimbursement of Income Tax to be paid in FY2016-17 on Quarterly basis as an in-principle decision.

**Para 3:-** The respondent has submitted the Average Approved Tariff of OHPC from FY 2012-13 to FY 2014-15. There is a rise of 60.52paise/ unit in Average Tariff of OHPC for FY 2016-17 from the previous approved Tariff which is mainly due to the consideration of Tariff impact of State Govt. Notification No. 5843 dated 03.07.2015.

**Para4:-** The compliance of Para-1 of M/s GRIDCO above may please be referred.

**Para 5:-** In the 1<sup>st</sup> meeting of the committee on Dtd. 03.07.2012 in the Conference Hall of DoWR taken by Principal Secretary, DoWR on policy for optimum utilization of water in the reservoirs by industries and running of Hydro Electric Project with their optimum capacity it was decided that OHPC will execute supplementary agreement with the Industries drawing

water from Reservoirs. The DoWR will issues administrative order to the industries drawing water for execution of such agreement. In spite of issue of Administrative order from DoWR none of the Industries have executed the Supplementary agreement with OHPC. The case is now sub-judice in the High court of Odisha.

OHPC is treating the loose of generation arising out of drawal of water from the reservoirs by industries as loss due to Hydrology Failure. Since Hydrology failure is claimed under Secondary Energy Fund which has a present deficit of Rs 145.62Cr. So, the compensation received from the industries due to such drawl of water will be accounted for in the secondary energy fund. This has already been intimated to the Hon'ble Commission in the Tariff filing of OHPC for FY 2015-16. However as per the recent observation of CAG, since the matter is under sub-judice in the High Court of Odisha as mentioned above, the amount so far received from the user industries is kept separately, which has been intimated to Hon'ble OERC in the original tariff applications of OHPC for the FY 2016-17.

**Para 6:-**

OHPC has taken up the Renovation Mordenisation work of Unit-3 of CHEP, Chiplima amounting to Rs65.67Cr which is likely to be completed by 15.06.2017. OHPC has also taken up the RM&U of Unit-5 & 6 of HHEP, Burla amounting to Rs158.77Cr which is likely completed by 16.04.2018. Besides this OHPC is also shortly finalizing the R&M bid of Unit-1 to 6 BHEP, Balimela which has an estimated cost of Rs664.75Cr. Since these R&M works of different power stations of OHPC will be completed in a phased manner between FY 2017-18 to FY 2020-21. The detail schedule of R&M works of different power stations of OHPC is furnished in the Table below:

<b>Power station</b>	<b>Unit</b>	<b>Zero Date</b>	<b>Tentative Date of Commercial Operation</b>	<b>Total duration of Shut down for R&amp;M works</b>
CHEP, Chiplima	3	15.10.2015	15.06.2017	20 months
BHEP, Balimela	1	15.05.2016	15.11.2018	30 months
	2	15.05.2017	15.11.2018	18 months
	3	15.05.2018	15.11.2019	18 months
	4	15.05.2018	15.11.2019	18 months
	5	15.05.2019	15.11.2020	18 months
	6	15.05.2019	15.11. 2020	18 months
HHEP, Burla	5	16.12.2016	16.04.2018	16 months
	6	16.10.2015	16.02.2018	28 months

Besides this OHPC has taken the Capital Maintenance works of different Units of UKHEP, UIHEP, RHEP & HHEP after due approval of the Hon'ble Commission. The status of these Capital Maintenance work are as follows:

Sl. No	Power Station & Unit under Capital Maintenance	Zero Date (in consultation with SLDC)	Approved Period	Remarks
1.	Unit-1 of HHEP, Burla	18.4.2015	153days	Synchronized to Grid on 14.10.2015
2.	Unit-1 UKHEP, Bariniput	29.07.2015	181days	Under Capital Maintenance
3.	Unit-3 UIHEP, Mukhiguda	23.11.2015	123days	Under Capital Maintenance
4.	Unit-2 RHEP, Rengali	Not yet finalized	122days	--
5.	Unit-3 RHEP, Rengali	Not yet finalized	46days	Likely to commence in the 1 <sup>st</sup> week of Nov.2016 after Monsoon.
6.	Unit-2 of HHEP, Burla	10.02.2016 (Tentative)	198days	--

So, OHPC is always trying its best to carry out the maintenance work of different units under Capital Maintenance/ Renovation and Modernization to increase their life, reliability & efficiency for maximum availability with prior approval of the Hon'ble Commission.

**Para 7:-** OHPC will abide by the decision of Hon'ble OERC.

**Para 8:-** OHPC will abide by the decision of Hon'ble OERC.

### **Compliance to the Objections/Suggestions raised by Sri Ananda Kumar**

**Mohapatra, Power Analyst, Proprietor, Mohapatra & Associates:**

**Para 1 to 8:-** Not related to OHPC.

**Para 9:-** Hon'ble Commission in the Order Dtd. 02.07.2013 in Case No 09/2013 observed the following:

*“ The Commission desires that OHPC should operate the Unit-5 & 6 in the current monsoon at a flat load of **reduced capacity**, say 20MW and simultaneously initiate action for retirement of the Unit-5 & 6 which are already more than 50years old and if necessary go for the installation of complete new units instead of Renovation, Modernization and Up rating.”*

Regarding the information of the Respondent that even after the declaration of the retirement of Unit-5 of HHEP, Burla the same Unit is running as per the data revealed by the SLDC, this is to state that Unit No -5 & 6 of HHEP, Burla have not yet been retired from their service as per the above mentioned order of Hon'ble OERC dtd. 02.07.2013. But these two Units were de-rated and instructed by Hon'ble OERC to run at a combined load of 20MW instead of 75MW. Accordingly, OHPC has initiated the R&M work with complete replacement for Unit- 6 from 16.10.2015. But as per the above order of the Hon'ble OERC Unit-5 is still running and will be subsequently considered for R&M from 16.12.2016(tentatively).

Regarding removal of silt & proper maintenance of reservoirs in order to increase the live storage capacity of the reservoir, the Department of Water Resources (DOWR) shall create a corpus fund, to be utilized for removal of shoals/silt etc. from the reservoirs through periodical dredging as directed by Hon'ble High court of Odisha vide WPC No-8409 of 2012 at para 24. Accordingly the Govt. of Odisha in the DoWR shall take necessary action in this regard.

**Para 10:-**

Regarding the Objector's view that, "Though Design Ensergy of all Power Stations of OHPC was around 8000MU in previous years but in the ARR for FY 2014-15, it was shown very less at 5619.24MU and in the ARR of FY2016-17, it has been shown 5589MU", necessary clarification has been furnished at Para No.3 of Compliance to the Objection raised by Shri Ramesh Chandra Satapathy, above.

The detail process of calculation of design energy of a power station does not come under the purview of the ARR. So, the opinion of the objector that, "OHPC is not disclosing the details of calculations of D.E in the ARR and keeping people of Odisha in dark and projection of Design Energy by OHPC as very low compared to the calculation of D.E by the objector", has no merit.

**Para 11:-**

The reason to the finding of the objector that the actual generation for different power stations of OHPC during some financial years are more than the Design Energy & less in some other years, has already been clarified in the Para 10 above.

However, regarding reassessments of Design Energy of OHPC power stations Hon'ble OERC had directed OHPC to engage an independent agency to carry out the Reassessment as per the CEA guidelines. Accordingly, OHPC with due permission of Hon'ble Commission had engaged M/s SPARC, Bhubaneswar for the above purpose. Accordingly, the total Design Energy of OHPC power stations was reassessed as 4903.63MU in place of existing D.E of 5676MU and was placed before Hon'ble OERC for approval. Hon'ble OERC vide its Order dtd. 30.01.2013 observed that, there is no immediate requirement of reduction of Design Energy as proposed by OHPC, however in the event of hydrology failure and worse monsoon years when the energy generation of any hydro projects falls short of its design energy not attributable to the generator, the Commission would consider the revenue shortfall occurred on this count in subsequent years as per the CERC Tariff Regulations.

**Para 12:-**

The statement of the objector that, "the NAPAF of OHPC power stations are shown very less, resulting less estimation of Design Energy and sale of power" is incorrect, since in case of Hydro power stations in two part tariff regime NAPAF is fixed for recovery of Capacity

Charges(i.e.50% of ARR) considering the availability of the Machines but not meant for estimation of Design Energy & Sale of power.

Regarding the information furnished by the objector at Annexure-4 of his submission it is to mention here that the weighted PAF achieved by CHEP, Chiplima is more than the NAPAF fixed by Hon'ble OERC and hence its performance has improved. The weighed PAF achieved by HHEP, Burla is nearer to its approved NAPAF. However, in the prevailing regulatory regime a generator loose its Capacity Charge if its weighted PAF falls below the approved NAPAF. Accordingly, OHPC has not burdened the consumers as it has sustained the proportionate shortfall in the revenue billing on account of Capacity Charges.

As per the further submission of the objector on proposed NAPAF for the block period FY2014-19, Hon'ble OERC has fixed the NAPAF for OHPC power stations as under.

<b>Name of Power Stations</b>	<b>HHEP</b>	<b>CHEP</b>	<b>BHEP</b>	<b>RHEP</b>	<b>UKHEP</b>	<b>UIHEP</b>
NAPAF (%)	78	75	83	75	87	88

**Para 13:-**

The NAPAF of the OHPC power stations is fixed by Hon'ble OERC as per the tariff regulation & consideration of PowerStation wise constraints thereby allowing necessary allowance. OHPC in its Tariff submission of FY 2016-17 has considered the approved NAPAF of Hon'ble OERC for the block period FY 2014-19.

**Para 14:-**

The objector has raised objection on low performance of OHPC power stations in spite of huge investment for repair & maintenance, Up gradation and modernization because of low generation of power observed year after year wherein the fixation of low design energy is one of the prime cause.

The actual generation from the hydro power stations of OHPC depends on good hydrology condition, the rainfall pattern, availability of water in the reservoir & machines for generation, demand of the state. Further the water available in a carry over reservoir is very often carried over to the next year due to uncertainty and irregular pattern of rainfall. This affects the actual generation in a particular year.

**Para 15:-**

As already clarified above the fixation of Design Energy is not a criteria to justify the real time performance of OHPC hydro power stations.

**Compliance to the Objections/Suggestions raised by Sri G. N. Agrawal, General Secretary, Sambalpur District Consumers Federation on the ARR application of OHPC for the FY 2016-17**

**Para 3:-** OHPC has taken up the Renovation & Mordenisation works of Unit-3 of CHEP; Unit-5 & 6 of HHEP, Burla and Unit- 1 to 6 of BHEP, Balimela. Also, OHPC has taken the Capital Maintenance work of different Units to maintain a sustainable and effective generation. The detail status of R&M and Capital Maintenance work is shown at the Para-3 of the Compliance of R.P.Mohapatra above.

**Para 4:-**Regarding proper maintenance of reservoirs, the Department of Water Resources (DOWR) shall create a corpus as annual maintenance fund, to be utilized for removal of shoals/silt etc. through periodical dredging as directed by Hon'ble High court of Odisha vide WPC No-8409 of 2012 at para 24.

Subsequently, some of the user industries filed objections before the Hon'ble High Court of Odisha which is under subjudice.

**Para 7:-**CHEP is a base load Power Station. The generation depends upon the water co-ordination of the discharge water at Head regulator and corresponding water at forebay. The staff of CHEP, Chiplima are putting their best effort for maximum utilization of water to generate the power. The installation of Trash rack cleaning machine has helped in improving the generation to a great extent.

**Para 8:-** The report on the status of new small hydro projects being looked after by GEDCOL is furnished at **Annexure-II**.

**All other objections/suggestions are not related to OHPC Ltd.**

## PRAYER

OHPC pray before the Hon'ble Commission to kindly approve the following in the ARR & Tariff Order of OHPC Power Stations for the FY 2016-17:

- i) The ARR of Rs 799.724 Crs. at an Average tariff @ 143.09 p/u with a saleable Design Energy of 5588.79MU
- ii) The miscellaneous reimbursement of Rs.44.7226 Cr by OHPC from GRIDCO.
- iii) Design Energy of CHEP, Chiplima as 474.05MU (Salable D.E = 469.31MU) considering restriction in generation by DoWR, GoO not below RL of 595.0 ft of Hirakud Reservoir.
- iv) Design Energy of HHEP, Burla as 669.19MU (Salable D.E = 662.50MU) which is the maximum possible generation of HHEP considering restriction in generation by DoWR, GoO not below RL of 595.0 ft.
- v) The tariff for energy billing to CSPDCL at 197.46 paisa per Kwh as per CERC (Terms & Conditions of Tariff) Regulations, 2014.
- vi) Recognizing the following as the Regulatory Asset and taking suitable decision for realization of the same.
  - a) Accumulated interest of UIHEP Govt. Loan from 2006-07 to 2015-16 = Rs.327.74Cr.
  - b) Accumulated interest on Normative Loan of UIHEP from 2001-02 to 2015-16 = Rs.61.50Cr.
  - c) Realization of Rs. 145.6245 Crs. towards Hydrology Failure ( negative fund for Secondary energy) from FY 1996-97 to FY 2014-15.
- vii) Suitable decision in allowing interest on the above recognized Regulatory Asset.
- viii) The fixation of Installed Capacity for computation of PAFM & payment of SLDC charges during the FY 2016-17 as per the information furnished under Table No.1 of the Original Application.
- ix) In-principle decision for quarterly reimbursement of Income Tax as proposed by Sri R. P. Mohapatra, Retd. Chief Engineer & Member (Gen. OSEB).

Place : Bhubaneswar

Date :

**Deponent**