Summary of ARR & Tariff Filings

Submitted by

OHPC

For

FY 2018-19

SUMMARY OF ARR PROPOSAL OF OHPC FOR FY 2018-19

1. Installed Capacity

The total installed capacity of various Hydro Stations owned by the Orissa Hydro Power Corporation (OHPC) is reduced due to repair and maintenance (R&M) work undertaken in certain units of electric plants of OHPC. The installed capacity of different generating stations for the FY 2018-19 is given in table -1 below. The Odisha share of Machhkund is same as previous year at 36 MW as the actual installed capacity of MHEP has been reported as 120 MW by the MHEP authorities.

Table – 1: Installed capacity of OHPC stations for PAFM calculation

G1	St. No. 24 D. T. A. H. L. C. 24 A. 22 L. L. A. H. L. C. 24 C. EX. 2010.1					
Sl.	Name of the Power	Installed Capacity Approved	Installed Capacity for FY 2018-19			
No.	Station	for FY 2017-18				
1	Rengali (RHEP)	250.00	250.00			
2	Upper Kolab(UKHEP)	320.00	320.00			
3	Balimela(BHEP)	450.00 (for R&M of one Unit)	 390 (from 21.11.2017 due to R&M of Unit-1 &Unit-2 till the approved period) 270 (during the overlapping period for R&M of Unit -1 to 4. The Unit No. 3&4 are Scheduled for R&M from 05.08.2018) 			
4	Burla (HHEP) 210.50 (from 16.10.2015 onwards till the approved period of shut-down of any one Unit under R&M)		238.00 (from 17.02.2018 onwards as per the approved period of S/D of Unit-6)			
		200.50 (during the overlapping period of R&M of #5 & #6)	275.50 (from 25.04.2018 onwards as per the approved period of S/D of Unit-5)			
5	Chiplima (CHEP)	48.00 (from 15.10.2015 onwards till the approved period of shut down of Unit-3 under R&M)	72.00 (from 16.06.2017 onwards as per the approved period of shutdown of Unit- 3)			
6	Upper Indravati (UIHEP)	600.00	600.00			
7	Machhakund (30% Orissa share)	36.00	36.00			

2. **Design Energy of OHPC Stations**

The hydro power station wise design energy proposed for FY 2018-19 is given in the following table.

Table -2: Design energy for FY 2018-19

(in MU)

Sl. No.	Name of the Power Station	Design Energy approved for FY2017-18	Design Energy for sale for FY 2017-18	Design Energy proposed for FY 2018-19	Design Energy for sale for FY 2018-19
1	RHEP	525.00	519.75	525.00	519.75
2	UKHEP	832.00	823.68	832.00	823.68
3	BHEP	1183.00	1171.17	1183.00	1171.17
4	HHEP	684.00	677.16	684.00	677.16
5	CHEP	490.00	485.10	490.00	485.10
	Total of Old wer Stations	3714.00	3676.86	3714.00	3676.86
6	UIHEP	1962.00	1942.38	1962.00	1942.38
Total		5676.00	5619.24	5676.00	5619.24

3. Reservoir Level and Anticipated Generation for FY 2017-18

The reservoir level of Power Stations reported by OHPC as on 31.10.2016 vis-à-vis on 31.10.2017 is given in table -3 below

Table – 3: Reservoir level of power stations

Sl. No.	Reservoirs	As on 31.10.2016	As on 31.10.2017
1.	Rengali	123.00 mtr.	123.26 mtr
2.	Kolab	856.66 mtr.	854.06 mtr.
3.	Balimela	1507.20 ft.	1486.60 ft.
4.	Hirakud	630.06 ft.	629.29 ft.
5.	Indravati	639.32 mtr.	636.44 mtr.

The actual generation of different Power Stations under OHPC from 01.04.2017 up to 31.10.2017 and anticipated generation up to 31.03.2018 for the FY 2017-18 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 are furnished below.

Table – 4: Actual / Anticipated Energy Generation

Sl. No.	Name of the power stations	Actual generation from 01.04.17 up to 31.10.17 (in MU)	Anticipated generation from 01.11.17 to 31.03.18 based on DoWR & DoE Schedule (in MU)	Total Estimated generation for the FY 2017-18 based on DoWR & DoE Schedule (in MU)
1.	RHEP	636.466	97.8	734.266
2.	UKHEP	478.654	165.6	644.254
3.	BHEP	1216.773	252.72	1469.493
4.	HHEP	510.445	118.92	629.365
5.	CHEP	156.396	86.4	242.796
6.	UIHEP	1266.270	536.4	1802.670
Total		4265.004	1257.84	5522.844

The extra/ shortfall in generation from the design energy of the respective Power Stations shall be accounted towards the secondary energy fund as per Order of the Hon'ble Commission. The present deficit of the secondary energy fund of OHPC as a whole is about **Rs. 261.283Crs**. The total anticipated generation of OHPC for the present FY 2017-18 is **5522.84 MU** which will fall short by **153.156 MU** from the approved D.E of **5676MU**. The shortfall in generation in the present FY will give rise to further deficit in the secondary Energy Fund.

4. Project Cost

The revalued cost of old power stations under OHPC is Rs.1196.80 Crs as on 01.04.1996 as per the notification vide S.R.O No. 254/96 dtd. 01.04.1996 of Department of Energy, Government of Orissa. The Commission in its Order dated 23.03.2006 at clause no. 5.4 (C) had approved the same. Further, Hon'ble Commission, in the order dated 20.03.2008 has approved Rs. 1195.42 Crs. as final capital cost of UIHEP for the purpose of determination of tariff. However, the Tariff of Old power stations was determined on the historical cost of old power station of OHPC for Rs. 479.80 Crores as per the Notification No. 1068 Dtd. 29.01.2003 of DoE, GoO.

OHPC has considered additional capitalization as per clause no. 3.4 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 and extra additional capitalization on account of amended Companies (Ind AS) Rules to be considered under OERC norms. Considering the above factors, the total additional capitalization for an amount of Rs. 62.91 Cr. as per the audited account for FY 2016-17 has been considered for FY 2018-19. The OHPC has made capital maintenance of unit 1 of HHEP Burla amounting to Rs. 10.029 Cr. and civil works amounting to Rs. 6.56 Cr.

The adjustment of cost of assets during the period from FY 2011-12 to FY 2015-16 on account of de-capitalization of asset for an amount of Rs 9.38 Cr has been approved by Hon'ble Commission in the earlier tariff order of OHPC. There is de-capitalization of Rs 0.40 Cr in case of old power stations of OHPC&Rs. 2.00Cr in case of UIHEP for FY 2016-17. The Revalued cost as on 31.03.2017 is shown in the table-5 below. Hence the total decapitalisation of Power Stations during the FY 2011-12 to FY 2016-17 comes to Rs 11.78Cr which has been deducted from the original Historic Cost as on 01.04.1996.The project cost of OHPC power stations considered for computation of ARR & tariff for the FY 2018-19 is given in the table below:

Table-5: Project Cost for tariff Calculation for FY 2018-19

(in Rs. Cr.)

Name of the power stations	Historic Cost as on 01.04.1996	Asset reduction during FY 2011-12 to FY 2016- 17	Approved New additions up to 31.03.2016	New additions for FY 2016-17 (audited)	Total New Addition upto 2016- 17	Project Cost considered for Tariff calculation based on Historic Cost
1	2	3	4	5	6=4+5	7=2+6-3
RHEP	91.09	0.06	57.47	0.32	57.79	148.82
UKHEP	108.31	0.43	18.98	0.29	19.27	127.15
BHEP	115.42	0.29	215.50	1.52	217.02	332.15
HHEP	72.75	6.77	217.35	27.76	245.11	311.09
CHEP	92.23	0.88	47.87	0.63	48.50	139.85
Sub	479.80	8.43	557.17	30.53	587.70	1059.06
Total						
UIHEP	1194.79	3.35	1198.19	32.39	1228.58	1228.58
Total	1674.59	11.78	1755.36	62.91	1816.28	2287.64

Note: Project cost approved for UIHEP after CoD is Rs. 1194.79 Cr.

5. The Commission's Decision on Notification No. 5843 Dt. 03.07.2015 of Department of Energy:

The Commission in Para No. 75 of the tariff order for the FY 2016-17 took the decision that it was not possible for the commission to consider the effect of up-valuation of Rs. 766.20 Cr. in the form of convertible bonds carrying interest @7% at present with respect to the notification no. 5843 dated 03.07.2015 of department of energy, government of Orissa. The commission in para no. 76 of the said order ruled that the impact of notification no. 5843 dated 03.07.2015 as proposed by OHPC in its ARR application was not taken under consideration while determining tariff for FY 2016-17 as the same was not in accordance with law and escalate financial burden on public.

The Commission also rejected the OHPC review petition for not considering the impact of government notification no. 5843 dtd 03.07.2015 in the tariff of OHPC for FY 2016-17 devoid of any merit.

Accordingly, OHPC has considered the Project Cost of old power stations equal to Historic Cost as on 01.04.1996 plus New additions & decapitalizations after 01.04.1996 up to FY 2016-17 (audited) and calculated the ARR & Tariff of OHPC power station for FY 2018-19. Similarly, the Project Cost of Rs 1194.79Cr is considered for calculation of ARR & Tariff of UIHEP for FY 2018-19.

6. Tariff for Energy Billing to CSPDCL:

The erstwhile Chhattisgarh State Electricity Board (CSEB), presently Chhatisgarh State Power Distribution Company Limited (CSPDCL) drawing energy from Hirakud generation towards 5MW share of Chhattisgarh State (erstwhile share holder being Madhya Pradesh) is taking a plea since the FY 2006-07 to pay the energy charges at the tariff approved by the Hon'ble Commission for HHEP, Burla, applicable for the consumers of Odisha, considering the supportive measures extended by the Govt. of Odisha which is considerably less than the actual cost of generations from HHEP on which billing is made to them as per the Minutes of Meeting dtd. 24.12.2004.

Presently it is decided that from 2008-09 onwards CSPDCL shall pay at a rate as approved by OERC provisionally till the rate is approved by appropriate Commission and afterwards necessary adjustment shall be done in accordance to law.

For coming FY 2018-19, OHPC has computed the tariff for billing of Energy to CSPDCL as per the CERC (Terms and Conditions of Tariff) Regulation 2014 as furnished at Table-6 below.

Details of Expenses HHEP	Amount (Rs in Crs)
Salable Design Energy of HHEP	677.16 MU
Project Cost (Up-valued cost as on 01.04.1996 + Capitalization up	368.5Cr
to 31.03.2017 - Decapitalization)	
Return on Equity (@ 24.9962%)	27.63
Interest on Loan	6.51
Depreciation (@ 5.28%)	19.46
O & M expenses (Escalated @ 6.64%)	84.90
Interest on Working Capital (@ 11.5%)	5.02
Total ARR	143.53
Average Tariff (p/u)	211.96

Tariff for CSPDCL for 2018-19

7. Determination of Annual Fixed Cost

Tariff computation is done according to the OERC (Terms and conditions for determination of Generation Tariff) Regulations, 2014 that specifies methodology for computation of tariff for supply of electricity from a hydro generating station. The tariff shall comprise capacity charge and energy charge to be shared on 50:50 basis for recovery of annual fixed cost.

The Annual Fixed Cost of a hydro generating station shall consist of the following components:

- a. Return on equity (ROE)
- b. Interest on loan capital
- c. Depreciation

- d. Operation and Maintenance expenses
- e. Interest on working capital

a. Return on equity (ROE):

Based on the Commission's tariff order dtd 19th April, 2002 and subsequent government notification the ROE to OHPC was allowed on new investments made after 01.04.1996. According to Clause No. 4.5 & 4.6 of OERC (Terms and conditions for determination of Generation Tariff) Regulations, 2014 the Return on Equity shall be computed @16% of the equity amount. Also as per the provisions made in the said clause the income tax of the Generating Company shall be recovered from the beneficiaries(income tax on other income streams shall not be considered).

OHPC has considered 30% of additional capitalization in UIHEP as equity base. Further OHPC has considered equity base as 30% of the revalued cost of old power stations as on 01.04.1996 along with additional capitalization from 1996-97 to 2015-16 and audited cost for capitalization and decapitalization for FY 2016-17. 30% of this additional capitalization is considered as equity base.

Moreover, OHPC has paid Rs. 70.09 Crs. towards income tax for FY 2016-17 on the core business.

Table – 7: Computation of RoE for different power stations of OHPC for FY 2018-19 (in Rs. cr.)

Name of the Power Station	Capital Addition after 01.04.1996 upto 31.03.2016 approved (in Crs)	Capital Addition for the FY 2016-17 audited (in Crs)	Capital Addition considere d for RoE for FY 2018-19 (in Crs)	Share of Equit y (%)	Value of Equity capital (in Crs)	ROE @16% Propose d for 2018-19 (in Crs)	RoE approved by OERC for 2017- 18 (in Crs)
1	2	3	4=2+3	5	6=4*5	7=16% of 6	8
RHEP	57.47	0.32	57.79	30	17.337	2.774	2.759
UKHE P	18.98	0.29	19.27	30	5.781	0.925	0.911
BHEP	215.5	1.52	217.02	30	65.107	10.417	10.344
HHEP	217.35	27.76	245.11	30	73.534	11.765	10.433
CHEP	47.87	0.63	48.50	30	14.550	2.328	2.298
UIHEP	1198.19	32.39	1228.58	25&3 0	309.002	49.440	47.966
Total	1755.37	62.91	1816.27		485.310	77.650	74.710

Thus, OHPC has appealed before the Commission to approve Rs. 77.650 Crs. as RoE for FY 2018-19for different power stations of OHPC.

b. Interest on loan

The loan liabilities on OHPC consist of state Government loan, PFC loans and Normative Loans. The State Government loan liabilities outstanding as on 01.04.1996 is given in the table below:

Table – 8:State Govt. Loan Liabilities

(Rs. inCrs)

Sl. No.	Description of loan	Amount as on 01.04.1996
1.	9.8% loan	39.20
2.	13% loan (UIHEP)	497.86
3.	Interest free loan (UIHEP)	132.14
4.	13% loan (Potteru)	14.30
5.	Zero Coupon Bond-I	383.10
6.	Zero Coupon Bond-II	383.10

The Commission in the Tariff approval of OHPC for the FY 2017-18 has stated as follows:

"......the Commission allows OHPC to make principal repayment of Rs. 30.23 Cr. against depreciation during FY 2017-18. The commission may consider the interest accumulated on government loan and normative loan of UIHEP in the ARR of OHPC after completion of principal repayment of the govt. loan and normative loan as per our earlier observations." In line with the above observations and the Commission's letter No. DIR (T) 17512/57 dtd.13.01.2015 to the Government, no interest payment on government loan and normative loans for UIHEP is allowed for the purpose of tariff for FY 2017-18."

Considering the difference in opinion in the debt servicing of the government investment in UIHEP between the DoE, GoO and Hon'ble OERC, the OHPC is of the view that the Commission may consider to include both payment of interest and repayment of principal in the ARR of UIHEP. However, Hon'ble Commission is of the view that the interest accumulated on Govt Loan and Normative loan of UIHEP may be considered in the ARR of OHPC after completion of the Principal repayment of the Government loan and Normative loan as per decision in Case No.100/2012 and as per para 131 of the compendium of tariff orders for FY 2013-14.

Table – 9: Present Status of UIHEP Govt. Loan based on the approvals of OERC

(Rs. In Cr.)

Original Approved Project Cost	1195.42
Project cost deducting the infirm power cost	1194.79
Equity @25%	298.70
Govt. Loan of UIHEP	497.86
Depreciation allowed from 2010-11 to 2017-18 @ Rs30.23 Crore	241.84
Loan Repayment made till FY 2017 -18	Rs241.84(Rs30.23Cr to be paid)

Polonos Outstanding Loon os on 01 04 2019	Rs256.02Crore (Considering		
Balance Outstanding Loan as on 01.04.2018	Depreciation allowed)		
Cumulative interest on UIHEP Govt. Loan from	350.49 Crore(Govt. proposed to		
FY 2006-07 to FY 2017-18 @ 7%	consider as regulatory asset)		
Cumulative interest on normative loan from FY 2001-02 to FY 2017-18@ 7%	101.85 Crore (Not paid)		

PFC loan of Rs320.00 Cr. has already been repaid in full by FY 2009-10.OHPC has so far paid Rs211.61Cr to Govt. by March 2017. The depreciation approved for FY 2017-18 for Rs 30.23Cr shall be paid by the end of this Financial Year. Interest on UIHEP Loan has been provided by OHPC in its books of account every year as per the direction of the Commission in the tariff order of OHPC for FY2014-15. So, the cumulative interest of UIHEP, Govt. Loan up to FY 2017-18 stands at Rs350.49Cr.

Status of UIHEP Loan Liability as on 31.03.2018

- i) PFC loan of Rs319.49 Crs repaid.
- ii) Rs241.84 Crs @Rs30.23Crs approved and repaid to Govt.
- iii) Interest on Govt. Loan of UIHEP not approved by Commission.
- iv) Principal & Interest on normative loan not approved by the Commission.

The Commission in the Para 131 of Compendium of Tariff Order of OHPC for FY 2013-14 has observed that this loan repayment may start after the total repayment of Govt. loan as approved above, at the same rate of Rs.30.23 Cr. each year i.e. beginning with 2026-27. The interest component will be considered after the total repayment of the principal in line with the Govt. loans.

If above order of OERC is to be carried out, total liability of UIHEP Loan as on 01.01.2029 will be Rs761.22Cr, which has to be recovered between FY 2029-30 to FY2034-35 (i.e. the balance useful life period of the UIHEP, project). In order to avoid sharp hike in the tariff to the tune of 50 paise per unit for UIHEP the OHPC proposes to OERC to consider the repayment of interest of UIHEP Govt. Loan & UIHEP Normative Loan of Rs 78.74Crs in the ARR of OHPC from FY2018-19 onwards to reduce sharp rise in Tariff towards the fag end of Project Life when the R&M of these Units will be due.

OHPC further proposes that the OERC may consider the claim of DoE, GoO and recognize the Accumulated interest of Govt. Loan of UIHEP upto FY2017-18 as Regulatory Asset & decide its repayment in suitable instalment and in line with the suggestion of the DoE, GoO, the accumulated interest of Normative Loan of UIHEP may also be recognized as Regulatory Asset & its repayment in suitable instalment may be decided.

If the Commission does not agree to the proposals of OHPC as above, then a suitable plan may be approved so as to clear all interest liability as well as recovery of 90% of the project cost within the Useful life period.

Table 10: OHPC prayer before the Commission to approve in the tariff for the FY 2018-19

1.	Rs 30.23Crs towards Principal Repayment of UIHEP Govt. Loan.
2.	Rs 16.863Crs towards Interest Repayment of UIHEP Govt. Loan.
3.	Rs 5.51Crs towards Interest Repayment of UIHEP Normative Loan of Project Cost.
4.	Declare the accumulated Interest of Rs 350.49 Crs as on 31.03.2018 on the UIHEP
	Govt. Loan as the Regulatory Asset.
5.	Declare the accumulated Interest of Rs 101.85Crs as on 31.03.2018 on the UIHEP
	Normative Loan of Project Cost as the Regulatory Asset.
6.	Pass through of the 1st Installment (to be decided by the Hon'ble Commission) of the
	above Regulatory Asset as under sl. No. 4 & 5 in the tariff of 2018-19.

Normative Loans - The normative loans of CHEP, RHEP & UKHEP is considered @ 9.8% as per Clause No. 4.13 of OERC (Terms & Conditions for determination of Generation Tariff) Regulation, 2014. The normative loan of BHEP, Balimela is considered @ 9.6 % for FY 2017-18 based on PFC interest rate applicable to BHEP. Similarly, the normative loan of HHEP, Burla is considered @ 8.75 % for FY 2017-18 based on PFC interest rate applicable to HHEP, Burla.

The accumulated interest on UIHEP normative loan calculated upto 31.03.2018 will be Rs. 101.85Crore at the prevailing rate of interest of State Govt. Loan @7% as per the orders of Hon'ble Commission.

OHPC prays before the Commission to include the interest on normative loan for the FY 2018-19 amounting to Rs. 5.51 Crs. in the ARR and designate the accumulated interest amounting to Rs101.85 Crs from the FY 2001-02 to FY 2016-17 on Normative Loan of Rs 78.74 Crs as Regulatory Asset and fix suitable installment as pass through in the tariff for the FY 2018-19 in order to reduce the future tariff burden.

The interest on outstanding loans payable by OHPC for the FY 2018-19 is given in table -11 below: -

Table-11:(Statement of Outstanding Loans and Interest there on)

(Rs. in Crs.)

Sl. No.	Source of Loan	Loan Outstanding as on 01.04.18	Interest on Average Net Loan for the FY 2018-19
1.	State Govt. Loan of UIHEP @7%	256.02	16.86
2.	Normative loan for R&M of Unit 2, CHEP, Chiplima.	1.40	0.07
3.	Normative loan for Addl. Capitalization FY 2012-13 to FY 2016-17 of CHEP, Chiplima @ 9.8%	1.36	0.14

Sl. No.	Source of Loan	Loan Outstanding as on 01.04.18	Interest on Average Net Loan for the FY 2018-19
4.	Normative loan for Unit #4 & Addl. Capitalization FY 2012-13 to FY 2016-17 of Upper Kolab @ 9.8%	1.21	0.11
5.	Normative loan for Addl. Capitalization FY 2012-13 to FY 2016-17 of Balimela @ 9.6%	2.45	0.20
6.	Normative loan for Addl. Capitalization FY 2012-13 to 2016-17 of HHEP @ 8.75%	26.38	2.04
7.	Normative loan for Addl. Capitalization FY 2013-14 to 2016-17 of RHEP, Rengali @ 9.8%	0.70	0.08
8.	Normative loan for Addl. Capitalization FY 2013-14 and FY 2016-17 of UIHEP, Mukhiguda @ 7%	24.44	1.55
10.	Normative loan of Rs 78.23Cr @ 7% UIHEP, Mukhiguda for	78.74	5.51
11.	Normative loan for Unit -1&2 R&M, Rengali	18.71	1.66
	Total	411.42	28.22

The Power Station wise interest on loan and guarantee commission as described above is given below:

Table-12:Interest on loan of different power house of OHPC

(Rs. Cr.)

Sl.	Source of loan		Interes	st on loan	for FY 2	018-19		
No.		RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	TOTAL
1.	Normative loan	1.741	0.110	0.200	2.040	0.208	7.062	11.360
2.	Govt. Loan	-	-	-	-	-	16.863	16.863
Total		1.741	0.110	0.200	2.040	0.208	23.925	28.224

Thus OHPC prays before the Commission to approve Rs28.224 Cr. in the tariff of OHPC for the FY2018-19for payment of Interest towards Govt. Loan, and Normative Loans of the different Power Stations of OHPC as mentioned in the above table.

c. Depreciation

Depreciation is the refund of capital subscribed and is a constant charge against an asset to create a fund for its replacement.

Honorable Commission at clause no. 4.21 of OERC (Terms and Conditions for determination of generation tariff) Regulations, 2014 has specified for OHPC as follows:

"Provided that for existing plants of OHPC as per the direction of the High Court of Orissa, depreciation will be calculated at pre-1992 norms notified by Government of India on the book value of the assets."

OHPC has computed depreciation for the FY 2018-19 @ 2.57% on the Historic project cost as on 01.04.1996 (excluding de-capitalization) plus an additional capitalization w.e.f. 01.04.1996up to FY 2016-17. The Unit wise depreciation so calculated is compared with the Loan repayment and the amount whichever is higher is considered as depreciation for Tariff computation.

UIHEP depreciation is calculated based on straight line method following which 90% of the project cost shall be recovered on the last year of the project life i.e., FY 2034-35. By the way Hon'ble Commission is allowing Rs30.23Cr annually under depreciation for repayment of State Govt. loan starting from the FY2010-11 onwards as per the order at Para No. 131 of the Compendium of OHPC Tariff Order for FY 2013-14.

For depreciation on the additional capitalization up to 2015-16 and for additional capitalization of FY 2016-17 (Audited), OHPC has calculated the normative loan repayment of different power stations as per the terms approved by the OERC.

The comparative statement for actual repayment of loans and depreciation @2.57% for the FY 2018-19 as shown in the Table – 13below to arrive at the depreciation amount to be claimed in the ARR & Tariff of OHPC for the FY 2018-19.

Table -13: Depreciation Claim for the FY 2018-19

(Rs in Crs)

Sl. No.	Power Stations	Project Cost	Loan Repayment Amount	Depreciation @ 2.57%	Depreciation Claimed	Remark
1.	RHEP	148.82	3.72	3.82	3.82	Depreciation @ 2.57%
2.	UKHEP	127.15	0.72	3.27	3.27	Depreciation @ 2.57%
3.	ВНЕР	332.15	0.75	8.54	8.54	Depreciation @ 2.57%
4.	ННЕР	311.09	6.14	8.00	8.00	Depreciation @ 2.57%
5.	СНЕР	139.85	2.17	3.59	3.59	Depreciation @ 2.57%
6.	UIHEP	1228.58	35.43	31.57	35.43	Equal to loan Repayment
	Total	2287.64	48.93	58.79	62.65	• •

OHPC prays before the Commission to approve Rs. 62.65 Cr towards depreciation for FY 2018-19.

d. Operation and Maintenance (O&M) Expenses:

O & M Expenses has been calculated as per the Generation Tariff Regulations, 2014 and escalated @ 5.72 % on previous years approved O&M expenses. On this principle O&M expenses for FY 2017-18 comes to Rs. 334.77 Cr. It has been decided in the tariff Order for FY 2015-16 that the Department of Water Resource share of dam maintenance receivable by OHPC is to be deducted from total O&M expenses of OHPC. Accordingly, Rs. 10.97 Crore has been deducted from approved O&M expenses of UIHEP of Rs. 77.504 Cr. in FY 2017-18. Thus the Commission approved total O&MExpenses at Rs. 323.803 Cr. Subsequently, OHPC has escalated O&M expenses for FY 2017-18 @5.72% to arrive at O&M expenses of different power stations of OHPC for FY 2018-19.

The Commission has deducted Rs. 10.97 Crs from O&M expenses of UIHEP Makhiguda on account of dam maintenance expenses receivable from DoWR for the FY 2017-18. Assuming the same principle OHPC has deducted Rs. 9.66 Cr. from the escalated O&M expenses of UIHEP for FY 2018-19.

Govt. of Odisha has already approved 7th Pay Commission's pay structure for the State Govt. Employees w.e.f 01.01.2016. OHPC has calculated the financial impact on account of implementing the 7th Pay Commissions pay-structure which works out to about Rs53.94Cr from 01.01.2016 to 31.03.2018. OHPC proposes to allow 40% of the estimated arrear in O&M of Tariff of OHPC for FY 2018-19. However, the additional financial implication on account of manpower restructuring in OHPC shall be accommodated within the escalated O&M expense as proposed for the FY 2018-19 including the current 7th pay impact for the FY 2018-19.

The Station-wise O&M expenses proposed by OHPC for FY 2018-19 is presented in the table – 14 below:

Table- 14: Statement of O & M Expenses for different power stations of OHPC for FY 2018-19

(Rs.in Cr.)

Sl. No.	Particulars	RHEP	UKHEP	внер	ННЕР	СНЕР	Sub Total	UIHEP	СО	Total
1	O & M expenses for FY 2017-18 Approved by OERC.	47.95	36.12	68.73	72.64	16.63	242.08	69.48	23.22	334.78

Sl. No.	Particulars	RHEP	UKHEP	внер	ННЕР	СНЕР	Sub Total	UIHEP	СО	Total
2	O & M expenses for FY 2018-19 with escalation @ 5.72% over FY 2017-18	50.69	38.19	72.66	76.80	17.58	255.93	73.45	24.55	353.93
3	Corporate Office expenses apportioned to different units under OHPC based on Design Energy	2.27	3.60	5.12	2.96	2.12	16.06	8.49	24.55	65.12
4	Total O & M Expenses for the FY 2017-18	52.963	41.784	77.778	79.753	19.700	271.990	81.940		353.929
5.	Arrear of 7 th Pay revision of OHPC & Terminal liabilities w.e.f 01.01.2016	9.24	3.90	10.07	6.55	4.53	34.29	16.10	3.55	53.941
6.	40% of arrear of 7 th pay revision of OHPC & Terminal liabilities w.e.f 01.01.2016	3.70	1.56	4.03	2.62	1.81	13.71	6.44	1.42	21.576
7.	Corporate Office arrear expenses apportioned to different units under OHPC based on D.E. s: Amount Rec	0.13	0.21	0.30	0.17	0.12	0.93	0.49		

Sl. No.	Particulars	RHEP	UKHEP	внер	ннер	СНЕР	Sub Total	UIHEP	со	Total
8	Less : Income to be received from DOWR towards dam maintenance of UIHEP							(-)9.66		(-)9.66
9	Total O&M Expenses for the FY 2018-19.	56.791	43.554	82.100	82.545	21.634	286.633	79.212		365.846

OHPC prays before the Commission to approve Rs. 365.846 Cr towards O&M expenses for FY 2018-19.

e. Interest on Working Capital

As per OERC Tariff Regulation 2014, the basis for calculation of working capital shall include the following:

- 1. Receivables equivalent to two months of fixed cost.
- 2. Maintenance spares @ 15% of operational and maintenance expenses
- 3. Operation and maintenance expenses for one month.

The rate of interest on working capital considered is the SBI MCLR¹@ 8% as on 1st April, 2017 plus 300 basis points which turns out to be 11%.In accordance with OERC guidelines, the interest on working capital shall be payable on normative basis.

Table -15 below summarizes the station wise interest on working capital as proposed by the OHPC for FY 2017-18.

Table-15:Interest on Working Capital

(Rs. in Crs)

Sl.	Description	RHEP	UKHEP	ВНЕР	ННЕР	СНЕР	Sub	UIHEP	Total
No	2 escription						Total	CILLEI	10001
1	Receivables equivalent to two months of fixed cost	11.31	8.31	17.55	18.08	4.81	60.05	32.26	92.32
2	Maintenance spares @ 15% of O&M	8.52	6.53	12.31	12.38	3.25	43.00	11.88	54.88

¹ Marginal Cost of Funds based Lending Rate (MCLR)

_

Sl. No	Description	RHEP	UKHEP	внер	ННЕР	СНЕР	Sub Total	UIHEP	Total
	expenses								
3	O&M expenses for one month	4.73	3.63	6.84	6.88	1.80	23.89	6.60	30.49
4	Total working capital	24.56	18.48	36.71	37.34	9.86	126.93	50.75	177.68
5	Interest on working capital calculated @ 11.00%	2.701	2.033	4.038	4.107	1.084	13.963	5.582	19.545

OHPC has prayed before the Commission to approve **Rs. 19.545 Cr.** towards interest on working capital for FY 2018-19.

Annual Revenue Requirement (ARR) & Tariff for the FY 2018-19

Based on the above parameters the power station wise ARR and tariff of OHPC have been calculated for the FY 2018-19 as follows:

The values of ARR along with its different components and the average tariff computed considering the Saleable Design Energy of 5619.24 MU for the FY 2018-19 is shown in the table -17 below.

Table-16: Station wise ARR and Tariff for the FY 2018-19 considering saleable D.E. of 5619.24 MU

Details	RHEP	UKHEP	ВНЕР	ННЕР	CHEP	Sub	UIHEP	Total
expenses						Total		
Existing Saleable Design Energy (MU)	519.75	823.68	1171.17	677.16	485.10	3676.86	1942.38	5619.24
			(Rs.	in Crs.)				
Return on Equity	2.774	0.925	10.417	11.765	2.328	28.209	49.440	77.650
Interest on Loan	1.741	0.110	0.200	2.040	0.208	4.299	23.925	28.224
Depreciation	3.825	3.268	8.536	7.995	3.594	27.218	35.429	62.647
O&M Expenses	56.791	43.554	82.100	82.545	21.634	286.633	79.212	365.846

Details expenses	RHEP	UKHEP	ВНЕР	ННЕР	СНЕР	Sub Total	UIHEP	Total
Interest on working capital	2.701	2.033	4.038	4.107	1.084	13.963	5.582	19.545
Total ARR	67.832	49.889	105.290	108.453	28.847	360.311	193.589	553.911
Average Tariff (p/u)	130.51	60.57	89.90	160.16	59.47	97.99	99.67	98.57

8. Application Fee and Publication Expenses

As per the OERC tariff regulation 2014, the application filing fee and the expenses incurred on publication of notices may in the discretion of the commission, be allowed to be recovered by the generating company directly from the beneficiaries. As per the Commission notification no. 1992 dated 31.08.2009 in the clause no. 17, Commission has fixed a fee of Rs. 5000/- per MW as application fee for determination of tariff of conventional fuel based plant/ hydel plants, subject to maximum limit of Rs. 25,00,000/- (Rupees Twenty five lakhs). Further, the OHPC has incurred Rs. 0.84815 lakhs as against approved Rs. 1 lakh for publication expenses in FY 2017-18. Due to implementation of GST, the publication expenses may likely to be increased. As per above provision, the application fee and publication expenses proposed by OHPC for FY 2018-19 are given in table – 17 below.

Table -17: Application Fees and Publication Expenses

(Rs. In lakhs)

Sl. No.	Application fee	Publication expenses	Total
1	25.00	1.20	26.20

9. Electricity Duty on Auxiliary Consumption

As per the agreed PPA between OHPC and GRIDCO, the taxes and duties including electricity duty (ED) on auxiliary consumption etc. payable by OHPC to the State Government and other statutory bodies shall be passed on to GRIDCO in the shape of supplementary bill raised by OHPC. The Rate of Electricity Duty / Unit have been revised from 30 paisa per Unit to 55 paisa per Unit with effect from 12th May, 2017 as per the Gazette Notification No. 912 dtd. 12.05.2017.

As per the Odisha Electricity (Duty) Amendment Act, 2016 vide their Gazette Notification No. 1981 Dtd. 05.11.2016.the electricity duty(ED) on Auxiliary Energy Consumption shall be paid on auxiliary equipment consumption and the transformer losses within the power stations. Since there was no claim of Electricity Duty on Transformer loss by EIC-PCEI in the Gazettee Notification, OHPC was paying ED on auxiliary equipment consumption and getting it reimbursed from GRIDCO limiting to 0.5% of the gross generation on Annual

basis, as per the approval of the Commission. OHPC pray before the Commission to allow the Transformer loss as per the average Transformer loss for last 07years of different power stations. OHPC has started paying ED on Transformer losses @55paise/ Kwh along with the auxiliary equipment consumption and raised reimbursement claim from GRIDCO. The total reimbursement claim for the FY 2018-19 may be around Rs11.394Cr (Rs6.123Cr + Rs5.271Cr).

Table-19:ED on Auxiliary Consumption

(Rs. in Crs)

Description	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
Differential ED on							
Auxiliary Consumption	0.549	0.662	0.603	0.685	0.172	2.600	5.271
for FY 2017-18							
ED on Auxiliary							
Consumption for FY	0.628	0.787	0.780	0.788	0.246	2.894	6.123
2018-19							

Hence, OHPC pray before the Hon'ble OERC to approve reimbursement of ED paid on the Auxiliary Equipment Consumption limiting to 0.5% of the Annual gross generation and approve to reimburse the actual ED paid on transformer loss from GRIDCO. Accordingly, an amount of Rs11.394Cr may kindly be provisioned in the ARR of GRIDCO.

10. License Fee for Use of Water for Generation of Electricity

As per the gazette Notification Dt. 01.10.2010, OHPC has to pay @Rs. 0.01/KWh as Licence Fee on water used for generation of electricity from all Hydro Electric Project to the tune of Rs. 5.676 Crs. based on design energy which is to be reimbursed to OHPC by GRIDCO.

As per the amendment made in Rule-23-A (2) (f) of the Odisha irrigation Rule the license fee for drawl or allocation of water was enhanced @10% per annum w.e.f 1st day of April. Accordingly, OHPC is paying @Rs. 0.011/KWh w.e.f 01.04.2017 as Licence Fee on water used for generation of electricity from all Hydro Electric Project and getting it reimbursed from GRIDCO.

OHPC in its Tariff submission had claimed Licence Fee on water used for generation of electricity from all Hydro Electric Project @1paise/ Kwh for the FY 2017-18 which was approved by Hon'ble OERC. But due to the enforcement of the above Notification, OHPC is paying water cess/tax @1.1paise/ Kwh w.e.f 01.04.2017.

Table –19:License fee for Consumption of water for generation of electricity

(Rs. in Crs)

Description	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
Differential Licence Fee on water used for generation of electricityfor FY 2017-18	0.053	0.083	0.118	0.068	0.049	0.196	0.567

Licence Fee on water							
used for generation of	0.635	1.007	1.431	0.828	0.593	2.374	6.868
electricity for FY 2018-19							

Hence, OHPC prays before the Commission for approval of total amount of Rs 7.435 Cr as Reimbursement of Licence Fee from GRIDCO for the FY 2018-19.

11. SLDC Charges

As per OERC (fees & charges of state load dispatch centre and other related matters) regulations, 2010, SLDC has to levy and collect annual charges from the users towards system operation charges and market operation charges. The Commission allowed Rs.1.44 Cr. as SLDC charges for the FY 2017-18 which is to be collected by SLDC from OHPC. Since OHPC has not received ARR, fees and charges of SLDC for FY 2018-19, OHPC has escalated previous year's fees and charges @5.72%. Accordingly, OHPC proposes Rs. 1.5223.as fees and charges payable by OHPC to SLDC for the FY 2018-19.

12. Annual Revenue Requirement & Tariff for Machhkund H.E. (Jt.) Scheme

Machhkund Hydro Electric Project is a joint scheme of Government of Andhra Pradesh and Government of Orissa with 70% and 30% shares respectively, with option of Government of Orissa to draw an additional 20% power (105 MU) at a cost of Rs. 0.08 per unit as per the interstate supplementary agreement in the year 1978 between Government of Andhra Pradesh and Government of Orissa. The proposed tariff of 78.5098 Paisa/Unit of Orissa drawl of Machhkund power for FY 2017-18 has been computed on cost reimbursement basis. The tariff proposed by OHPC is based on assumption that GRIDCO will draw power up to 50% of design energy of Machhkund equivalent to 262.50 MU.

Table-20: Projected Tariff of Machhkund H. E. (J) Scheme For FY 2018-19

Installed Capacity (MW)	120.00 MW
Odisha share as per Original Agreement (30%)	36.00 MW
Energy for sharing between Andhra Pradesh & Odisha	525.00 MU
Expected Energy Drawl by Odisha (50%)	262.50 MU
Energy Drawl of 30% of Odisha share	157.50 MU
Purchase of Power up to 20% as per Supplementary Agreement	105.00 MU
O&M Escalation factor @ 6.64% for year for 2 years	1.1372
	(Rs. in Crs)
1. O&M Exp. (Odisha share of O&M Exp. For FY 16-17)	16.6526
2. O&M Exp for FY 2018-19 with escalation of 6.64% for 2016-17 & 2017-18	18.9375
3. Power purchase cost of additional 20% above 30% Orissa Share (105MU x 0.08)	0.84
4. Total Annual Expenditure (2 +3)	19.7775
5. Tariff (Paise/Kwh)	75.34

Note: The tariff is calculated on cost reimbursement basis. Any penalty for over drawl of power by M/s GRIDCO above 50% limit shall be paid directly to APGENCO separately by GRIDCO.

13. Reimbursement of Contribution Made to ERPC

OHPC has paid Rs. 15 lakhs towards contribution to ERPC establishment fund and Rs. 1 lakh towards contribution to ERPC fund. Assuming the same claim of ERPC, OHPC has claimed Rs. 16 lakh as a pass through in the tariff for FY 2018-19 to be reimbursed from GRIDCO.

14. Reimbursement of Contribution Made to Catchment Area Treatment Plan (CATP)

In the first meeting of High Power Committee on Catchment Area Treatment Plan on 07th August 2013, Resolution was taken by Government for the treatment of catchments of the Upper Indravati Multipurpose Project & Upper Kolab Hydro-electric Project located in the districts of Kalahandi, Koraput, Nabarangpur and Raygada on watershed basis. In the 123rd meeting of Board of Directors of OHPC held on 27th September 2014 the Board has decided to reflect Rs2.411 Cr (Rs 0.402Cr for the year 2013-14 &Rs 2.009 Cr for year 2014-15) in the ARR of FY 2015-16. Further OHPC proposes to consider the institutional cost of Rs 1.599 Cr as reimbursement for the FY 2015-16 towards CATP contribution.

OHPC had claimed Rs. 2,9368 crores from GRIDCO till 28.02.2017 and the same was approved by the Commission. OHPC does not claim any further reimbursement under the head CATP for the FY 2018-19 but if any excess payment is made over approved amount of Rs 4.01Cr the same will be reimbursed in the Tariff of OHPC for FY 2019-20.

15. Income Tax

OHPC has paid Rs. 59.07 Cr. on operational income of Rs. 505.13 Cr. which is a core business. Thus OHPC prays before the Commission to allow the same to be reimbursed from GRIDCO in the Tariff of OHPC for FY 2018-19 towards income tax as per the audited accounts of FY 2016-17

Details of Reimbursement Cost:

Total reimbursement cost claimed for the FY 2018-19 is given in the table – 21below.

Table – 21:Details of Reimbursement Claim

(in Rs. Cr.)

Component of Costs	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
(a) Differential License							
fee for use of water for	0.549	0.662	0.603	0.685	0.172	2.600	5.271
generation of electricity	0.549	0.002	0.003				5.4/1
for FY 2017-18.							
(b) License fee for use of							
water for generation of	0.628	0.787	0.780	0.788	0.246	2.894	6.123
electricity for FY 2018-	0.028	0.787	0.780	0.700	0.240	2.894	0.123
19.							

(c) Differential ED on Auxiliary Consumption for FY2017-18	0.053	0.083	0.118	0.068	0.049	0.196	0.567
(d) ED on Auxiliary Consumption for FY2018-19.	0.635	1.007	1.431	0.828	0.593	2.374	6.868
(e) SLDC charges							1.5223
(f) Application fees and publication expenses							0.262
(g) ERPC charges							0.16
(h) Income Tax as per Audit Account of FY 2016-17							59.07
Total							79.8433

OHPC prays before the Commission to approve total reimbursement of RS. 79.8433 Crs. Proposed by OHPC. The above expenditure may be included in GRIDCO's ARR and hence shown as revenue requirement in OHPC filing for FY 2018-19.

16. Two-Part Tariff

As per clause 4.36 to 4.4 of the OERC (Terms and conditions for determination of Generation Tariff) Regulation 2014, the annual fixed cost of a power station shall be recovered on monthly basis through capacity charge (inclusive of incentives) and energy charge to be shared on 50:50 basis.

1) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

Capacity charge (CC) = AFC \times 0.5 \times NDM/NDY \times (PAFM/NAPAF) in Rupees.

Where, AFC= Annual Fixed Cost specified for the year in rupees

NAPAF= Normative Annual Plant Availability Factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM= Plant Availability Factor achieved during the month in percentage.

The PAFM shall be computed in accordance with the following formula:

PAFM =
$$10000 \text{ x} \sum_{i=1}^{N} DC / \{N \text{ x IC x (100-Aux)}\} \%$$

Where.

Aux = Normative auxiliary energy consumption in percentage

N = No of days in the month

- IC = Installed capacity in MW of the complete generating station
- DC_i = Declared Capacity (in ex-bus MW) for the i^{th} day of the month which the station can deliver for at least (3) hours, as certified by the nodal load dispatch centre after the day is over.
- 2) The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, during the calendar month on expower plant basis at the computed energy charge rate.
 - Total energy charge payable to the generating company for a month shall be {(Energy charge rate in Rs./ Kwh) x (Schedule energy (ex-bus)) for the month in Kwh}
- 3) Energy charge rate (ECR) in Rupees per Kwh on ex-bus plant basis for a hydro generating station shall be determined up to three decimal places based on the following formula, subject to provisions in clause(4.41) of OERC (Terms and Conditions for determination of Generation Tariff regulations) 2014.

$$ECR = AFC \times 0.5 \times 10 / \{DE \times (100 - Aux) \times 100\}$$

Where,

DE= Annual design energy specified for the hydro generating station in MWh, subject to provisions in Clause-(6) of Schedule-22 of CERC tariff regulations 2014.

Accordingly, annual capacity charges, annual energy charges and energy charge rate of different power stations of OHPC for FY 2018-19 is shown below.

Name of the power stations	Annual Fixed Cost (ARR) (Rs. in Crs)	Annual Capacity Charge (ACC) (Rs. in Crs)	Annual Energy Charge (AEC) (Rs. in Crs)	Salable design energy (MU)	Energy Charge Rate (ECR) (in p/u)
RHEP	67.832	33.916	33.916	519.75	65.254
UKHEP	49.889	24.945	24.945	823.68	30.284
ВНЕР	105.290	52.645	52.645	1171.17	44.951
ННЕР	108.453	54.226	54.226	677.16	80.079
СНЕР	28.847	14.424	14.424	485.10	29.733
UIHEP	193.589	96.795	96.795	1942.38	49.833

Table-22: Capacity charge and energy charge of OHPC power stations

17. Normative Plant Availability Factor (NAPAF)

The Commission in the Tariff order of OHPC dated 22.03.2014 vide case no. 81/2013 has approved the NAPAF of OHPC stations for the control period from 01.04.2014 to 31.03.2019 as given in the table below.

Table-23:Normative Plant Availability Factor

Power Stations	ННЕР	СНЕР	внер	RHEP	UKHEP	UIHEP
NAPAF (%)	78	75	83	75	87	88

18. Renovation and Modernization (R&M) of OHPC Power Plants

The Commission accorded in principle approval to carry out the R&M works of Unit 3 of CHEP, Chiplima, Unit 1 to 6 of BHEP, Balimela and Unit 5&6 of HHEP, Burla at an estimated cost of Rs. 96.5 Crores, Rs.325.96 Crores and Rs.664.76 Crores respectively. Although there was a delay in starting the R&M works for the reasons indicated in earlier submissions of OHPC but in the process of International Competitive Bidding the price discovered was reduced considerably as submitted in the Tariff application for the FY2017-18.

Tender for R&M of Unit 3, Chiplima was awarded to M/s Voith Hydro Private Limited, India by L1. The effective date of contract is 15.10.2015 and the activity for R&M has been commenced. Refurbishment & repair work, Dismantling activities, Discharge ring welding, concreting behind Discharge ring completed. Assembly of the Facing plate, Building of Stator winding, Accumulator, Cooling water system installation, Refurbishment and repair works of Drainage &dewatering pit and other civil works of Penstock and spiral case is in progress. LAVT, NGT, Protection panel, Excitation panels &excitation transformer, UAB, DCDB, UAT, Instrumentation & D&D System placed in respective location and Cabling work started.

As per the OERC Tariff Regulation 2014, norms OHPC should include the up to date actual expenditure incurred for R&M of CHEP as Capital work in progress (CWIP) and compute the Tariff of CHEP for FY2018-19. In view of the OERC tariff order of OHPC for the FY 2015-16 on CWIP which are unaudited, OHPC prays before the commission to give in principle approval for acknowledging and loading of the financial impact on account of nonconsideration of CWIP and pass through of the same in tariff after lapses of almost 2 years from finalization of accounts.

M/s Bharat Heavy Electrical Limited was found to be successful bidder for R&M of BHEP Balimela. Kick off meeting with M/s. BHEL was held on 08.11.2016. Site mobilization has not been commenced yet. Design, drawing submission & review is under process.

Tender for R&M of Unit 5 & 6 of HHEP, Burla was awarded to M/s Voith Hydro Private Limited, India by L1. Refurbishment works of Draft tube gates of Unit-6 &Unit 5, Dismantling of unit 6 has been completed. Dismantling of Generator and Balance of Plant equipment of Unit No.6 & Unit No.5 were started from 04.08.2016 & 01.12.2016 respectively. Dismantling of Generator and Balance of Plant Equipment of Unit 5 is

completed and Dismantling of turbine is in process. Sand blasting and 1st coat of painting partially completed. Supply of different materials is under process.

Based on the submission of OHPC regarding the contract agreement & subsequent approval of the Board of OHPC, the Commission in the Tariff Order of OHPC for FY 2017-18 had approved the revised time schedule of the individual generating units for taking up R&M U works along with reduced project cost which is furnished in the Table below.

A revised time schedule of the individual generating units along with reduced project cost are furnished below for kind approval of the Commission.

Table – 24: Revised Time scheduled alongwith Reduced Project cost of R & M works

Power	Unit	Zero Date	Tentative Date		Revised Capital
station			of Commercial	Shut down for	Cost of R&M
			Operation	R&M works	works
CHEP,	3	15.10.2015	15.06.2017	20 months	6567 Lakhs
Chiplima					
	1	05.08.2016	05.02.2019	30 months	38291 Lakhs
	2	*	05.02.2019	*	
внер,	3	05.08.2018	05.02.2020	18 months	
Balimela	4	05.08.2018	05.02.2020	18 months	
	5	05.08.2019	05.02.2021	18 months	
	6	05.08.2019	05.02.2021	18 months	
ННЕР,	<u>5</u>	25.10.2016	24.04.2018	16 months	15877 Lakhs
Burla	<u>6</u>	16.10.2015	16.02.2018	28 months	

^{*}N.B- * The Unit-2 is required to be kept under shutdown during R&M works of Unit-1 as the Surge Tank Gate for Unit No-1 & Unit No-2 is common & the Surge tank gate is required to be lowered for safety doing work. Hence, the Zero date for R&M works of Unit-2 will be intimated after finalization of site mobilization by Contractor i.e. M/s BHEL.

19. Capital Maintenance of Different Power Stations

As per the approval of the Commission, OHPC has taken up the capital maintenance of different Units of OHPC in co-ordination with SLDC & GRIDCO. The power station wise status of Capital Maintenance is as follows:

Table – 25 : Status of Approved Capital Maintenance work of OHPC

Sl.	Power Station & Unit	Zero Date	Approved	Present Status
No	under Capital	(in	Period	
	Maintenance	consultation		
		with SLDC)		
1.	Unit-2 RHEP, Rengali	Not yet	122days	To be taken up after due
		finalized		planning.
2.	Unit-2 of HHEP, Burla	22.07.2016	198days	Synchronized to Grid on
				01.07.2017 after
				completion of Capital
				Maintenance.

The Commission had also approved the Proposal of Capital Maintenance Work for Unit-IV UKHEP to be executed in FY 2017-18. The Status of this Capital Maintenance work is given in the Table below.

Table 26: Status of Approved Capital Maintenance work of OHPC as per the ARR & Tariff approval for FY 2017-18

Sl.	Power Station & Unit		Zero Date		Approved	Present Status
No	under Capital		under Capital (in		Period	
	Maintenance		consultation			
			with SLl	DC)		
1.	Unit-IV	UKHEP,	Not	yet	185days	To be taken up after due
	Baraniput		finalized			planning.

PRAYER

OHPC prays before the Commission to kindly approve the following in the ARR & Tariff Order of OHPC Power Stations for the FY 2018-19:

- 1. The ARR of Rs553.911Crs. at an Average tariff @ 98.57 p/u
- 2. The miscellaneous reimbursement of Rs.79.8433 Cr by OHPC from GRIDCO.
- 3. The tariff for energy billing to CSPDCL at Rs. 211.96 paisa/kWh considering upvalued asset of HHEP and the norms of CERC (Terms and Conditions of Tariff) Regulations, 2014
- 4. To revise the decision taken in Para 131 of Compendium of Tariff Order of OHPC for FY 2013-14 and approve a suitable mechanism for recovery of Loan Liability &Depreciation(up to 90% of project cost) within the life period of the project i.e. FY2034-35 of UIHEP.
- 5. 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 2017-18 = Rs.350.49Cr.
 - b) Accumulated interest on Normative Loan of UIHEP from 2001-02 to 2017-18 = Rs.101.85Cr.
 - c) Realization of Rs. 263.283 Crs. towards Hydrology Failure (negative fund for Secondary energy) from FY 1996-97 to FY 2016-17.
- 6. Suitable decision in allowing interest on the above recognized Regulatory Asset.
- 7. Installed capacity for computation of PAFM and SLDC charges

- 8. Revise time schedule along with capital cost for taking up R&M works
- 9. Revision of Design Energy of HHEP as 653 MU & that of CHEP as 330MU
- 10. In-principle approval for acknowledging and loading of the financial impact on account of non-consideration of CWIP and pass through of the same in tariff after lapse of almost 2 years after finalization of accounts.
- 11. Direct appropriate authorities for optimization of hydro power generation from OHPC power stations utilizing the water potential up to MDDL.
- 12. In principle approval to meet the additional financial requirement arising out of the implementation of the proposed arrear dues arising out of implementation of 7th Pay Commission to OHPC employees.
