

**ODISHA ELECTRICITY REGULATORY COMMISSION**  
**BIDYUT NIYAMAK BHAWAN**  
**PLOT NO. 4, CHUNUKOLI, SHAILASHREE VIHAR,**  
**BHUBANESWAR-751021**  
\*\*\*\*\*

**Present: Shri U. N. Behera, Chairperson**  
**Shri S. K. Parhi, Member**

**Case No. 56/2019**

OHPC Ltd. .... Petitioner

-Vrs. -

Sri Ananda Kumar Mohapatra & others ..... Respondents

**In the matter of: Application for approval of Capital Maintenance of Unit-2 and 4 of UIHEP, Unit-1 of HHEP, Burla; approval of Capital civil works and procurement of Capital spares and Implementation of ERP System of OHPC for FY 2019-20 as per Para No. 133 of the Tariff Order of OHPC for FY 2019-20.**

**For Petitioner:** Sri P P Sahu, CGM (Finance), OHPC Ltd.  
Sri G R Das, CGM, OHPC Ltd.  
Sri A K Das, Manager (Elect.), OHPC Ltd.

**For Respondent:** Sri S S Nayak, CGM (PP), GRIDCO Ltd.  
Sri R P Mohapatra

**ORDER**

**Date of hearing: 05.11.2019**

**Date of order: 11.06.2020**

The OHPC Ltd., has filed the present petition basing on the Commission's direction at para 133 of Tariff order of OHPC for FY 2019-20 wherein it was observed that "the proposal submitted by OHPC at para 130-132 need to be studied in detail and OHPC should file a separate petition with justification for approval of those projects."

2. Accordingly, OHPC has resubmitted the revised proposal of capital maintenance of generating units and procurement of capital spares of different generating stations of OHPC in this petition as detailed below:

Sl. No.	Generating Unit	Name of the Work/ Critical Spares	Tentative Period of Shut Down	Estimated Cost (in Rs)
1.	UIHEP	Capital Maintenance of Unit-II of UIHEP, Mukhiguda for replacement of underwater parts such as guide vanes along with bushes, facing plates and stationary & rotating labyrinth seal etc.	181 days	26,81,65,947/-

2.		Capital Maintenance of Unit-IV of UIHEP, Mukhiguda for Design, Manufacturing and Supply of new stator and replacement of old Stator of Unit No – 4 and & replacement of critical Spare parts along with service.	220 days	50,28,81,883/-
3.	<b>HHEP</b>	Capital maintenance of Unit I of HHEP, Burla for correction of turbine shaft journal, TGB shell and shaft seal, dismantling and reassembly of turbine and generators, testing and commissioning of units.	4 months	7,42,00,000/-
4.	<b>UKHEP</b>	Construction of 220/33 KV Sub-Station with Station Transformer of 7.5 MVA and Control Panel with accessories along with extension of existing 220 KV Bay of UKHEP Bay.	60 days	3,82,38,553/-
5.	<b>CHEP, UKHEP, RHEP, HHEP</b>	Procurement of One No. of generator transformer under capital spare for each Power Station.	50 days each	CHEP: 2,14,76,000/- UKHEP: 5,44,86,500/- RHEP: 4,57,25,000/- HHEP: 3,92,32,761/-
6.	<b>CHEP</b>	Repair & Rehabilitation of Chiplima fore bay, Spillway and Surplus escape including survey, geotechnical and geological investigations, Design, Drawing, Vetting, Tendering, Execution, Supervision, Quality Control etc. on deposit work basis.	180 days (45 days each in May/June and November/ December)	99,62,73,544/-

Hence, OHPC prays to approve capital maintenance proposal of different generating units of OHPC and procurement and replacement of one number each of Generator Transformer for CHEP, UKHEP, RHEP and HHEP as mentioned above.

3. OHPC has also proposed the following capital civil works along with implementation of ERP system as shown in the table below:

Sl.No.	Name of the work.	Amount (Rs. in Crores)
1.	Construction of 12 nos. of 'D' type qrs., at CHEP, Chiplima	4.43
2.	Construction of office building, at UIHEP, Mukhiguda	5.31
3.	Construction of 2-0 nos. of 'D' type qrs., at BHEP, Balimela	6.11
4.	Construction of multi storied office/commercial complex at OHPC Training Center, Bhubaneswar	136.03
5.	Construction of Shakti Bhawan (OHPC's shares for its office space)	80.00
6.	Construction of multi storied commercial complex on plot No.324(Pt.) Khata No.-619, Chandrasekharpur, BBSR	136.03
7.	Construction of New Officers' Club at BHEP, Balimela	0.61
8.	Implementation of ERP system in OHPC	48.96

4. The respondent GRIDCO has observed that OHPC has claimed a total amount of Rs.621.552 crs. to be capitalized in the project cost of different hydro power stations as detailed below:
- Capital maintenance Rs.84.52 crs.
  - Capital civil works Rs.471.97 crs.
  - Capital spares Rs.16.09 crs.
  - Miscellaneous Rs.48.96 crs.
5. GRIDCO has further submitted that at present the following units of OHPC stations are under R&M work.

Power Stations	Units	Zero Date	Tentative Date of Commercial Operation	Total duration of shutdown for R & M works
CHEP, Chiplima	3	15.10.2015	15.06.2017	20 months
BHEP Balimela	1	05.08.2016	05.02.2019	30 months
	2	21.11.2017	20.05.2019	18 months
	3	05.08.2018	05.02.2020	30 months
	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
HHEP, Burla	5	25.10.2016	24.04.2018	16 months
	6	16.10.2015	16.02.2018	28 months

GRIDCO further submitted that till date none of the above units have been brought back to operation although OHPC have realized its full Capacity Charge for the Units under R&M for approved period of shut down by the Commission. The present status of R & M work as submitted by OHPC in petition No.69/2018 is as follows:

Power Stations	Units	Zero Date	Approved period of shutdown	Scheduled date of completion	Tentative date of commercial operation	Remarks
CHEP, Chiplima	3	15.10.2015	20 months	14.06.2017	30.09.2019	Will be synchronized shortly
HHEP, Burla	5	25.10.2016	21 months	25.07.2018	23.06.2020	Project delayed
	6	16.10.2015	18 months	15.04.2017	01.04.2020	Project delayed
BHEP, Balimela	1	05.08.2016	30 months	05.02.2019	31.12.2019	Project delayed
	2	21.11.2017	18 months	20.05.2019	31.12.2019	Project delayed
	3	01.01.2020 (Tentative)	18 months	30.06.2021	30.06.2021	R&M not started
	4	01.01.2020 (Tentative)	18 months	30.06.2021	30.06.2021	R&M not started
	5	01.01.2021 (Tentative)	18 months	30.06.2022	30.06.2022	R&M not started
	6	01.01.2021 (Tentative)	18 months	30.06.2022	30.06.2022	R&M not started

6. It is observed from the above table that the state is deprived of availing cheap hydro power of around 208 MW from CHEP, HHEP and BHEP since 2015-16 till date. Again in the present petition, OHPC prays for capital maintenance of one number of

generating unit of 49.5 MW capacity in HHEP and two numbers of generating units of 300 MW capacity of UIHEP which comes together to around 350 MW. Since the reservoir level of various hydro stations are in comfortable position OHPC may be directed to bring back the Units under R&M into operation for greater interest of the state and GRIDCO is of the view that capital maintenance of HHEP and unit 2 & 4 of UIHEP may be allowed by the Commission after the Units under R&M are brought back to operation.

7. GRIDCO further submitted that as per OERC Generation Tariff Regulations, 2014, clause 3.4 “the Capital Expenditure incurred or projected to be incurred under following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check”:

*x            x            x            x            x*

*(d) Any additional works/services which have become necessary for efficient and successful operation of a generating station but not included in the original capital cost.*

*(e) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation.*

8. As per agreed clause-4 of PPA executed between GRIDCO & OHPC regarding Adjustments on Renovation & Additional Capital Expenditure the following has been mentioned:

*“4.1.1 The Approved Capital Cost shall be :*

*(a) Increased by the cost incurred by OHPC in OHPC’s complying with its obligations pursuant to and in accordance with clause 2.1(e) & also any additional capital expenditure on case to case basis duly approved by OERC can only be passed through tariff.*

*4.3 Any expenditure for maintenance, major overhaul of equipment to operate & maintain the Power Station during the term of agreement shall be met out of O & M and Insurance charges included in the tariff.*

*4.4 Any expenditure on replacement of old assets shall be considered for additional capitalization after writing off the gross value of the original assets from the original capital cost.”*

9. In OERC Generation Tariff Regulation 2014 the definition of Operation & Maintenance Expenses (O&M expenses) stipulates that:

*“O&M expenses means the expenditure incurred on operation & maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, maintenance, spares, consumables, insurance and overheads but excludes fuel expenses & water charges.”*

From the above stipulations, it may be observed that it is the jurisdiction of the Commission to increase the project cost/capital cost of a Generating company by allowing additional capitalization in the process of determination of tariff.

10. GRIDCO is of the view that capital civil work claim of OHPC amounting to Rs.510.54 crs. may be met from miscellaneous earnings of OHPC otherwise there will be huge burden on the consumers of the state. Further, the proposal for civil constructions which are not incidental to the hydro generation may not be allowed to be passed on into tariff. There will be an average increase of 24 paise per unit in the 1<sup>st</sup> year tariff due to the additional capitalization as proposed by OHPC. Hence, GRIDCO has submitted as follows:
  - (i) to allow and approve the claim of OHPC towards capital maintenance of various units, implementation of ERP system in OHPC, procurement of capital spares as well as capital civil works through prudence check and to decide whether the claimed items and amount will be capitalized or the expenditure will be shown under O&M expenses as per prevailing norms and regulations.
  - (ii) to ensure that the units under R&M as well as capital maintenance should be brought back into operation within the approved period of shut down.
  - (iii) to pass on the impact of tariff due to allowance of such additional capitalization as well as O&M expenses to the BSP tariff for greater interest of general consumer of the state.
11. Sri R P Mohapatra has submitted that OHPC has not carried out the capital maintenance of the generating units of different hydro power stations for a very long period and is proposing such capital maintenance after serious damage and break down of the units. Further, replacement of complete stator or all the underwater components of the turbine cannot be treated as part of capital maintenance. Therefore, OHPC may be directed to submit the following information before its proposal is considered.
  - (i) Extracts from the Manufacturer's Instruction Manual regarding the interval period and the maintenance works to be carried out for Capital Maintenance of the generating units in operation in the different power stations of OHPC.
  - (ii) The period when such Capital Maintenance was carried out by OHPC as per the instructions of the Manufacturers.

- (iii) The reasons as to why the Capital Maintenance as per Manufacturer's guidelines was not carried out, in spite of specific orders of the Commission.

Further, the Commission had accorded in principle approval to carry out the renovation and modernization work of Unit-3 of CHEP, Chiplima, Unit 1-6 of BHEP, Balimela and Unit 5& 6 of HHEP, Burla in its order dated 31.3.2014 in case Nos. 62/2013, 67/2013 and 68/2013. All the works projected under capital maintenance of different power stations should rightly come under R&M activities. Additional works for life extension should also be included in the R&M activities. The impact on tariff is to be determined based on the life extension of the project. OHPC may submit as to why R&M proposal for the units which have already operated for long years have not been submitted instead is being submitted for approval under capital maintenance. OHPC has submitted a proposal for installation of a 7.5 MVA 220/33 KV transformer for general auxiliary supply of UKHEP after a period of 31 years since the 1<sup>st</sup> unit was commissioned on 15.3.1988. This should be included under R&M scheme. OHPC while submitting its proposal for procurement of 1 No. of Generator Transformer for stations like RHEP, CHEP, UKHEP and HHEP has not submitted the condition of the existing transformers. Residual life assessment can be carried out through specialized agencies like CPRI to determine the condition of the existing transformer. The construction of office building, staff quarters and officers club are to be constructed as a part of additional capitalization or R&M instead of capital maintenance. Further, the construction of Shakti Bhawan, multistoried commercial complex at OHPC Training Centre, Bhubaneswar and Chandrasekharapur may be considered as "other activities" and should not come under capital investment. He prays the Commission to direct OHPC to submit the clarifications to the points as summarized above.

12. OHPC, in compliance to the above objections submitted that the preventive maintenance like annual maintenance, quarterly maintenance & monthly maintenance have been carried out regularly as per the guidelines of OERC for smooth operation of generating units. Further, when the situation of capital maintenance had arisen, the same had also been taken up under Annual Maintenance with prior planning. OHPC is doing condition monitoring and testing periodically as per the guidelines of OEM. The Capital Maintenance regarding replacement of Stator of Unit No.4 of UIHEP is carried out in a planned manner on the instruction of the OEM when the machine is in operating condition & R & M of the unit is not due. As per the prevailing Regulation, the Renovation and Modernization of a Unit is usually considered at the fag end of

useful life. However, OHPC is carrying out need based R&M of its Units after due approval of the Commission.

OHPC has taken up the R&M works of its generating units in a phased manner starting from the inception of OHPC, hence the objection of Sri Mahapatra is not correct. Further, the expenditure made by OHPC on account of Capital Maintenance is considered as additional capitalisation as per the provisions made by the OERC in the Generation Tariff Regulations, 2014. The audited expenditure towards the Capital Maintenance is segregated into a Debt: Equity ratio of 70:30. Debt is treated as normative loan as OHPC invest that from its own fund to provide necessary relief to the consumers. The repayment period is considered as 5 to 10 years depending upon the amount of capitalisation. The interest on loan, RoE & interest on working capital is calculated as per OERC Generation tariff Regulation.

13. As regards to the proposal for installation of 7.5 MVA, 220/33 KV transformer at Upper Kolab Power Station, OHPC submitted that due to non-availability of own 220/33 KV transformer, the auxiliary system is getting 33 KV supply from Jayanagar substation of SOUTHCO. Due to break down of the 33 KV feeders, the station common power supply is getting interrupted which in turn is affecting the reliable operation of the power station. It is standard technical practice to avail reliable and consistent station as well as start-up power supply from the power house own substation. Accordingly, it is proposed for construction of 220/33 KV sub-station with provision of a station transformer of 7.5 MVA capacity with control panel and accessories alongwith extension of existing 220 KV bay for UKHEP with an sanctioned estimate of Rs.6,94,30,543/- only. Out of this Rs. 311.92 lakh has already been sanctioned by PSDF (Power System Development Fund) as grant, which is not having any tariff impact. Since the proposal is partly funded by PSDF, it will have less tariff impact. Further, the proposal may not be considered under R&M scheme since there is no proposal of R&M of Generating Units of UKHEP at present.
14. As regards to procurement of Generation transformer, OHPC submitted that most of the Generator Transformers have outlived their useful life and no spare GTs are available in above units of OHPC. Hence, OHPC Board in its 145<sup>th</sup> meeting advised to make provision for procurement of one Generator Transformer (GT) for each power station as back up arrangement since a considerable time (more than a year) may be required for procurement of a new GT in case of breakdown. As per the recent experience, CHEP, Chiplima is not being able to procure the spare GT as the

manufacturers are not showing any interest for a project specific design of GT. The main purpose of the proposal is to increase the reliability of the power generation. As proposed by the objector, OHPC shall carry out the RLA study of the GTs when such situation arises. OHPC justifying the requirement of one no. of new spare GT for each power station, submitted that after procurement/installation of the new GTs, the replaced old GTs shall be kept as backup.

15. Further, the office building & staff quarter of different units of OHPC are in dilapidated condition and need immediate attention. In addition to that OHPC does not possess its own Corporate Office building till date and is functioning in the rental premises of Odisha State Police Housing and Welfare Corporation building, Vani Vihar. The rented building is also lacking adequate space for proper official functioning of employees. Since, many such Government of Odisha undertakings does not have their own office building, Department of Energy, Government of Odisha decided to construct an Energy Complex in the premises of OPTCL where Department of Energy, GRIDCO, OPTCL, OHPC, OPGC and the subsidiaries, joint venture companies of OHPC shall be the occupants. Further, as per standard practice a well-equipped Training Center for imparting value based training to its employees is required for OHPC. Also as per the MoU signed with Government, OHPC has to impart 5000 training-days during a year. The present training center at Chandaka Industrial Area is very small and in damaged condition. Training center lacks office area, hostel for trainers and trainees, dining area, service floor etc. OHPC is planning to construct a multi storied office complex in place of present training center.
16. OHPC in response to objections raised by GRIDCO submitted that OHPC had not earlier taken up any complete replacement programme of its old generating units by new generator & turbine sets. This involves reverse engineering and a lot of professionalism. Further, due to various site constraints the scheduled date of commissioning is delayed. However, OHPC has taken care to keep the IDC (interest during construction) under control by phasing out the expenditure in appropriate time. The R&M work of Unit No.3 of CHEP, Chiplima is near completion and is expected to be synchronized shortly. Renovation and modernization is a continuous process and OHPC has proposed to take R&M work of its machines in a phased manner to increase the reliability in operation. Since, R&M of unit-3 of CHEP, Unit-5 & 6 of HHEP and Unit-1 to Unit-6 of BHEP were due and these units were remaining under forced outage frequently, OERC had approved the R&M proposals of these units. In spite of



the above units under R&M, OHPC has managed to generate more than 6000 MU of cheap hydro generation in the FY 2018-19 against the design generation of 5676 MU and provided necessary relief to the consumers. Further, during the FY 2019-20 OHPC has also generated almost 4000 MU upto October, 2019. However, GRIDCO in coordination with DoWR & SLDC should have proper planning to maximize generation by proper utilization of available water in the Reservoirs of OHPC with the machine available at different units. Efforts also should be made by GRIDCO to utilize the water in the reservoir upto MDDL at the end of each water year. In addition to that, the capital works proposed after due approval may be initiated but its capitalisation will be in different years depending upon the period of completion, therefore the net impact may be within 10 to 15 paise and after 3 to 4 years the tariff impact will be reduced through depreciation.

17. The present status of R&M works and Generator Transformers are as follows :

Power station	Unit	Zero date	Approved period of shutdown by OERC	Scheduled date of completion	Tentative date of commercial operation
CHEP, Chiplima	3	15.10.2015	20 months	14.06.2017	31.01.2020
HHEP, Burla	5	25.10.2016	21 months	25.07.2018	19.06.2020
	6	16.10.2015	18 months	15.04.2017	28.03.2020
BHEP Balimela	1	05.08.2016	30 months	04.02.2019	24.06.2020
	2	21.11.2017	18 months	20.05.2019	30.04.2020

#### Status of Generator Transformers

Name of the Power Station	Generating Unit No.	Year of commissioning of the GT	Period of service rendered by the GT	Particular GT proposed for replacement at first.
HHEP, Burla	Unit-1	1998	21 years	
	Unit-2	1998	21 years	Unit-2
	Unit-3	2005	14 years	
	Unit-4	2005	14 years	
	Unit-5	Will be replaced in R&M		
	Unit-6	Will be replaced in R&M		
	Unit-7	2014	5 years	
CHEP, Chiplima	Unit-1	1957	62	Unit-1
	Unit-2	1957	62	
	Unit-3	Will be replaced in R&M		
RHEP, Rengali	Unit-1	1985	34	Unit-1
	Unit-2	1986	33	
	Unit-3	1989	30	
	Unit-4	1990	29	
	Unit-5	1992	27	
UKHEP, Baraniput	Unit-1	1988	31	Unit-1
	Unit-2	1998	31	
	Unit-3	1990	29	
	Unit-4	1993	26	

18. Sri R. P. Mohapatra has submitted his observations to the compliance of OHPC and prayed the Commission to direct OHPC.
- a. To submit R&M schemes, in place of capital maintenance, with due justification.
  - b. To submit data on the RLA of the Generator Transformers and include the same for procurement, if required, along with the R&M scheme of the generating units.
  - c. Direct OHPC to submit reasons for unusual delay in completion of the “Capital Maintenance” & “R & M” Works already approved by the Commission and
  - d. Reject the submission regarding commercial complexes as it comes under “other activities” of the petitioner, and the investment of 80.00 cr. in Shakti Bhawan, if found remunerative, be recovered in 50 years.
  - e. Reject the submission to implement ERP at a huge initial and recurring cost.
19. In compliance to queries raised during the hearing on 05.11.2019, OHPC submitted that the RLA studies of the existing GTs are not done. But, the maintenance and condition monitoring tests of the existing GTs are done at site as per the prescribed maintenance schedule and accordingly OHPC has taken the required corrective measures. During the proposal for Renovation & Modernisation of old Units, the RLA study of GTs are done along with the complete Generating units. Further, OHPC submitted that a detailed revised proposal for the proposed Training Complex at Chandaka and a fresh proposal for construction of staff quarters along with recreational and other essential facilities will be submitted after due approval of their Board for consideration by the Commission. As regards to investment in “Shakti Bhawan”, OHPC submitted that the investment has been made as per the direction of Department of Energy, Government of Odisha since their Corporate Office is functioning in a rented building and the intention of the Government for construction of Energy Complex is to house Department of Energy, GRIDCO, OPTCL, OHPC, OPGC and subsidiaries, joint venture companies of OHPC etc. in one building. Further, the space in the existing rented building is inadequate to accommodate various Departments and their employees. Since, OHPC has invested in this project with an intention to have an own asset for Corporate Office, hence no cost benefit analysis has been done and an amount of Rs.20 crore has been released for this purpose and the construction of the building is in progress.

20. We heard the parties and perused the case record. Let us now examine the provision in PPA between OHPC and GRIDCO regarding renovation and modernization and incidental capitalization. As per agreed clause-4 of PPA executed between GRIDCO & OHPC Adjustments on Renovation & Additional Capital Expenditure shall be guided as follows:

*4.1.1 The Approved Capital Cost shall be:*

- (a) *Increased by the cost incurred by OHPC in OHPC's complying with its obligations pursuant to and in accordance with clause 2.1(e) & also any additional capital expenditure on case to case basis duly approved by OERC can only be passed through tariff.*
- 4.3 *Any expenditure for maintenance, major overhaul of equipment to operate & maintain the Power Station during the term of agreement shall be met out of O & M and Insurance charges included in the tariff.*
- 4.4 *Any expenditure on replacement of old assets shall be considered for additional capitalization after writing off the gross value of the original assets from the original capital cost.*

Similarly, as per Generation Regulation, 2014, where the generating company makes an application for approval of its proposal for renovation and modernization, the approval shall be granted after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

21. From conjoint reading of the above provisions, we find that additional capitalization can be permitted for renovation and modernization work after prudence check by the Commission. OHPC is to take up the capital maintenance of generating units as per the operating manual/manufactures guidelines since the units are in operation for a very long period. The following units are approved to be taken up under capital maintenance as proposed by OHPC. This will extend the life of the generating units.

Sl No.	Generating Unit	Name of the Work/ Critical Spares	Tentative Period of Shut Down	Estimated Cost (Rs. In Cr.)
1.	UIHEP	Capital Maintenance of Unit-II of UIHEP, Mukhiguda for replacement of underwater parts such as guide vanes along with bushes, facing plates and stationary & rotating labyrinth seal etc.	181 days	26,81,65,947/-

2.		Capital Maintenance of Unit-IV of UIHEP, Mukhiguda for Design, Manufacturing and Supply of new stator and replacement of old Stator of Unit No – 4 and & replacement of critical Spare parts along with service.	220 days	50,28,81,883/-
3.	<b>HHEP</b>	Capital maintenance of Unit I of HHEP, Burla for correction of turbine shaft journal, TGB shell and shaft seal, dismantling and reassembly of turbine and generators, testing and commissioning of units.	4 months	7,42,00,000/-
4.	<b>UKHEP</b>	Construction of 220/33 KV Sub-Station with Station Transformer of 7.5 MVA and Control Panel with accessories along with extension of existing 220 KV Bay of UKHEP Bay.	60 days	3,82,38,553/-
5.	<b>CHEP, UKHEP, RHEP, HHEP</b>	Procurement of One No. of generator transformer under capital spare for each Power Station.	50 days each	CHEP: 2,14,76,000/- UKHEP: 5,44,86,500/- RHEP: 4,57,25,000/- HHEP: 3,92,32,761/-
6.	<b>CHEP</b>	Repair & Rehabilitation of Chiplima fore bay, Spillway and Surplus escape including survey, geotechnical and geological investigations, Design, Drawing, Vetting, Tendering, Execution, Supervision, Quality Control etc. on deposit work basis.	180 days (45 days each in May/June and November/ December)	99,62,73,544/-

22. The zero date for undertaking capital maintenance work shall be as per the date in consultation with SLDC. However, OHPC considering the exigency of work has already placed orders on M/s. G.E. Power India Ltd., Vadodara vide work order no.2816 dt.10.05.2019 for capital maintenance of Unit-I of HHEP, Burla with zero date of 10.05.2019 and we accept the same. However, the capacity of generating units under renovation and modernization shall not be considered in installed capacity while computing the plant availability, the capacity of generating units under capital maintenance requiring maintenance period of more than 45 days shall be deducted from installed capacity after due approval of OERC. However, the capital maintenance of the generating units shall not be taken during rainy season where there is possibility of spillage of water from the reservoirs.
23. The Commission after due scrutiny of the proposal for construction of quarters at CHEP, Chiplima and BHEP, Balimela, office building at UIHEP, new officers club at BHEP, Balimela agrees to the proposal of OHPC and hereby approves the following civil works of OHPC along with the investment on account of construction of Shakti

Bhawan. However, OHPC has not justified huge expenditure for implementation of ERP which they may do during the ensuing tariff hearing. Therefore, we are not approving the ERP implementation proposal now.

<b>Sl. No.</b>	<b>Name of the work.</b>	<b>Amount (Rs. in Crores)</b>
1.	Construction of 12 nos. of 'D' type qrs., at CHEP, Chiplima	4.43
2.	Construction of office building, at UIHEP, Mukhiguda	5.31
3.	Construction of 2-0 nos. of 'D' type qrs., at BHEP, Balimela	6.12
4.	Construction of Shakti Bhawan (OHPC's shares for its office space)	80.00
5.	Construction of New Officers' Club at BHEP, Balimela	0.61

The above work shall be carried out by normal investment procedure of OHPC as per the Regulation. The repayment period of loan is to be considered as 10 years. The investment shall be made on the principle of debt equity ratio of 70:30. The interest on loan, RoE & interest on working capital is to be calculated as per OERC Generation tariff Regulation/PPA provision. The construction of 220/33 kV substation at UKHEP shall be met from PSDF as grant partially as suggested by OHPC.

24. In reply to the Commissions query regarding construction of multi storied office/commercial complexes at (i) OHPC Training Centre, Bhubaneswar and (ii) Plot No.324 (Pt.) Khata No.-619, Chandrasekharapur, Bhubaneswar, OHPC submitted that they are planning to bring fresh proposals for (i) construction of training centre with R&D facilities and (ii) staff quarters along with recreational & other essential facilities for the employees of OHPC. In this regard, revised proposals will be submitted before the Commission in due course of time after approval of OHPC Board. Therefore, the Commission do not consider the above proposal of OHPC at present.
25. With the above observation the case is disposed of.

Sd/-  
(S. K. Parhi)  
Member

Sd/-  
(U. N. Behera)  
Chairperson