CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 229/GT/2014

Coram
Shri Gireesh B. Pradhan, Chairperson
Shri A. S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Order: 22.9.2016

In the matter of

Approval of generation tariff of Nimoo Bazgo Hydroelectric Project (45 MW) for the period from 1.4.2014 to 31.3.2019

AND

NHPC Ltd,
NHPC Office Complex, Sector 33,
Faridabad – 121003 ……Petitioner

Vs

The Principal Secretary to Govt. of J&K,
Power Development Department,
Civil Secretariat,
Srinagar, J&K …..Respondent

Parties Present:

Shri A.K. Pandey, NHPC
Shri Piyush Kumar, NHPC
Shri Naresh Bansal, NHPC
Shri Jitendra Kumar Jha, NHPC

ORDER

This petition has been filed by the petitioner, NHPC, for determination of tariff of Nimoo Bazgo Hydroelectric Project (3 x 15 MW) (hereinafter referred to as "the generating station") for the period 2014-19, based on the Central Electricity

Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The generating station with a total capacity of 45 MW comprises of 3 units of 15 MW each and the said units were declared under commercial operation on 10.10.2013. The generating station situated in the State of J&K has been designed as a purely run of the river scheme with diurnal pondage to provide peaking for 4 hours (except during winter season). The project involves the construction of 57 m high concrete gravity dam and surface PH at dam toe. The project would generate 239 million units in a 90% dependable year. Power Development Department, Govt. of Jammu Kashmir is the sole beneficiary of the project. The petitioner has entered into a Power Purchase Agreement (PPA) with the Government of J&K on 26.10.2005 for supply of entire power from the project. Subsequently, the Ministry of Power, Govt. of India vide letter dated 8.4.2011 had made the following allocations from this project to the State of J&K as under:

	% share	Equivalent MW
Allocation to state of J&K	72	32.40
Unallocated share	15	6.75
Home state share	12	5.40
Free power to J&K towards local area development	1	0.45

3. The unallocated share of 15% power is also allocated to the State of J&K during winter season. The State Government of J&K will provide matching 1% power from its share of 12% free power, to the corpus of the Local Area Development Fund. Further, as per allocation letter 100 units of electricity per month is to be provided by the

petitioner to each family affected by the project for a period of 10 years from the date of commissioning of the project.

4. The Commission vide order dated 13.10.2015 in Petition No. 89/GT/2013 approved the tariff for the generating station for the period from 10.10.2013 to 31.3.2014 and had allowed the Fixed Charges as under:

(₹ in lakh)

10.10.2013 to 31.3.2014	
Return on Equity	2860.12
Interest on Loan	2274.64
Depreciation	2272.49
Interest on Working Capital	216.36
O & M Expenses	939.31
Total Fixed Charges	**8562.92**

5. Before proceeding with the determination of tariff for the period 2014-19, we notice that the Commission in para 55 of the order dated 13.10.2015 in Petition No. 89/GT/2013 had considered the capital cost of ₹100233.00 lakh (the DIA recommended completion cost) in the absence of approved Revised Cost Estimate (RCE) by the Ministry of Power, Govt. of India, for the purpose of calculating the O&M expenses for the period from 10.10.2013 to 31.3.2014. However, in para 56 of the said order dated 13.10.2015, the Commission had observed that the O&M expenses allowed for the said period was subject to revision based on the approval of RCE by the Central Government and the actual capital cost as on the cut-off date of the generating station. Considering the fact that the petitioner has submitted the RCE approved by the MoP, GOI, we are inclined to revise the O&M expenses and consequently the fixed charges for the period from 10.10.2013 to 31.3.2014 allowed

vide order dated 13.10.2015. We do so accordingly in the relevant paragraph of this order.

6. The petitioner vide affidavit dated 5.8.2014 has prayed for determination of annual fixed charges of the generating station for the period 2014-19 in accordance with the provisions of the 2014 Tariff Regulations. Accordingly, the annual fixed charges claimed by the petitioner for the period 2014-19 are as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	5020.05	5237.29	5348.46	5383.54	5386.28
Interest on Loan	5134.46	4921.08	4533.19	4067.83	3573.90
Return on Equity	6318.14	6591.56	6731.47	6775.62	6779.07
Interest on Working Capital	503.69	518.34	524.01	524.53	523.33
O & M Expenses	2254.15	2403.83	2563.44	2733.65	2915.17
Total	**19230.51**	**19672.10**	**19700.57**	**19485.17**	**19177.74**

7. In response to the directions of the Commission the petitioner has submitted the additional information vide affidavit dated 27.4.2016 and has served copies of the same on the respondent. No reply has been filed by the respondent. Accordingly, the claims of the petitioner for the period 2014-19 are considered and allowed on prudence check, as detailed in the subsequent paragraphs.

Capital Cost

8. Clause (1) of Regulation 9 of the 2014 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects. Clause (3) of Regulation 9 provides as under:

"9(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) xxxx

(c) xxxx"

9. The Commission in its order dated 13.10.2015 in Petition No. 89/GT/2013 had considered the opening actual cash expenditure of ₹94602.56 lakh as on COD (10.10.2013), excluding un-discharged liabilities is allowed for the purpose of tariff. The Commission vide ROP of the hearing dated 10.3.2016 had directed the petitioner to submit on affidavit, the Status of approval of Revised Cost Estimate (RCE) by the MOP, GOI and the petitioner vide affidavit dated 27.4.2016 has submitted the letter dated 30.11.2015 of the MOP, GOI wherein the RCE of the Project has been approved for ₹985.15 crore including IDC & FC of ₹48.37 crore at completion cost. However, it is observed that the closing capital cost as on 31.3.2014 considered by the Commission in order dated 13.10.2015 is ₹98102.08 lakh. Accordingly, in terms of the regulations, the amount of ₹98102.08 lakh has been considered as opening capital cost as on 1.4.2014 for the purpose of determination of tariff of the generating station for the period 2014-19.

Projected Additional capital expenditure for 2014-19

10. Clause (3) of Regulation 7 of the 2014 Tariff Regulations provides that the application for determination of tariff shall be based on admitted capital cost including any additional capital expenditure already admitted upto 31.3.2014 (either

based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2014-15 to 2018-19.

11. Regulation 14 of the 2014 Tariff Regulations provides as under:

"14 (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Un-discharged liabilities recognized to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(v) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and

(vi) Change in law or compliance of any existing law

Provided that the details of works asset wise/work wise included in the original 48 scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

14(2) xxxxxx

14.(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;

(ii) Change in law or compliance of any existing law;

(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;

(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) 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) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and

(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation."

12. The additional capital expenditure (on cash basis) as claimed by the petitioner in Petition No. 89/GT/2013 for the period from 10.10.2013 to 31.3.2014 was

allowed by the Commission in order dated 13.10.2015 with the following observations.

> *"41. It is noticed that the amounts claimed above has been certified by Statutory Auditor. It is also noticed from Form-9 that the assets included are within the original scope of works and within the RCE. Accordingly, the additional capital expenditure claimed in respect of the assets within the original scope of work have been considered and allowed under Regulation 9(1)(ii) of the 2009 Tariff Regulations (works deferred for execution) and accordingly included in the capital cost of the generating station for the purpose of tariff. Further, the reduction of de-capitalized amounts corresponding to assets becoming obsolete, the deduction of un-discharged liabilities in additions to arrive at the additions on cash basis, and the addition of liabilities discharged are considered and allowed in terms of the proviso to Regulation 7(1)(c)and Regulation 9(1)(i) respectively. Accordingly, the additional capital expenditure for ₹3499.52 lakh has been allowed for the purpose of tariff"*

13. The petitioner vide affidavit dated 5.8.2014 had claimed the total projected additional capital expenditure of ₹6114.27 lakh for the period 2014-19. However, the petitioner vide affidavit dated 27.4.2016 has revised the total claim for projected additional capital expenditure as ₹5660.27 lakh for 2014-19. Accordingly, the year-wise breakup of the projected additional capital expenditure claimed by the petitioner for the period 2014-19 is as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Works deferred for execution Regulation 14(1)(ii)	877.21	661.35	827.68	530.00	0.00
Procurement of initial capital spares within the original scope of work Regulation 14(1)(iii)	58.42	421.28	1019.45	0.00	0.00
Works beyond original scope of work - Regulation 14(3)(viii)	34.26	39.32	891.50	300.00	0.00
Total Projected Additional Capital Expenditure	**969.89**	**1121.96**	**2738.63**	**830.00**	**0.00**

14. The COD of the generating stations is 10.10.2013 and the cut-off date of the generating station in terms of Regulation 3(11) of the 2009 Tariff Regulations is

31.3.2016. However, the petitioner vide affidavit dated 27.4.2016 has prayed for extension of cut-off date of the generating station for a period of two years i.e till 31.3.2018 for the following reasons:

(a) The power station is located at very high altitude (approx. 3100 meter) where weather remains at sub-zero temperature for 6-7 months in a year. The temperature goes up to – 30° C in winter months. During this period, the execution of civil work gets affected and setting of cement is also technically not feasible.

(b) The approach road to Leh and Kargil area remains closed for almost six months in a year. Hence, transportation of material from outside valet is also not feasible.

(c) Due to adverse condition, the availability of efficient contractor and skilled manpower are also very poor.

15. Accordingly, the petitioner has submitted that the project work within the original scope of work envisaged during the years 2014-15 and 2015-16 could not be completed in time and hence the cut-off date of the project is required to be extended for a period of two years (upto 31.3.2018).

16. We have examined the matter. As stated, the COD of the generating station is 10.10.2013 and in terms of Regulation 3(11) of the 2009 Tariff Regulations, the cut-off date of the generating station is 31.3.2016. However, considering the difficulties being encountered by the petitioner during project execution i.e difficult terrain, extreme weather conditions including sub-zero temperatures for 6-7 months in a year, closure of approach road to the area in which project is located for almost six months in a year leading to stoppage of transportation of necessary material &

equipment and non-availability of efficient contractors and skilled labour, we are of the considered view that the prayer of the petitioner for extension of the cut-off date by two years is justified. Accordingly, the prayer of the petitioner for extension of cut-off date of the generating station from 31.3.2016 to 31.3.2018 is accepted and the claim of the petitioner for additional capital expenditure shall be considered in terms of the provisions under Regulation 14(1) and under Regulation 14(3) of the 2014 Tariff Regulations. However, this extension of cut-off date shall not be deemed as precedence by the generators as the Commission may consider such prayer of extension of cut-off date on case to case basis after prudence of the reasons for seeking such extension. Accordingly, based on the submissions of the petitioner and the documents available on record, the claims of the petitioner for the period 2014-19 has been considered and allowed on prudence check, after reduction of the gross value of old assets, wherever necessary, as detailed in the subsequent paragraphs.

Works deferred for execution-Regulation 14(1)(ii)

17. The petitioner has claimed projected additional capital expenditure of ₹2896.24 lakh in respect of completion of deferred works within the original scope of work for the period from 1.4.2014 to 31.3.2018. i.e up to the cut-off date. Since these are deferred works within the original scope of work which are required to be completed by 31.3.2018 (extended cut-off date), the projected additional capital expenditure of ₹2896.24 lakh for 2014-18 is allowed under Regulation 14 (1) (ii) of the 2014 Tariff Regulations. It is noticed that the capital cost for the purpose of tariff

after including the said additional capital expenditure is within the completion cost of ₹105282.63 lakh.

<u>Procurement of initial capital spares within the original scope of work</u>

18. The petitioner has claimed initial spares amounting to ₹1499.15 lakh as part of the projected additional capital expenditure upto the cut-off date (31.3.2018). It is noticed from the CEA letter dated 23.5.2014 on the "Project cost at completion level", that while examining the completion cost of the project, the CEA has not considered the expenditure on procurement of initial spares and had observed that 'the additional initial spares have not been considered essential as the normal requirement of initial spares have already been included in the respective equipments. Since, the completion cost as allowed by the CEA/MOP includes the expenditure towards normal requirement of initial spares, we are not inclined to allow the claim of the petitioner for projected additional capital expenditure of ₹1499.15 lakh under this head. However, in case the actual cost of initial spares included in the equipment's cost (as stated above) is lesser than the ceiling limit of 1.5% specified under Regulation 8 of the 2009 Tariff Regulations, the petitioner will be at liberty to claim the same at the time of truing-up of tariff of the generating station with proper justification and the same will be considered in accordance with law.

<u>Works beyond the original scope of work-Regulation 14(3)(viii)</u>

20. The petitioner has claimed additional capital expenditure of ₹1265.08 lakh in respect of works/assets which are not within the original scope of work during the period 2014-19. These assets/works includes the purchase of Mini Truck, Supply,

Installation, Testing & Commissioning of Electrical Heating Panels for Newly Constructed Executive Field Hostels 1, 2 & 3, Non-executive Field Hostel, Officer club, Hospital, Old VIP Guest House, Dam Control Room, Switchyard rooms, Leh Guest House & Security Huts for space heating arrangement, Wooden Flooring of Non Executive and executive Field Hostels, Construction of Helipad, Stone Masonary in Front of power house, etc. The asset-wise and year-wise admissibility of the claim is discussed as under:

(₹ in lakh)

Sl. No.	Assets/ Works	Amount Claimed	Justification submitted by the petitioner	Remarks on admissibility	Amount Allowed
	2014-15				
1	Mini Truck-Tata-407	6.33	At present one no. Tata-407 mini truck of 2005 model is available at Site. This mini truck has already covered more than 2 lac km and is not functioning properly in this harsh climate. As per norms, after running more than 1.5 lac km, mini truck can be replaced with a new one.	The expenditure towards the replacement of asset **is allowed** as the asset is considered necessary for efficient operation of the generating station. The de-capitalized value of ₹0.46 lakh as submitted by the petitioner has been considered.	**5.87** (6.33-0.46)
2	Supply, Installation, Testing & Commissioning of Electrical Heating Panels for Newly Constructed Executive Field Hostels 1, 2 & 3, Non Executive Field Hostel,	27.93	During winter season from period November to April the temperature remain in the range of minus i.e. from -10 degree to -40 degree Celsius. At present this heating system is	Expenditure on heating panels in various buildings at project is allowed under Regulation 14(3) (viii) as the asset is necessary for efficient and successful operation of the plant	27.93

	Officer club, Hospital, Old VIP Guest House, Dam Control Room, Switchyard rooms, Leh Guest House & Security Huts for space heating arrangement.		not installed in these buildings except in the rooms of Executive field hostel #1. Due to extreme winter conditions in this region these heating panel are required to be installed so the employees can stay & work in this power station comfortably.	considering the sub-zero temperatures for almost six months in a year	
Total Claimed		**34.26**			
Total Allowed (after de-capitalization)					**33.80**
2015-16					
1	Supply, Installation, Testing & Commissioning of **Electrical Heating Panels** for Newly Constructed Executive Field Hostels 1, 2 & 3, Non Executive Field Hostel, Officer club, Hospital, Old VIP Guest House, Dam Control Room, Switchyard rooms, Leh Guest House & Security Huts for space heating arrangement.	39.32	During winter season from period November to April the temperature remain in the range of minus i.e. from -10 degree to -40 degree Celsius. At present this heating system is not installed in these buildings except in the rooms of Executive field hostel # 1. Due to extreme winter conditions in this region these heating panel are required to be installed so the employees can stay & work in this power station comfortably.	Expenditure on heating panels in various buildings at project is allowed under Regulation 14(3) (viii) as the asset is necessary for efficient and successful operation of the plant considering the sub-zero temperatures for almost six months in a year	39.32
Total Claimed		**39.32**			
Total Allowed					**39.32**

2016-17					
1	Construction of Permanent Office Building	240.00	The work is required for having permanent office building at project site.	Expenditure on construction of Permanent Office Building at project is allowed under Regulation 14(3) (viii) as the asset is necessary for efficient and successful operation of the plant	240.00
2	Wall Insulation of Field Hostels, Residential quarters, hospital and club building,	50.00	The Power Station is situated in very adverse climate of Ladakh region where the winter temperature falls upto -40 C and survival of mankind in such harsh climatic conditions is difficult. In order to provide safe and suitable accommodation to the employees, wall insulation and wooden flooring of residential facilities as well as hospital and club building is essential. 'The walls & Floor presently made of concrete blocks/tiles have heat loss property, rendering it impossible to maintain the room temperature at comfortable level in harsh winters.	Expenditure on assets to keep the project buildings warm is allowed under Regulation 14(3) (viii) as these assets are necessary for efficient and successful operation of the plant considering the sub-zero temperatures for almost six months in a year	50.00
3	Wooden Flooring of Non Executive and executive Field Hostels	55.00			55.00

			The works of wooden flooring and wall insulation are necessary to maintain the room temperatures of these buildings used by O&M personnel so that they can man the power station in a smooth and safe manner.		
4	Supply, Installation, Testing & Commissioning of Electrical Heating Panels for Newly Constructed Executive Field Hostels 1, 2 & 3, Non Executive Field Hostel, Officer club, Hospital, Old VIP Guest House, Dam Control Room, Switchyard rooms, Leh Guest House & Security Huts for space heating arrangement.	40.00	During winter season from period November to April the temperature remain in the range of minus i.e. from -10 degree to -40 degree Celsius. At present this heating system is not installed in these buildings except in the rooms of Executive field hostel # 1. Due to extreme winter conditions in this region these heating panel are required to be installed so the employees can stay & work in this power station comfortably.		40.00
5	Supply, Installation, Testing & Commissioning of Solar water geysers for hot water utilities at Leh, Guest House required due to	15.00	During the extreme winter conditions i.e. during the month of November to April the water freezes in the GI pipes and no water		15.00

	extreme winter conditions.		available in rooms in this guest house. Hence, this system is required to install so that the water available in this guest house during the whole year & also, there is no consumption of electrical power.		
6	Construction of Road Around Right Bank	242.00	The proposed road would provide the better connectivity to the project area from right bank and would link the acquired pre fab structures at left bank upper bench to the NHPC eastward edge. Also the road would provide an alternate connectivity to Power Station in event of calamites like landslides/avalanches.	The expenditure on construction of road is allowed under Regulation 14(3) (viii) as this asset is necessary for efficient and successful operation of the plant considering the better connectivity/alternate connectivity this road would provide in event of calamites like landslides/avalanches.	242.00
7	Stone Masonry in Front of power house	70.00	To stabilize the road to power house and to save the same from scouring action of river/Sliding which is the only connecting link to power house	The expenditure claimed is not allowed as these works are of maintenance in nature. As such, this expenditure shall be met from the O&M expenses allowed to the generating station. In case, the petitioner is not able to meet these expenses from the O&M expenses, it will be at liberty to claim the same during truing up, if incurred.	0.00
8	Slope protection work in u/s of Dam	15.00	As the Ladakh is a desert the Soil is very loose in nature and to save the several critical locations from		0.00

			collapsing into the reservoir the cited work is required to be undertaken.		
9	Installation of new 2 Nos. 250 KVA D.G. Sets with AMF Panel & 1 MVA, 2 Nos. transformers	130.00	New buildings such as Executive Field Hostels, CISF residential buildings and boiler rooms etc are proposed to be constructed. Also 8 nos electrical boilers of 100KW capacity to be installed in this power station **for space heating**, hot water utility purpose due to extreme winter conditions. To meet the power requirement, these DG sets and transformer are essentially required. These DG sets are covered in "Sanctioned Equipment Strength of Power Station".	Expenditure on assets to keep the project buildings warm is allowed under Regulation 14(3) (viii) as these assets are necessary for efficient and successful operation of the plant considering the sub-zero temperatures for almost six months in a year	130.00
10	Construction of Helipad	34.50	The Nimoo Bazgo Power Station is situated in extreme remote area of the country. Landslides and avalanches are common in this area. In winter season, road remains closed and the area is cut off from the rest of	The expenditure claimed is **allowed** under Regulation 14(3) (viii) as the asset is necessary for efficient and successful operation of the plant considering the project location, closure of approach road during winters and possibility of	34.50

			the country a helipad is necessary for rescue operation and providing assistance to the power station in case of natural calamities. Further it is also required for dignitary movement moreover influx of dignitaries is expected	landslides and avalanches at project site situated at high altitude.	
Total Claimed		**891.50**			
Total Allowed					**806.50**
			2017-18		
1	Wall Insulation of Field Hostels, Residential quarters, hospital and club building,	20.00	The Power Station is situated in very adverse climate of Ladakh region where the winter temperature falls upto -40C and survival of mankind in such harsh climatic conditions is difficult. In order to provide safe and suitable accommodation to the employees, wall insulation and wooden flooring of residential facilities as well as hospital and club building is essential. 'The walls & Floor presently made of concrete blocks/tiles have	Expenditure on assets to keep the project buildings warm is allowed under Regulation 14(3) (viii) as these assets are necessary for efficient and successful operation of the plant considering the sub-zero temperatures for almost six months in a year	20.00
2	Wooden Flooring of Non Executive and executive Field Hostels	20.00			20.00

			heat loss property, rendering it impossible to maintain the room temperature at comfortable level in harsh winters. The works of wooden flooring and wall insulation are necessary to maintain the room temperatures of these buildings used by O&M personnel so that they can man the power station in a smooth and safe manner.		
3	Construction of Permanent Office Building	260.00	The work is required for having permanent office building at project site.	Expenditure on construction of Permanent Office Building at project is allowed under Regulation 14(3) (viii) as the asset is necessary for efficient and successful operation of the plant	260.00
Total Claimed		**300.00**			
Total Allowed					**300.00**
2018-19					
Total Claimed		**0.00**			
Total Allowed					**0.00**

21. Accordingly, the projected Additional capital expenditure beyond original scope allowed for the period 2014-19 is as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Additional capital expenditure allowed	34.26	**39.32**	**806.50**	**300.00**	**0.00**
De-capitalisation considered	0.46	0.00	0.00	0.00	0.00
Net Additional capital expenditure allowed after de-capitalization	**33.80**	**39.32**	**806.50**	**300.00**	**0.00**

Capital Cost

22. As stated, the closing capital cost of ₹98102.08 as on 31.3.2014, as approved in order dated 13.10.2015 in Petition No. 89/GT/2015 has been considered as the opening capital cost as on 1.4.2014. Accordingly, the capital cost allowed for the purpose of tariff of the generating station for the period 2014-19 is as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	98102.08	101946.9	102795.7	105375.41	106205.41
Additional capital expenditure of original scope allowed	877.21	661.35	827.68	530.00	0.00
Additional capital expenditure beyond original scope allowed	33.80	39.32	806.50	300.00	0.00
Liabilities proposed to be discharged out of the existing liabilities	2933.81	148.13	945.53	0.00	0.00
Capital cost as on 31st of the year	**101946.90**	**102795.70**	**105375.41**	**106205.41**	**106205.41**

Debt-Equity

23. Regulation 19 of the 2014 Tariff Regulations provides as under:

"19. Debt-Equity Ratio

(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio."

24. Accordingly, the debt-equity ratio of 70:30 has been considered for the purpose of tariff.

Return on Equity

25. Regulation 24 of the 2014 Tariff Regulations provides as under:

"24. Return on Equity: *(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.*

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

ii)the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

iii)additional RoE of 0.50% has been allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation

(FGMO), data telemetry, communication system up to load dispatch centre or protection system:

v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."

26. Regulation 25 of the 2014 Tariff Regulations provides as under:

"Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be

recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis."

27. The base rate has been grossed up with the MAT rate (20.961%) for the year 2013-14. Accordingly, in terms of the above regulations, Return on Equity has been computed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Notional Equity	29430.62	30584.07	30838.71	31612.62	31861.62
Addition due to Additional Capitalization	1153.45	254.64	773.91	249.00	0.00
Closing Equity	30584.07	30838.71	31612.62	31861.62	31861.62
Average Equity	30007.34	30711.39	31225.66	31737.12	31861.62
Return on Equity (Base Rate)	16.500%	16.500%	16.500%	16.500%	16.500%
Tax rate for the year	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of ROE (pre-tax)	20.876%	20.876%	20.876%	20.876%	20.876%
Return on Equity	**6,264.33**	**6,411.31**	**6,518.67**	**6,625.44**	**6,651.43**

28. The petitioner is however directed to submit the effective tax rates along with the tax Audit report for the period 2015-19 at the time of at the time of revision of tariff based on truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.

Interest on loan

29. Regulation 26 of the 2014 Tariff Regulations provides as under:

*"**26. Interest on loan capital**: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account

cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

30. The opening gross normative loan as on COD of each unit has been arrived at in accordance with Regulation 26 of the 2014 Tariff Regulations. The weighted average rate of interest has been worked out on the basis of the actual loan portfolio

of the respective year applicable to the project. The repayment of loan for the period 2014-19 has been considered equal to the depreciation allowed for the respective year of the tariff period. Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest on loan. The calculation for weighted average rate of interest is enclosed as Annexure-I to this order. As such, Interest on loan for the period 2014-19 is worked out as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	68671.46	71362.83	71956.99	73762.79	74343.79
Cumulative Repayment up to Previous Year	2272.49	7249.79	12343.87	17523.25	22787.47
Net Loan-Opening	66398.97	64113.04	59613.12	56239.54	51556.32
Repayment during the year	4977.30	5094.08	5179.38	5264.22	5284.87
Addition due to Additional Capitalization	2691.37	594.16	1805.80	581.00	0.00
Net Loan-Closing	64113.04	59613.12	56239.54	51556.32	46271.45
Average Loan	65256.01	61863.08	57926.33	53897.93	48913.89
Weighted Average Rate of Interest on Loan	6.082%	6.076%	5.965%	5.833%	5.691%
Interest	**3968.80**	**3758.55**	**3455.38**	**3143.75**	**2783.73**

Depreciation

31. Regulation 27 of the 2014 Tariff Regulations provides as under:

"27. (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset: Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff: Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

32. The weighted average rate of depreciation of 4.976% calculated in terms of the above regulation has been considered for the period from 2014-19. Accordingly, depreciation has been computed as under:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block as on 31.3.2014	98102.08	101946.90	102795.70	105375.41	106205.41
Additional capital expenditure during 2014-19	3844.82	848.80	2579.71	830.00	0.00
Closing gross block	101946.90	102795.70	105375.41	106205.41	106205.41
Average gross block	100024.49	102371.30	104085.56	105790.41	106205.41
Rate of Depreciation	4.976%	4.976%	4.976%	4.976%	4.976%
Depreciable Value	90022.04	92134.17	93677.00	95211.37	95584.87
Remaining Depreciable Value	87749.55	84884.41	81333.16	77688.15	72797.43
Depreciation	**4977.30**	**5094.08**	**5179.38**	**5264.22**	**5284.87**

O&M expenses

33. The Commission in para 55 of the order dated 13.10.2015 in Petition No. 89/GT/2013 had considered the DIA recommended capital cost of ₹100233.00 lakh in absence of approved RCE for the purpose of calculating the O&M expenses for this generating station for the period 10.10.2013 to 31.3.2014 is as under:

(₹ in lakh)

	10.10.2013 to 31.3.2014
Capital cost considered (DIA recommended capital cost)	100233.00
Less: R&R expenses	1144.00
Capital cost for the purpose of O&M expenses	99089.00
Annualized O&M expenses @ 2% of above	1981.78
Number of days	173
O&M expenses allowed	**939.31**

34. The Commission in para 56 of the said order dated 13.10.2015 had also observed that the O&M expenses allowed is subject to revision based on the approval

of RCE by the Central Government and the actual capital cost as on the cut-off date of the generating station.

35. The petitioner has submitted the RCE approved by the MOP, GOI which has been considered in this order. Based on the discussions above and in terms of the observations of the Commission in order dated 13.10.2015, the O&M expenses allowed for the period from 10.10.2013 to 31.3.2014 stands revised as under:

(₹ in lakh)

	10.10.2013 to 31.3.2014
Capital cost allowed as on 31.3.2018	106205.41
Less: Additional capital expenditure allowed beyond original scope of work	1179.62
Less: R&R expenses	1144.00
Capital cost for the purpose of O&M expenses	**103881.79**
Annualized O&M expenses @ 2% of above	2077.64
O&M expenses allowed for the period	**984.74**

The above O&M expenses have been considered for revision of annual fixed charges the period from 10.10.2013 to 31.3.2014.

36. Regulation 29 (3) (b) of the 2014 Tariff Regulations provides as under:

"*In case of the hydro generating stations, which have not been in commercial operation for a period of three years as on 1.4.2014, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) for the first year of commercial operation. Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @6.04% per annum up to the year 2013- 14 and then averaged to arrive at the O&M expenses at 2013-14 price level. It shall be thereafter escalated @ 6.64% per annum to arrive at operation and maintenance expenses in respective year of the tariff period.* "

37. The petitioner has considered an amount of ₹105689.82 lakh as completion cost for the purpose of O&M expenses and has claimed O&M expenses for 2014-19 as under:

(₹ in lakh)

2013-14	2014-15	2015-16	2015-17	2017-18	2018-19
2113.80	2254.15	2403.83	2563.44	2733.65	2915.17

38. Accordingly, based on the original capital cost of ₹105025.79 lakh (106205.41-1179.62) as on cut-off date (31.3.2018) and R&R cost of ₹1144.00 lakh, the O&M expenses for the period 2013-14 and for the period 2014-19 in terms of the Regulation 29 (3) (b) of the 2014 Tariff Regulations is as under:

(₹ in lakh)

2013-14	2014-15	2015-16	2015-17	2017-18	2018-19
2077.64	2215.59	2362.71	2519.59	2686.89	2865.30

Interest on working capital

39. Sub-section (c) of Clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:

"28. Interest on Working Capital:

(1) The working capital shall cover

(c) Hydro generating station including pumped storage hydro electric generating Station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expense specified in regulation 29; and

(iii) Operation and maintenance expenses for one month."

40. Accordingly, receivables considering two months of fixed cost are worked out and allowed as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
2983.09	3018.09	3026.83	3035.79	3013.74

41. Maintenance spares @ 15% of operation and maintenance expenses is worked out and allowed as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
332.34	354.41	377.94	403.03	429.80

42. O&M Expenses for one month are allowed as under:

(₹ in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
184.63	196.89	209.97	223.91	238.78

Rate of interest on working capital

43. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

> *"**Interest on working Capital**: (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."*

44. In terms of the above regulations, the Bank Rate of 13.50% (Base Rate + 350 Basis Points) as on 1.4.2014 has been considered by the petitioner. This has been considered in the calculations for the purpose of tariff. Necessary computations in support of interest on working capital are appended below:

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	332.34	354.41	377.94	403.03	429.80
O & M expenses	184.63	196.89	209.97	223.91	238.78
Receivables	2983.09	3018.09	3026.83	3035.79	3013.74
Total	3500.06	3,569.38	3,614.74	3,662.74	3,682.31
Interest on working capital @ 13.50%	**472.51**	**481.87**	**487.99**	**494.47**	**497.11**

Annual Fixed Charges

45. Accordingly, the annual fixed charges approved for the generating station for the period 2013-14 (10.10.2013 to 31.3.2014) and for the period 2014-19 are as under:

(₹ in lakh)

	2013-14 (10.10.2013 to 31.3.2014)	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	2860.12	6264.33	6411.31	6518.67	6625.44	6651.43
Interest on Loan	2274.64	3968.80	3758.55	3455.38	3143.75	2783.73
Depreciation	2272.49	4977.30	5094.08	5179.38	5264.22	5284.87
Interest on Working Capital	217.76	472.51	481.87	487.99	494.47	497.11
O & M Expenses	984.74	2215.59	2362.71	2519.59	2686.89	2865.30
Total	**8609.75**	**17898.53**	**18108.51**	**18161.01**	**18214.77**	**18082.45**

Normative Plant Availability Factor and Deemed Generation

46. The Commission in its order dated 7.10.2013 in Petition No. 89/GT/2013 had allowed the normative plant availability factor of 65.18% with regard to the recovery of capacity charges and provision of deemed generation was also made for recovery of energy charges till availability of full load. The relevant portion of the order dated 13.10.2015 is extracted as under:

> *"65. The Commission in order dated 7.10.2013 while considering the prayer of the petitioner for relaxation of Normative Annual Plant Availability Factor (NAPAF) has decided as under:*
>
> (a) *NAPAF of 65.18% is allowed after relaxation of 5% with reference to the NAPAF of 70.18% as mentioned in para-29 above.*
>
> (b) *Infirm power to be charged at the applicable UI rate of ₹1.65/kWh, corresponding to the frequency in the range of 50 Hz and 50.02 Hz, in terms of the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) (second amendment) Regulations, 2012 .*
>
> *66. SLDC being an apex body is required to ensure the integrated operation of the power system in the State. Accordingly, we direct the SLDC to certify the Plant*

Availability Factor and the deemed generation on monthly basis, after verifying the same with the respondent. The prayer of the petitioner is disposed of in terms of the above."

47. The directions of the Commission in the said order dated 13.10.2015 as above, shall continue for the period 2014-19, until full load is made available by the respondent. However, the petitioner is directed to submit on affidavit, the status including the date from which the full load was made available by the respondent, at the time of revision of tariff based on truing up exercise in terms of Regulation 8 of the 2014 Tariff Regulations.

Auxiliary Power Consumption

48. As regards Auxiliary Power consumption, the petitioner vide affidavit dated 5.8.2014 in Petition No.89/GT/2013 had submitted that auxiliary consumption for the power station has been observed to be much higher than the normative value allowed by the Commission and that it shall claim relaxation in auxiliary consumption of the power station in 2014-19 tariff petition. The Commission in its order dated 13.10.2015 had disposed of the above prayer of the petitioner as under:

"68. The prayer of the petitioner to claim relaxation in auxiliary consumption of the power generating station in the tariff petitions for the period 2014-19 has been considered. While we permit the petitioner to prefer the said claim in the tariff petitions for the period 2014-19, the reliefs, if any, on this count, will be considered on merits, based on the submissions and documents regarding actual energy consumption to be filed in this connection. The prayer of the petitioner is disposed of in terms of the above"

49. The petitioner in this petition has submitted that the generating station is being located at very high altitude, weather remains at subzero temperature for almost seven months in a year from October to April and the minimum temperature has

dropped to (-) 30 °C in winter months. The petitioner has also submitted that in order to maintain water flow for power generation, substantial quantum of power is required for deicing arrangement of radial gates and in addition, substantial quantum of power is required to maintain various auxiliary equipments and systems when the units are running and also when units are not running. It has further submitted that continuous power is required to maintain a minimum working temperature in the power house and all this is achieved through various heating arrangements and by continuous running of one or more unit even when not supplying load to consumers. This according to the petitioner results in very high auxiliary consumption with respect to any other conventional hydro generating stations.

50. The petitioner has also stated that the generating station is operating in isolation and is not connected with national grid and enough load is also not available in the Leh area to absorb the entire generation from the project. The petitioner has submitted that considering this fact, the Commission had allowed the deemed generation benefit vide order dated 7.10.2013 in Petition No.89/GT/2013, as under:

> *"19. Taking into consideration that the recovery of energy charges shall be less if the beneficiary demands/schedules for lesser energy (than declared by the generator) due to non-availability of load, we, in exercise of power under Regulation 44 of the 2009 Tariff Regulations, relax the provisions of Clause (4) of Regulation 22 of the 2009 Tariff Regulations and allow the recovery of energy charges, corresponding to difference between energy declared to be generated and the energy scheduled by the beneficiary (due to non–availability of load) as deemed generation along with recovery of monthly energy charges for scheduled energy to be calculated as per provisions of the 2009 Tariff Regulations. The prayer of the petitioner is allowed in terms of the above."*

51. The petitioner has submitted that as per the present situation, grid is not likely to be available in this tariff period and therefore the maximum load would be only for

two units. It has further stated that during winters, load availability is there but generation is less as per availability of water therefore, actual auxiliary consumption will be higher in terms of percentage (approx.14%). Accordingly, the petitioner has submitted that auxiliary consumption has been calculated based on running hours of auxiliaries and other essential heating systems with actual conditions and generation restricted to two units in summers. The petitioner has stated that considering maximum load availability equivalent to two (2) units only, auxiliary energy consumption works out to 11%. The petitioner has however submitted that it is claiming only 9% auxiliary consumption on annual average basis, which is calculated on total design energy (239.33 MU) of the generating station. This according to the petitioner is quite reasonable considering isolated operation of units, adverse weather conditions and low load availability etc., and may be allowed as a special case.

52. The petitioner has stated that due to the above facts i.e. very high auxiliary consumption requirement and less isolated load, the existing normative auxiliary consumption of 1.0% under Regulation 37(6)(a)(ii) of the 2014 Tariff Regulations, is highly inadequate in respect of the generating station. Accordingly, the petitioner has prayed to relax & fix average auxiliary consumption at 9% for the generating station as a special case, by exercising the powers under Regulation 54 (power to relax) and Regulation 55 (power to remove difficulty) of the 2014 Tariff Regulations so as to schedule the generation realistically and achieve PAF based on realistic auxiliary consumption and not to gain any other benefit.

53. The petitioner vide affidavit dated 27.4.2016 has submitted the day-wise actual auxiliary consumption data for the period 2012-16 as under:

	Average Auxiliary Consumption (%)
2012-13	6.64
2013-14	6.07
2014-15	7.24
2015-16	5.74

54. We have examined the matter. Considering the location of plant, the extreme weather condition and the data submitted by the petitioner, we, in exercise of the power under Regulation 54 of the 2009 Tariff Regulations, and as a special case relax the provisions of Clause (6) sub-clause (a)(ii) of Regulation 37 of the 2014 Tariff Regulations and allow the auxiliary consumption of up to 6% based on average actual auxiliary consumption for the period 2012-16 as against the claim of the petitioner for 9%. The relaxation granted for this generating station cannot be cited as precedent in future.

Design Energy

55. The Commission in its order dated 7.10.2013 in Petition No.89/GT/2013 had approved the annual Design Energy (DE) of 239.33 Million Units for the period 2009-14 in respect of this generating station. This DE has been considered for this generating station for the period 2014-19 as per month wise details hereunder:

Month		**Design Energy (Million Units)**
April	I	3.54
	II	3.75
	III	4.02
May	I	4.85
	II	6.81
	III	11.29

June	I	10.23
	II	10.26
	III	10.26
July	I	10.26
	II	10.26
	III	11.29
August	I	10.26
	II	10.26
	III	11.29
September	I	10.26
	II	10.26
	III	10.26
October	I	7.79
	II	5.99
	III	6.05
November	I	5.26
	II	4.93
	III	4.60
December	I	4.38
	II	4.37
	III	4.73
January	I	3.88
	II	3.69
	III	3.90
February	I	3.42
	II	3.36
	III	3.03
March	I	3.36
	II	3.37
	III	3.81
Total		**239.33**

Application Fee and Publication Expenses

56. The petitioner has sought the reimbursement of filing fee and also the expenses incurred towards publication of notices for application of tariff for the period 2014-19. The petitioner has deposited tariff filing fees of ₹198000/- for the period 2014-15 in terms of the provisions of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012. The petitioner vide affidavit dated 14.11.2014

has submitted that it has incurred ₹38623/- as charges towards publication of the said tariff petition in the newspapers. Accordingly, in terms of Regulation 52 of the 2014 Tariff Regulations and in line with the decision in Commission's order dated 6.1.2016 in Petition No.232/GT/2014, the petitioner shall be entitled to recover the filing fees for the year 2014-15 and the expenses incurred on publication of notices for the period 2014-19 directly from the respondents. The filing fees for the remaining years of the tariff period 2015-19 shall be recovered pro rata after deposit of the same and production of documentary proof.

57. The annual fixed charges approved as above are subject to truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.

58. Petition No. 229/GT/2014 is disposed of in terms of the above.

Sd/-	**Sd/-**	**Sd/-**
(Dr. M.K.Iyer)	**(A.S Bakshi)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**