



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

जल विद्युत परियोजना मूल्यांकन प्रभाग

Hydro Project Appraisal Division

OFFICE MEMORANDUM

Subject: Accord of Concurrence to Uri-I Stage-II HE Project (2x120=240 MW) in UT of J&K by M/s. NHPC Limited. – regarding.

Reference is invited to the Detailed Project Report (DPR) of the Uri-I Stage-II HE Project (2x120=240 MW) in UT of J&K submitted by M/s. NHPC Limited on 18.05.2022 for concurrence. The DPR was accepted for detailed examination w.e.f. 20.06.2022.

It is hereby informed that in exercise of the powers conferred upon the Authority under Section 8 of the Electricity Act, 2003, the Central Electricity Authority has concurred the aforesaid Hydro Electric Project for Estimated Completion cost of ₹ 2526.79 Crore including IDC of ₹ 249.45 Crore. An amount of ₹ 26.20 Crores may be availed as budgetary support towards enabling infrastructure after incurring expenditure of 25% of the total project cost in terms of MoP OM dated 08.03.2019 and 28.09.2021.

In case the cost is revised due to any reason, the cost variation shall be capped at 10% of original sanctioned cost (as per decision of PIB issued vide OM No.15(18)/PFC-I/2021 dated 08.02.2022 and OM No.15(04)/PFC-I/2021 dated 14.02.2022 for similar projects).

2. The abstract of approved Project Completion Cost, details of Cost of Civil works, E&M works, Miscellaneous works and Grant in terms of MoP OM dated 08.03.2019 are attached as **Annex-I, I(A), I(B), I(C) & I(D)**. The Salient Features of the scheme are given in **Annex-II**.


3. This concurrence is subject to fulfillment of the following conditions: -

- i. M/s. NHPC Limited shall incorporate the suggestions/observations of Central Water Commission (CWC) as given in **Annex -III**.

- ii. M/s. NHPC Limited shall incorporate the suggestions/observations of Central Electricity Authority (CEA) as given in **Annex – IV**.
- iii. M/s. NHPC Limited shall communicate results of explorations/investigations from time to time for appraisal of CEA/CWC/ GSI/CSMRS regularly. Cost for changes required consequent to investigations shall be absorbed by M/s. NHPC Limited.
- iv. M/s. NHPC Limited shall use the NCSDP approved parameters for design purposes.
- v. In case, any change in e-flows is suggested by MoEF&CC in future, M/s NHPC Limited shall review the installed capacity & design energy of the project and furnish the same for appraisal to CEA before commencement of construction of the project.

Further, M/s NHPC Limited shall review the design energy based on revised hydrology on commissioning of the project and thereafter at interval of every 10 years and furnish the same for appraisal of CEA.

- vi. In case geological surprises in underground works are met, M/s NHPC Limited shall systematically maintain a record of geological surprises, those are encountered and immediately request the State Govt. to constitute an expert committee consisting of representatives from State Govt., CEA, CWC, GSI etc at the earliest. Once a committee is constituted, M/s NHPC Limited shall submit complete proposal on Geological surprise and the enhanced cost on account of Geological surprise to the expert committee, which shall examine the proposal and vet the cost thereof. In case the enhanced cost is not vetted by the said committee, no increase in the cost on this account shall be booked in project cost.
- vii. In case, changes are made in design parameters, during construction, due to site conditions or otherwise, the same shall be intimated and got concurred from the Authority (CEA) before M/s NHPC Limited implements such changes. The works on such changes shall remain suspended till approval of the Authority. If M/s NHPC Limited violates this condition, then this Concurrence shall become invalid.
- viii. M/s. NHPC Limited shall obtain Land availability certificate before actual start of the project and shall submit a copy to CEA.
- ix. M/s. NHPC Limited shall obtain Water availability certificate before actual start of the project and shall submit a copy to CEA.
- x. M/s. NHPC Limited shall obtain Environmental and Forest clearance from MoEF&CC before actual start of the project and shall submit a copy to CEA.
- xi. M/s. NHPC Limited shall obtain International clearance from MoJS after the project features are finalized/ frozen and shall submit a copy to CEA.





- xii. M/s. NHPC Limited shall obtain clearance from Inter State aspect from CWC, if applicable.
- xiii. Tariff of the project shall be determined/ adopted by the appropriate Electricity Regulatory Commission.
- xiv. If Scheduled Tribe population is getting affected at project site, clearance under Forest Right Act/Ministry of Social Justice & Empowerment/State Government shall be obtained by NHPC Limited and shall submit the same to CEA.
- xv. Suitable R&R plan shall be prepared by M/s NHPC Limited and submitted to MoEF&CC for obtaining their clearance.
- xvi. M/s. NHPC Limited shall set up a sound and scientific safety management system which shall include:
  - Establishing procedures to identify hazards that could give rise to the potential of injury, health impairment or death and measures to control impact of such hazards.
  - Setting up an Early Warning System to deal with hazardous events such as Glacial Lake and Landslide Outburst Floods, Earthquakes, cloudburst, Flash Floods, Avalanches, Dam Break event, etc.
  - Establishing Standard Operating Procedure to deal with these hazardous events.
- xvii. M/s NHPC Limited Shall comply with the conditions as mentioned in the MoJS (erstwhile Ministry of Water Resources, RD&GR and Ganga Rejuvenation) letter no.15011/1/2015-PP Dated 15.12.2015 (the corrected letter as forwarded by MoWR, RD&GR. vide letter no. L-15011/1/2015-PP Dated 22.01.2016, (copy attached at **Annex-V**) for project design and shall ensure adequate e-flow for different months as prescribed by MoEF&CC particularly during lean months and longitudinal connectivity.
- xviii. M/s NHPC Limited shall obtain clearance from Ministry of Home Affairs regarding participation of foreign companies in tender works packages and shall comply with the conditioned stipulated therein.
- xix. M/s. NHPC Limited shall comply with the Guidelines to reduce the incidence of time & cost overruns in Hydro Power Projects issued by MoP vide letter No.2/3/2016-NHPC (Part) dated 23.11.2022 (Copy attached at **Annex-VI**).
- xx. M/s. NHPC Limited shall take measures for averting the flooding of the powerhouse as per conditions contained in **Annex-VII** and appropriate preventive measures of Disaster Management in case of Dam failure or sudden release of water as per conditions contained in **Annex-VIII**.
- xxi. M/s. NHPC Limited shall comply with the "Guidelines for participation of foreign Companies in tender work packages of Hydroelectric Projects in sensitive areas, 2009" as issued by Ministry of Home Affairs vide letter no. 7/1/2002-DO (NHPC Limited) [Vol.II] dated 03.09.2009 (**Annex-IX**).



- xxii.** M/s. NHPC Limited shall deploy modern tools / software for construction monitoring of the project by establishing IT based monitoring systems and linking the same to CEA network.
- xxiii.** Uri-I St-I & Uri-I St-II HE Projects are being developed by M/s. NHPC Limited as a single project. As common infrastructures are already in place, M/s. NHPC Limited shall obtain consent of all the beneficiaries states/ UTs of existing Uri-I St-I HE Project.
- xxiv.** M/s. NHPC Limited shall submit the updated DPR to the State Govt., Appropriate Electricity Regulatory Commission, Central Transmission Utility, co-basin States and Indus wing of MoJS (erstwhile MoWR, RD&GR) under intimation to the Authority.
- xxv.** M/s NHPC Limited shall ensure availability of adequate quantities of rock/sand from quarries/excavated muck/burrow areas to meet the requirement of coarse & fine aggregates for both wearing & non-wearing surfaces.
- xxvi.** Fly ash and fly ash based products shall be used in the construction of various works to the extent possible in accordance with MoEF notification dated 14.09.1999 and its amendment dated 27.08.2003 and as revised on 06.11.2008. Construction material surveys shall include the required investigations for use of fly ash and fly ash based products in various works, infrastructure facilities etc. and their feasibility shall be ascertained by M/s NHPC Limited.
- xxvii.** Information in respect of tying up essential inputs/statutory clearances, results of investigations/ studies shall be submitted by NHPC Limited to CEA/CWC/GSI/CSMRS on receipt of same from time to time.
- xxviii.** The broad technical aspects of the project proposal in the project report have been scrutinized in CEA in consultation with CWC, GSI and other concerned agencies. The scrutiny is based on the data, assessment and certificates presented in the report and information/clarifications received as compliances to the observations on the assumption that the data and information furnished are accurate and have been collected reliably by the project authorities from dependable sources and/or after carrying out detailed surveys and investigations as presented in the report.
- xxix.** Project is scheduled to be completed in 44 months from zero date i.e. 01.12.2023.

Unit wise Commissioning Schedule of the Project is given below:

Unit 1 (120 MW)	July, 2027
Unit 2 (120 MW)	July, 2027


- xxx.** In case time gap between Concurrence accorded to the scheme by CEA and award of one of major civil packages (either HRT or Powerhouse) by M/s NHPC Limited is three years or more, a fresh Concurrence of CEA shall be obtained by M/s NHPC Limited.



5. Monthly Progress Report during construction of the project shall be submitted by NHPC Ltd to Hydro Project Monitoring (HPM) Division of CEA. Three (3) copies of half-yearly reports both on physical progress of the scheme and expenditure actually incurred, duly certified by statutory auditors shall be submitted to the Authority till the Commercial Operation Date of the plant. The project authorities shall give free accessibility to CEA officers and staff to have on the spot assessment of various aspects of the project.
6. Monthly status of the project from date of concurrence to date of Commercial Operation (CoD) shall be furnished by NHPC Limited to Chief Engineer (HPA), CEA as per the proforma enclosed at **Annex-XI**.
7. The Authority reserves the right to revoke this concurrence, if the conditions stipulated in this office memorandum are not complied with to the satisfaction of the Authority.

This issue with the approval of competent Authority.

**Encls: Annex I, I(A), I(B), (C), I(D), II, III, IV, V, VI, VII, VII, IX, X & XI.**

  
(Anil Raghuwanshi),  
Deputy Director

To,

1. CMD, NHPC Limited, NHPC Office Complex, Sector-33, Faridabad-121003.
2. Secretary, Ministry of Power, Govt. of India, Shram Shakti Bhawan, Rafi Marg, New Delhi-110119.
3. Secretary, MoEF&CC, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.
4. Chairperson, Central Electricity Regulatory Commission, 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building, 36, Janpath, New Delhi-110001.
5. Chairman, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
6. Principal Secretary (Power Development Department), Civil Secretariat, UT of J&K, Srinagar.
7. Chairman-cum-Managing Director, Power Grid Corporation of India Limited, Saudamini, Plot No.2, Sector 29, Gurgaon-122001 (Haryana).
8. Adviser (Energy), NITI Aayog, Yojana Bhawan, New Delhi-110001. Email: rajnath-pc@nic.in

- xxxi. Revalidation of Concurrence can also be considered, in case, the reason for delay in award of one of major civil packages (either of HRT or Powerhouse) is beyond the control of developer. However, proposal for revalidation shall be submitted three months before the expiry of validity of the Concurrence, which is three years from the date of issue of this Concurrence Memorandum.
- xxxii. Concurrence is subject to compliance by M/s NHPC Limited of various policies/guidelines etc. issued by Govt. of India from time to time.
- xxxiii. M/s NHPC Limited shall comply strictly the "Public Procurement (Preference to make in India) Order, 2017 (PPP-MII Order)" issued by Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, Govt. of India vide its letter no. P-45021/2/2017-B.E.-II dated 15.06.17. **(Copy enclosed at Annex-X).**
- xxxiv. The project developer has to approach CTU to seek connectivity/Long Term Access (LTA) as per CERC regulations at least five years before the anticipated commissioning of the project. The transmission system for the project would be firmed up after grant of LTA, as per CERC Regulations. The developer must ensure that generating machines are capable of operation in synchronous condenser mode.
- xxxv. M/s. NHPC Limited shall strictly comply with the provisions mentioned in Central Electricity Authority regulations for "Safety requirements for construction, operation and maintenance of electrical plants and electrical lines, 2011" and amendment thereof, if any.
- xxxvi. M/s. NHPC Limited shall try to squeeze the timeline for construction of the project so that tariff may be reduced. Further, this project is to be handed over to State Government after 40 years of operation as against usual practice of operating the plant on perpetual basis. In other such projects, where CPSUs had agreed to transfer the project after 40 years, state Governments had agreed for concessions such as staggering of free power, waiver of SGST, etc. In view of the same, M/s. NHPC Limited shall make efforts to bring down the tariff of standalone project further by way of staggering free power and SGST waiver, etc. in consultation with State Government. Further, no time overrun may take place in completion of project.
- xxxvii. M/s NHPC Limited shall register units of the project in e-gen portal.
- xxxviii. M/s. NHPC Limited shall strictly comply with the provisions mentioned in Central Electricity Authority regulations for "Measures relating to Safety and Electric Supply, 2010" and amendment thereof, if any.
- 4. Monthly Status Report of compliance of the conditions stipulated in para 3 of this Concurrence letter shall be submitted by NHPC Limited to Chief Engineer (HPA), CEA.





9. Member (D&R), Central Water Commission, Sewa Bhawan, RK Puram, New Delhi-110066.
10. Joint Secretary (Hydro), Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110119.
11. Commissioner (Indus Wing), Ministry of Jal Shakti, RD&GR, 2<sup>nd</sup> Floor, Block-3, CGO Complex, Lodhi Road, New Delhi-110003.
12. Chief Engineer (HPA/PSP&PA-I/F&CA/CD/Legal/HPP&I/HE&TD/HPM), CEA, Sewa Bhawan, RK Puram, New Delhi-110066.
13. Chief Engineer (PAO)/ Design (N&W), CWC, Sewa Bhawan (S), RK Puram, New Delhi-110066.
14. Director (LHIM & EPE Division), Geological Survey of India, A-II, Pushpa Bhawan, Madangir Road, New Delhi-110062.
15. Director, CSMRS, Olof Palme Marg, Hauz Khas, New Delhi-110016.
16. Director {PA(N)/ Hydrology(N)/ BCD(N&W)/ HCD(N&W)/ Gates Design (N&W)/ FE&SA/ ISM-2/ CA-HWF/ CB&PM/ Instrumentation}, CWC, Sewa Bhawan, (S), RK Puram, New Delhi-110066.

Copy to:

17. Chairperson, Central Electricity Authority, Sewa Bhawan, RK Puram, New Delhi-110066.
18. Member (Power System/ Hydro/ Planning/ Grid Operation & Distribution/ Thermal/ Economic & Commercial), CEA, Sewa Bhawan, RK Puram, New Delhi-110066.







**Annex-I**

**Uri-I Stage-II HEP (240 MW), J&K**  
**Abstract of Cost Estimates**

(Figures in ₹ crores)

S.N.	Description	Cost at Dec, 2022 PL	Cost at Completion Level
1	Civil Works	1410.53	1643.81
2	E&M Works	500.65	562.82
3	Miscellaneous Works (Security Services)	58.67	70.71
	<b>Hard Cost (1+2+3)</b>	<b>1969.85</b>	<b>2277.34</b>
4	IDC	219.76	249.45
	FC	0	0
5	<b>Total Project Cost (1+2+3+4)</b>	<b>2189.61</b>	<b>2526.79</b>
6	Grand in term of MoP OM dated 08.03.2019	<b>22.00</b>	<b>26.20</b>
	<b>Total Project Cost after grant (1+2+3+4-6)</b>	<b>2167.61</b>	<b>2500.59</b>





**Annex-I (A)****Uri-I Stage-II HEP (240 MW), J&K**  
**Abstract of Civil and HM Cost**

(Figures in ₹. Crore)

SI. No	Description	Total Present day cost at Dec 2022 PL	Completion Cost Corresponding to Present day cost of Dec, 2022 PL
<b>A</b>	<b>DIRECT CHARGES</b>		
<b>I</b>	<b>I-WORKS</b>		
1	A-Preliminary	4.45	4.45
2	B-Land	3.54	3.54
3	C-Works	0.00	0.00
4	J-Power Plant Civil Works	1171.24	1384.59
5	K-Building	8.52	9.69
6	M-Plantation	0.15	0.15
7	O-Miscellaneous	37.44	37.44
8	P-Maintenance during construction @ 1% of the total cost under the heads of C-Works, J-Power Plant Civil Works and K-Building	11.80	13.93
9	Q-Special T&P	0.00	0.00
10	R-Communication	22.00	26.20
11	X- Env & Ecology	33.00	33.00
12	Y-Losses on Stock @ 0.25% of C-Civil Works, J-Power Plant Civil & K- Building Work	2.95	3.48
	<b>Total(I-Works)</b>	<b>1295.09</b>	<b>1516.47</b>
<b>II</b>	Establishment	109.70	121.59
<b>III</b>	Tools & Plants	2.00	2.00
<b>IV</b>	Suspense	0.00	0.00
<b>V</b>	Receipts and Recoveries	-1.25	-1.25
	<b>TOTAL (Direct Charges)</b>	<b>1405.53</b>	<b>1638.81</b>
	<b>INDIRECT CHARGES</b>		
a	Capitalization of abatement of land revenue (5% of cost of culturable Land) land	0.00	0.00
b	Audit & Accounts Charges @ 0.25% of I-Works	5.00	5.00
	<b>TOTAL ( Indirect Charges)</b>	<b>5.00</b>	<b>5.00</b>
	<b>Total (Civil and HM Works)</b>	<b>1410.53</b>	<b>1643.81</b>







**Annex-I (B)**

Abstract of Cost Estimates of Electro-Mechanical Works of Uri-I Stage-II HE Project (240 MW)			
Dec, 2022 Price Level			Completion level
Sl.No.	Item	Total Amount (In ₹ Lakhs)	Total Amount (In ₹ Lakhs)
1	a) Preliminary Works	153.00	168.24
	b) BoCW @1% on 1 (a)	1.54	1.68
	c) GST @ 18% On 1 ( a ) & 1(b)	27.96	30.59
	<b>Sub-Total (Preliminary)</b>	<b>183.29</b>	<b>200.51</b>
2	<b>Generating Plant and Equipment</b>		
a)	Generator, turbine and accessories	16822.24	18922.26
b)	Auxiliary electrical equipment for power station	7540.24	8481.53
c)	Auxiliary Mechanical equipment and services of power station	1860.87	2075.28
d)	Transportation, handling & Insurance charges (@ 6% of 2 (a),2 (b), & 2(c)	1573.40	1768.74
e)	Erection and commissioning charges @8% of 2(a),2 (b), & 2 (c) excluding spares	2015.23	2265.37
f)	BoCW@1% on 2(a),2(b),2(c),2(d) & 2(e)	298.12	335.13
g)	GST @ 18% on 2(a), 2(b),2(c),2(d),2(e) & 2(f)	5419.82	6092.70
	<b>Sub-total ( Generating plant and Equipment)</b>	<b>35529.91</b>	<b>39941.02</b>
3	<b>Substation Equipment, Auxiliary Equipment and Services of Switchyard</b>		
a)	Substation equipment and auxiliary equipment and services for switchyard	7392.41	8315.25
b)	Transportation, handling and Insurance charges (@ 6% of 3(a))	443.54	498.92
c)	Erection and commissioning charges @8% of 3(a) excluding spares	574.17	645.84
d)	BoCW@1% on 3(a),3(b) & 3(c)	84.10	94.60
e)	GST @ 18% on 3 (a), 3(b),3(c) & 3 (d)	1528.96	1719.83
	<b>Sub-total (Substation Equipment, Auxiliary Equipment and Services of Switchyard)</b>	<b>10023.19</b>	<b>11274.44</b>
4	Contingencies @1% on items 2,3	455.53	512.15
5	Tools & plants @ 0.5% of items 2,3	227.77	256.08
6	<b>Sub-total (Item 1 to 5)</b>	<b>46419.69</b>	<b>52184.21</b>
7	Establishment	3416.48	3841.16
8	<b>Sub-total (Item 6,7)</b>	<b>49836.17</b>	<b>56025.37</b>
9	Audit and account @ 0.5% of 1,2,3	228.68	257.08
	<b>GRAND TOTAL FOR ELECTRO-MECHANICALWORKS</b>	<b>50064.86</b>	<b>56282.45</b>
	<b>Say (in Crores)</b>	<b>₹ 500.65</b>	<b>₹ 562.82</b>







**Annex-I (C)**

<b>Abstract of Cost Estimates of miscellaneous works (Security Services) Works of Uri-I Stage-II HE Project (240 MW)</b>			
<b>Sl. No.</b>	<b>Item</b>	<b>Total Amount at Dec,2022 PL</b>	<b>Total Amount at Completion Level</b>
		<b>(In ₹ Crores)</b>	<b>(In ₹ Crores)</b>
1	Security Services	58.67	70.71
	<b>Total (Miscellaneous Works)</b>	<b>58.67</b>	<b>70.71</b>





**Annex-I (D)**

<b>Abstract of Cost Estimates for Budgetary Support towards Enabling Infrastructure at Completion Level of Uri-I Stage-II HE Project (240 MW)</b>		
<b>Description</b>	<b>Amount in ₹ Crores at Dec.2022 PL</b>	<b>Amount at Completion level</b>
		<b>(In ₹ Crores)</b>
Cost of Construction of Roads/Bridges	22.00	26.20
Cost of Land Acquisition	0	0
Total Budgetary Support	22.00	26.20





