

Six Monthly Progress Report on  
Compliance of conditions stipulated in Environment Clearance of Rangit -IV HEP, Sikkim  
(Period Oct 2023 to March 2024)

1.	Name of the project	Rangit -IV HEP (3X40 MW), Sikkim																	
2.	Type of project	Hydro-Electric Project																	
3.	Clearance letter (s). OM No. & Dates <b>a)</b> Environment Clearance  <b>b)</b> Forest Clearance	(a)No.J.12011/11/2007-IA-I, dated -16/05/2007  (b) <table><tr><th>Date</th><th>File No.</th><th>Forest Land (ha)</th></tr><tr><td>26.12.2007</td><td>3-SKC072/2007-SHI/2419-21</td><td>24.7523</td></tr><tr><td>09.01.2012</td><td>3-SKC072/2007-SHI/2861-62</td><td>0.2</td></tr><tr><td>06.11.2023</td><td>FP/SK/HYD/IRRIG/402342/2022/178</td><td>1.2721</td></tr><tr><td colspan="2">Total(ha)</td><td>26.2244</td></tr></table>			Date	File No.	Forest Land (ha)	26.12.2007	3-SKC072/2007-SHI/2419-21	24.7523	09.01.2012	3-SKC072/2007-SHI/2861-62	0.2	06.11.2023	FP/SK/HYD/IRRIG/402342/2022/178	1.2721	Total(ha)		26.2244
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Total(ha)		26.2244																	
4.	Locations a)District b)State c)Latitude d)Longitude	South and West Sikkim 27° 13' 10"N 88° 13' 10"E																	
5.	Address for Correspondence a)Address of concerned Project Head (with pin code, telephone/fax)  b) Address of concerned HOD in corporate Office (with pin code & telephone/fax no.)	Executive Director Jal Power corporation Ltd. Rangit-IV HEP, Sikkim-737121 Email: rangit4@nhpc.nic.in  Executive Director (Environment & Diversity Management Division), Corporate Office, NHPC Ltd., Sector - 33, Faridabad, Haryana - 121 003. Phone : 0129 - 2254674, Email: envdivmgn-co@nhpc.nic.in																	
6.	Detail of Environmental ManagementPlans	As per Annexure-I																	
7.	Break-up of the Project area (Land details) a) Submergence area (forest & non-forest)  (b)Others	(i) <b>Forestland details</b> (a) Surface <table><tr><td>Land</td><td>8.4658 ha</td></tr><tr><td>Roads</td><td>1.4280 ha</td></tr><tr><td>Quarry area</td><td>0.2080 ha</td></tr><tr><td>Submergence area</td><td>11.3740 ha</td></tr></table> (b) Underground land=3.2765 Ha (c) Additional forest land: 0.200 Ha & 1.2721 Ha			Land	8.4658 ha	Roads	1.4280 ha	Quarry area	0.2080 ha	Submergence area	11.3740 ha							
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		<b>(ii) Private land</b> (a) Private land under mutation = 8.061 ha (b) Private land under lease by JPCL = 0.3040 ha
8.	Breakup of the project affected population with enumeration of those losing houses/ dwelling units only, agricultural land only, both dwelling units and agricultural land and land less laborers / artisans a) SC/ST/Tribals b) Others	Project Affected Families : 42 Number of Rural Families : 42 Number of Urban Families : Nil  (a) SC-05, ST-15  (b) 22 (After considering recent inclusion of Tamang and Subba communities in ST)
9.	Financial Details. a) Project cost as originally planned.  b) Actual expenditure incurred on the project so far.  c) Allocation made for the EMP.  d) Actual Expenditure incurred as on the Environmental management so far.	(a) Rs. 938.29 Crores at Oct'2019 PL including IDC &FC and bid amount of Original allocation of Rs. 165 Crores.  (b) 1006.93 Cr. (31 March 2024) by JPCL after take over by NHPC including JPCL's acquisition cost on accrual basis.  (c) Original allocation was Rs.10.525 crores which was revised to Rs. 11.62 Crores.  (d) Rs. 9.84 Crores (As per <i>Annexure-I</i> ).
10.	Forest land requirements a) Status of approval for diversion of forest land for non-forestry use.  b) The status of clear felling in forestland.	(a) (i) MoEF&CC, vide letter No 3-SKC 072/2007-SHI/2410-21, dated 26 <sup>th</sup> Dec. 2007 has approved diversion of 24.7523 ha of forestland; (ii) Additional forestland of 0.20 ha vide Letter No. 3 SKC072/2007-SHI/2861-62 dated 9 <sup>th</sup> January 2012. (iii) Additional 1.2721 ha forestland vide letter No. FP/SK/HYD/IRRIG/402342/2022/178 dated 06 <sup>th</sup> Nov 2023  (b) Data Not available as the previous Project proponent had not provided data during handing over of project to the present proponent (M/s JPCL, a wholly owned subsidiary of NHPC) in March 2021.
11.	Status of construction a) Date of commencement (Actual and Planned)	(a) Date of Start 1 <sup>st</sup> July, 2008 by Jal Power Corporation Limited (JPCL), the previous proponent. Date of Re-start of Project: 30.03.2021 by Jal Power

	b) Date of completion (actual and /or planned)	Corporation Limited (A wholly Owned Subsidiary of NHPC Ltd.) i.e. date of investment Approval by Govt. of India.  (b) Planned: May, 2025
12 .	Reasons for delay, if the project is yet to be started	The project was started by Jal Power Corporation Limited in July 2008. However, the construction of the project was stuck up since November 2013 due to financial crisis. Subsequently the corporate creditors invoked CIRP through NCLT. Subsequent to approval of Resolution Plan by Hon'ble National Company Law Tribunal (NCLT), NHPC Ltd. has acquired the JPCL as a going concern on 31.03.2021. Now, the balance construction works of Rangit-IV H.E. Project is being carried out by Jal Power Corporation Limited (A wholly Owned Subsidiary of NHPC Ltd.)
13 .	Details of the site visits: a) By Monitoring Committee          b) By Regional Office	(a) A Monitoring Committee was constituted by Additional Director (IA), MoEF, New Delhi vide letter dated 14.01.2009 and four meetings had been conducted. Last meeting was held on 30 <sup>th</sup> January 2013. However, due to stoppage/stuck up of the project further monitoring committee meetings could not be conducted by the then Project Proponent.  A new Multidisciplinary Monitoring Committee has been formed by MOEF&CC(New Delhi) vide letter No. F.no.J-12011/11/2007-IA.I(R) dated 23.09.2022 in pursuance to the taking over of M/s JPCL by NHPC Ltd. on 31.03.2021.  (b) No. of visit : 08 (Last visit was held on 30.01.2013 during the period of previous Proponent i.e M/s JPCL)
14 .	Brief note on the status of compliance of the conditions stipulated by MoEF.	Brief note on compliance status of conditions is mentioned at <i>Annexure-II</i> .

- Note: Environment Clearance (EC) letter dated 16.05.2007 was issued to M/S JPCL (the previous Project Proponent) which had submitted the last six monthly report to MOEF&CC vide letter dated JPCL:JT:ADMN:2014 Dtd. 12.01.2015 addressed to MOEF, Shillong.
- NHPC had taken over the M/s JPCL on 31.03.2021. Consequent upon the taking over of M/s JPCL by NHPC, MOEF&CC vide its letter dated 23.02.2022 clarified that the conditions stipulated in EC shall now be complied by M/s JPCL (a wholly owned subsidiary of NHPC Ltd.).
- Accordingly, M/s JPCL (a wholly owned subsidiary of NHPC Ltd.) has started submission of six monthly report vide letter dated 31.05.2022 (ending March, 2022). The six monthly report also contains the data/expenditure/compliance aspect related to EC as reported by the then project proponent (M/s JPCL) in the last six monthly report dated 12.01.2015 submitted to the ministry.

<p style="text-align: right;"><b><u>Annexure-1</u></b></p> <b>Details of expenditure incurred on Environmental Management Plans of Rangit-IV HEP</b>				
Sl. No	Items	Estimated Cost (Rs. Lakh)	Expenditure (in Rs.) incurred by the M/S JPCL, the previous Project Proponent up to 30.03.2021.	Expenditure (in Rs.) after takeover of JPCL by NHPC Ltd. (Exp. till March, 2024)
1	Sanitary facilities in labour camps	10.0	4,94,343.00	16,33,768.00*
2	Solid Waste Collection and Disposal system	29.9	8,08,572.00	72,300.00*
3	Management of impacts due to construction of roads	142.9	66,47,365.00	---
4	Restoration of Quarry sites	16.1	---	---
5	Restoration and Landscaping of Construction sites of Quarry sites	3.0	19,000.00	---
6	Green belt Development	3.1	5,40,732.00	---
7	Compensatory Afforestation	52.8	67,57,337.00	5,93,095.00
8	Public Health Delivery System	105.1	21,88,804.00	19,57,776.00*
9	Construction of settling tanks at construction sites	5.0	4,61,725.00	---
10	Sustenance of Riverine Fisheries	75.0	-----	---
11	Catchment Area Treatment Plan	346.59	2, 00,00,000 (Deposited to Forest Environment & Wildlife Management Deptt. Government of Sikkim)	---
12	Reservoir Rim Treatment Plan	41.0		
13	Forest Protection Plan	52.2	Being implemented by contractors	1,10,06,899.00*
14	Wildlife Conservation Plan		As per MoEF vide letter no. 3-SKC 072/2007-SHI/2419 dated 26th Dec 2007(point-v), the proposed special wildlife conservation plan appears redundant, hence not required.	---
15	Resettlement and Rehabilitation Plan	50.0	43,99,000.00	---
16	Muck Management Plan	142.5	3,17,90,471.00	---
17	Purchase of instruments.	7.5	1,83,928.00	---
18	O&M cost	53.2	---	---

19	Environmental Monitoring during construction phase.	26.5	15,12,901.00	23,13,880.00 <sup>#</sup>
20	Renewal of consent from State Pollution Control board w.e.f. 2014-15 to 2023-24		---	50,60,000.00
	Sub Total(Rs)	1162.39	7,58,04,178.00	2,26,37,718.00
	Grand Total(Rs) (Total expenditure since start of construction of Project)		<b>9,84,41,896.00</b> <b>Say, Rs 984.41 Lakh</b>	

**Note:**

\* Expenditure incurred by major contractors of Rangit-IV HEP, as per Annexure –IIA, IIB, IIC, IID and IIE.

# Expenditure incurred by both Rangit-IV HE Project establishment (Rs. 21,97,060/-) and major contractors of Rangit-IV HEP( Rs.1,16,820/- as per Annexure –IIC).

**Annexure-II****Part-A: Specific Conditions:**

Sl. No.	Conditions stipulated in EC letter dated 16.05.2007, Rangit-IV	Status of Compliance (as on March 2024).
i	Catchment Area Treatment Plan has been proposed should be completed in three years.	<ul style="list-style-type: none"><li>• The previous project proponent had deposited Rs. Two Crore to Forest Environment &amp; Wildlife Management Department, Government of Sikkim.</li><li>• The budget provision for CAT Plan in the Environment Management Plan was Rs 206.4 lakh during the year 2007-08. The estimated provision was scheduled for four years for implementation of engineering and bioengineering works and three years of maintenance cost.</li><li>• Govt. of Sikkim vide letter no. 1225/GOS/FEWMD dated 28.03.12 had revised the amount of CAT plan to Rs. 346.59 lakhs (three crore forty six lakhs and fifty nine thousand) as per the revised labour wages and escalation in cost of other construction material.</li><li>• CAT works are being executed by Land Use &amp; Environment Division, South Sikkim and West Sikkim. Matter is being pursued to get the latest progress report.</li></ul>
ii	If a Wildlife and/or National Parks exist with 10 Km from the radius of the project site, clearance under the Wildlife (Protection) Act, 1972 should be obtained.	No Wildlife or National Parks exist within 10 Km from the radius of Project site, hence no clearance from the Indian Board for Wildlife (IBWL) is taken in reference to MOEF&CC letter No 26.12.2007 (point-v, Forest Clearance).
iii	The Project Affected Persons (PAPs) should be Rehabilitated and Resettled as per R&R package of NPRR-2003.	The R & R package was approved by Government of Sikkim and full payments have been made to the concerned District Collectors (West & South Sikkim) for disbursement to all the beneficiaries by erstwhile JPCL.

iv	A Monitoring Committee for R&R should be constituted which must include representative of Project Affected Persons from SC/ST and a women beneficiary.	A Monitoring committee for finalization of R & R package was constituted and finalized by Government of Sikkim and full payment has been made to all the beneficiaries.
v	All the equipment which are likely to generate high noise levels are to be fully mollified. (Noise Reduction Measures)	All the possible noise generating machineries are being maintained regularly and contractors have been strictly directed to have timely maintenance of all their equipment's which are likely to generate high noise. All the Diesel Generators (DGs) working at the sites are having an acoustic enclosure to control the noise generating from DGs which conforms with the norms of State Pollution Control Board, Sikkim.
vi	Consolidation and Compilation of the muck should be carried-out in the muck dump sites and the dump sites should be above high flood level. Suitable retaining walls are constructed to develop terraces so as to support the muck on vertical slope and for optimum space utilization. The loose muck should be compacted layer wise. The muck disposal area will be developed in a series of terraces of Boulder crate wall and masonry wall to protect the area/muck from flood water during monsoon.	All the dumping areas located in both Forest and Private land are approved by Government of Sikkim. Detailed standard Engineering specifications have been adopted by way of construction of Gabion walls. The work is being done strictly as per the area requirement for optimum disposal of muck. The crate walls constructed at all the dumping sites are well above the high flood level to prevent the area/muck from flood water during monsoon.  Terrace construction/bench development at dumping area nos. 1, 6 & 7 is completed by erstwhile JPCL (previous project proponent). A suitable terrace has been constructed for laying the impervious fertile soil for necessary plantation work.
vii	The dam will act as a barrier to the free movement of Migratory fish species. A hatchery should be developed for stocking, as proposed in the Environment Management Plan.	Regarding implementation of Fish Management Plan, the then project proponent (M/s JPCL) had consulted with the Central Inland Cold Water Fisheries Research Institute, Bhimtal, Uttarakhand for providing necessary consultancy services regarding the implementation of Fish Management plan. However, the response of institute is awaited.  Subsequent to the taken over of M/s JPCL by NHPC, matter related to implementation of Fish Management Plan under EMP of Project was taken up with Directorate of Fisheries, Government of Sikkim. The

		<p>officials from Directorate of Fisheries, Government of Sikkim had visited the area around Project in the month of Nov. 2023 to finalize a site for development of hatchery. Accordingly, a site in Vill.-Sikkip, Distt-Soreng has been identified for development of hatchery with the objective of sustenance of endemic fisheries. In this regard, a proposal for construction of Fish farm at Sikkip(Reshi), District Soreng) with Financial Implication of Rs. 1.65 Cr. has been submitted by Directorate of Fisheries, Government of Sikkim to Project (JPCL (a Subsidiary of NHPC). The proposal is under review by Project.</p>
<b>Part-B: General Conditions :</b>		
i	Adequate free fuel arrangements should be made for the labour force engaged in the construction work at project so that indiscriminate felling of trees is prevented.	<p>Presently, mess facility is being provided by the contractor to their work forces.</p> <p>The details of expenditure on account of free fuel and electricity are attached at <b>Annexure-IIA</b>.</p>
ii	Fuel depot may be opened at the site to provide the fuel (Kerosene/wood/LPG). Medical Facilities as well as recreational facilities should also be provided to the labourers.	<p>Fuel (LPG) is being procured by the Contractors from the local market as and when required.</p> <p>Medical facilities are provided by the contractors to the laborers. The labor's camps are being equipped with recreation facilities. The details of expenditure on account of medical facilities are enclosed at <b>Annexure-IIB</b>.</p>
iii	All the laboures to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.	<p>Health screening and check-ups of laborers are carried out before engaging them in works. Medical facility is being provided to the laborers. Vaccination of the laborers for COVID-19 has been carried out by JPCL/Contractors.</p>
iv	Restoration of Construction area including dumping site of excavated materials should be ensured by leveling, filling up of borrow pits, Landscaping etc. The area should be properly treated with suitable plantation.	<p>Environment friendly measures are undertaken for dumping of Muck at designated dumping yards. Dumping areas are being provided with adequate retaining structures such as crate walls, RRM wall etc. as per requirement. After dumping the areas are being leveled. Since the works have commenced recently, the nallahs and river sections as per site requirement shall be provided with adequate protection measures such as</p>



		<p>crate wall and concrete plugs. All precautionary measures will be taken as per the statutory requirements with progress of works.</p> <p>The status of muck disposal is attached at <b>Annexure-III</b>.</p>
v	Adequate financial provisions should be made in the total budget of the project for implementation of the above suggested safeguard measures.	Financial provisions has been made in total budget of the project for implementation of the above suggested safeguard measures.
vi	A Multidisciplinary Monitoring committee in consultation with the Ministry should be constituted with Ecologist, Environment Scientists, Conservationists and experienced administrators etc. to oversee the effective implementation of the suggested safeguard measures.	<p>A monitoring committee was constituted by Additional Director (IA), MoEF, New Delhi vide letter dated 14.01.2009 and four meetings were conducted. However, due to stoppage up of the project further monitoring committee meeting could not be conducted.</p> <p>A new Multidisciplinary Monitoring Committee has been formed vide letter no. F.No.J-12011/11/2007-IA.I(R) dated 23.09.2022 in pursuance to the taking over of M/s JPCL by NHPC Ltd in March 2021.</p>
vii	Six monthly monitoring reports should be submitted to the ministry and its Regional Office, Shillong for review.	<p>The last report was submitted by previous project Proponent (M/s JPCL) vide letter dated 12.01.2015.</p> <p>After taken over of M/s JPCL by NHPC Ltd. on 31.03.2021 and in compliance to the MOEF&amp;CC letter dated 23.02.2022 regarding Environment Clearance, the last report was submitted to Ministry and its integrated R.O of MOEF&amp;CC at Kolkata vide letter No. NH/EDM/219/610 dated 28.11.2023 to email ID: iro.kolkata-mefcc@gov.in and yogendra78@nic.in to MOEF&amp;CC, New Delhi.</p>

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**Annexure-IIA****Expenditure incurred on Community kitchen & Free Fuel by Major Contractors Under Forest Protection Plan of EMP of Rangit-IV HE Project**

**Details:** Major contractors of Project have established community kitchens/mess facilities for labors and providing free fuel (LPG and electricity) to labors engaged by them. Expenditure incurred on these facilities by Major contractors after taking over of JPCL by NHPC is given in the following table.

<b>Sr. No.</b>	<b>Name of the Contractor</b>	<b>Amount (Rs) (from start of construction to 30/09/2023)</b>	<b>Amount incurred (Rs.) (from 01/10/2023 to 31/03/2024)</b>
1.	M/s Fitwell Constructions	3,23,679/-	2,26,500/-
2.	M/s Rithwik-HIPL Joint Venture	71,29,076/-	25,09,434/-
3.	M/s PES Engineers Pvt. Limited	5,22,615/-	2,95,595/-
<b>Total (Rs.)</b>		<b>79,75,370/-</b>	<b>30,31,529/-</b>

**Total Cumulative Expenditure by Major Contractors after taking over of JPCL by NHPC- Rs.1,10,06,899.00/-**

**Annexure-IIB****Expenditure incurred on Medical and Health Facilities to public i.e. Labors/locals etc.by Major Contractors**

**Details:** Major contractors of Project i.e. M/s Rithwik-HIPL JV has established a Health care unit at Project colony equipped at Sikkip with one doctor, one pharmacist, one no. of oxygen cylinder & three ambulances to provide free treatment of labors/site force. M/s Fitwell Construction has provided first aid kits at their sites. Expenditure incurred on these facilities by Major contractors after taking over of JPCL by NHPC is given in the following table.

<b>Sr. No.</b>	<b>Name of the Contractor</b>	<b>Amount (Rs) (from start of construction to 30/09/2023)</b>	<b>Amount incurred on Medical and Health Facilities (Rs) (from 01/10/2023 to 31/03/2024)</b>
1.	M/s Fitwell Constructions	6,000/-	2000/-
2.	M/s Rithwik-HIPL Joint Venture	15,36,041/-	3,53,939/-
3.	M/s PES Engineers Pvt. Limited	50,345/-	9451/-
<b>Total (Rs)</b>		<b>15,92,386/-</b>	<b>3,65,390/-</b>

**Total Cumulative Expenditure by Major Contractors after taking over of JPCL by NHPC - Rs.19,57,776.00/-**

**Annexure-IIC****Expenditure incurred on Environment Monitoring (Air, Water & Noise quality) by Major Contractors**

**Details:** Air, Water, Noise quality monitoring is being conducted by the major Civil contractor of Project from MoEF & NABL Certified laboratory. Expenditure incurred on Air, Water Quality testing etc. by Major Civil contractor after taking over of JPCL by NHPC is given in the following table-

<b>Sr. No.</b>	<b>Name of the Contractor</b>	<b>Amount (Rs) (from start of construction to 30/09/2023)</b>	<b>Amount incurred on Environment Monitoring (Rs) (from 01/10/2023 to 31/03/2024)</b>
1.	M/s Rithwik-HIPL Joint Venture	58,410/-	58,410/-
<b>Total (Rs.)</b>		58,410/-	58,410/-

**Total Cumulative Expenditure by Major Contractors after taking over of JPCL by NHPC - Rs.1,16,820/-**

**Annexure-IID****Details of Sanitary facilities in labor camps by Major Contractors**

**Details:** All major contractors of Projects are providing treated potable water to labors. Septic tanks have also been provided in all the labor camps. Expenditure incurred on these facilities by Major contractors after taking over of JPCL by NHPC is given in the following table.

<b>Sr. No.</b>	<b>Name of the Contractor</b>	<b>Amount (Rs) (from start of construction to 30/09/2023)</b>	<b>Amount incurred on Sanitary facilities in labor camps. (Rs) (from 01/10/2023 to 31/03/2024)</b>
1.	M/s Fitwell Constructions	33,000/-	6,000/-
2.	M/s Rithwik-HIPL Joint Venture	13,63,200/-	1,92,000/-
3.	M/s PES Engineers Pvt. Limited	39,568/-	Nil
<b>Total (Rs.)</b>		14,35,768/-	1,98,000/-

**Total Cumulative Expenditure by Major Contractors after taking over of JPCL by NHPC - Rs.16,33,768.00/-**