

## Chenab Valley Power Projects (P) Ltd

A Joint Venture of NHPC (A Govt of India Enterprise, JKSPDC (A Govt of J&K Undertaking)

### Pakal Dul Hydro Electric Project

Chenab Nagar - II, Kishtwar, (J&K) - 182206

CIN NO. U40105JK2011PTC003321

CVPP/PDHEP/GM (I/c)/2021 / 2216.

Dated: 30.11.2021

Deputy Director General (Central),

Northern Regional Office,

Ministry of Environment, Forests and Climate Change, Govt. of India,

Bays No. 24-25, Sector 31-A, Chandigarh- 160030

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Sub: Pakal Dul HE Project (1000 MW) in District Kishtwar, J&K – Submission of Environment Clearance Compliance Report (ECCR) for the period from April 2021 to September 2021.

Ref: Environmental Clearance granted to the Project vide letter no. J-12011/51/2007-IA dated 29.02.2008 and transferred in favour of CVPP vide letter no. J-12011/51/2007-IA dated 12.07.2012.

Sir,

We are enclosing herewith Six Monthly Environment Clearance Compliance Report (ECCR) in respect of Pakal Dul HE Project for the period from April 2021 to September 2021 for your kind information.

Thanking you and Warm Regards.

Yours Sincerely,

General Manager (I/c)

Pakal Dul HE Project

Email: [gmpdhep@gmail.com](mailto:gmpdhep@gmail.com)

Copy to:

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3. Member Secretary, JK Pollution Control Committee,  
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Email: [membersecretaryjkspcb@gmail.com](mailto:membersecretaryjkspcb@gmail.com)
4. General Manager, Planning Division, CVPPPL, Jammu.



## Pakal Dul Hydroelectric Project (1000MW)

### **1. Brief Introduction of Project**

Pakal Dul (1000MW) HE Project was initially conceived by NHPC and later on got transferred to Chenab Valley Power Projects [P] Limited (CVPPPL). CVPPPL is a Joint Venture Company of NHPC Limited & JKSPDC incorporated on 13/06/2011; presently, entrusted for execution of 04 Hydroelectric Projects namely Pakal Dul, Kirthai-II, Kiru and Kwar with aggregate installed capacity of 3094 MW at Chenab River Basin in Distt Kishtwar of Jammu & Kashmir.

Pakal Dul HE Project is proposed on river Marusudar, a tributary of Chenab in district Kishtwar of J&K. The project envisages construction of a 167 m high Dam, 2 nos. of Head Race Tunnel of 7.20M diameter and 10 km length, an underground Power House with 4 units of 250 MW each. The annual energy generation will be 3330 MU.

### **2. Status of Statutory Clearances**

Status of statutory clearances is tabulated below:

Techno- Economic Appraisal (TEA)	Accorded by CEA on 03.10.2006 <i>(Transferred in favour of CVPPPL on 06.08.2012)</i>
CCEA Approval	Accorded in favour of CVPPPL on 28.10.2014
Environmental Clearance	Accorded by MoEF to NHPC on 29.02.2008 <i>(Transferred in favour of CVPPPL on 12.07.2012)</i>
Forest Clearance	Clearance for diversion of 146.66 Ha of forest land accorded by GoJK on 15.12.2015. Clearance for diversion of 12.125 ha forest land accorded by GoJK on 26.06.2018. Clearance for felling of left out trees on already diverted forest land accorded on 17.07.2018. Clearance for felling of trees coming under already diverted forest land at right bank of river Marusudar stands accorded vide Order No. 531-(JK)FST of 2019 dated 12.12.2019.  Clearance for diversion of 0.6434 ha of Forest land at left bank of river Marusudar stands accorded vide Government order no. 17(JK)FST of 2020 dated 30.01.2020.
Wildlife Clearance	Clarence for diversion of 195.96 Ha of forest land (188.76 ha wildlife land and 7.2 ha Forest land) accorded by GoJK on 29.11.2016 after grant of approval by Hon'ble Supreme Court of India.
NOC from J&K State Pollution Control Board	Consent to Establish for Pakal Dul Project issued by J&K State Pollution Control Board in March

2016.

Status of Other Clearances Clearance from Fisheries Department and clearance from Hydraulic Division (PHE & Irrigation) have been received in the month of February 2016.  
NOC from mining department has been obtained on dated 23.02.2017.

R&R Plan The J&K govt. has approved the Rehabilitation and Resettlement plan of the project vide Govt. Order dated 22.02.2017 and 07.03.2019, total payment of Rs 54.09 Cr has been released as on date in favour of Commissioner Rehabilitation and Resettlement, Pakal Dul HEP (DC Kishtwar) for implementation of RR Plan.

Disbursement of RR benefits is in progress and a payment of Rs 50.68 Crores (upto 12.11.2021) to Project Affected Families (PAFs) has been made so far.

### **3. Status of Private Land Acquisition**

Final awards for acquisition of Power House area land and Reservoir area land have been accorded. A total amount of Rs 115.84 Crores as per final awards of land acquisition amounting to Rs. 91.56 Cr. issued to the Project till date has already been deposited with the concerned Collectorate for further disbursement to landowners.

### **4. Status of Tender/Award**

The Hon'ble High Court of J&K pronounced its judgement on **28.01.2017** in favour of CVPP Ltd. wherein cancellation of tenders was upheld. Accordingly, tendering process on Package mode for the Project was taken up in following packages of major works and the present status of the tenders and awarded works is as under:

**Dam Package** : Dam Package awarded to M/s Jai Prakash Associates Ltd on **21.06.2018** along with Diversion Tunnel and HRT from upstream side. The site has been handed over to M/s Jaiprakash Associates Ltd. The Contractor has started the site mobilization and infrastructure works. The status of construction works is as-

#### **Diversion Tunnel:**

Excavation of Diversion Tunnel Heading and Benching has been completed on **27.11.2020**. River diversion achieved on **01.11.2021**.

### **Excavation of HRT Adits:**

Portal development works for Adit to HRT has been completed. Excavation work of Adit-1 to HRT-2 has been completed and reached into HRT-2 on 18.03.2020. Adit-I A to HRT -1 has been completed and reached into HRT-1 on 31.07.2021. Excavation of HRT-2: The cumulative progress till date is 1020.99 m, out of total length of 2086.708 m. Excavation of HRT-1: The cumulative progress till date is 858.47 m, out of total length of 2034.48m.

### **Intake Gate Platform:**

Drain work and PCC work in berm at EL 1740 m are completed for 100% length. Excavation for 2nd bench up to EL 1721 and third bench up to El 1706 m is in progress. Further, Reinforcement fixing and binding for cladding wall of 20 m length is completed from EL 1721.25 m to 1722.15 m and thick raft concrete pouring is in progress. Excavation below Dam Top road and Concreting of Drain Wall and Slope protection works in Progress.

### **Tunnel Spillway:**

Tunnel Spillway Gate Shaft Platform: Excavation below EL 1709m is in progress and Wire mesh fixing is in progress from EL 1714 m to 1710 m.

Approach road works to Outlet Tunnel Spillway is in progress and out of 240 m length of road formation cutting of 200 m length has been completed.

Tunnel Spillway Outlet: Excavation of Overburden is done from EL.1652 m to EL 1612 m. Wire mesh work above EL1612m has been completed up to 50 m length. Excavation of hard rock in progress at EL 1580 m and Dry Shotcrete is in progress from EL 1611m to EL 1625m. Tunnel Spillway Inlet: Overburden between El 1608 m to El 1639 m removed. Rock Anchor installation done.

### **Surface Spillway:**

- Excavation completed for first bench at El 1738m up to section 11-11. Further Excavation for first bench from section 11-11 to 15-15 is in progress. Excavation for next bench at El 1723 is under progress, has reached upto El 1730 between section

1-1 to 11-11 in D/s side and to 23-23 in U/s side.

- Slope Protection above EL 1738 m is under progress in between section 12-12 to 15-15.
- Excavation from EL 1738 to EL 1742 m is completed and slab concrete at EL 1738 m is completed.

**Power Package**      **House** : Letter of Award has been issued to M/s Afcons-JAL JV on **21.02.2018**. Site mobilisation works started by a team of M/s Afcons-JAL-JV w.e.f **15.03.2018**. Site handing over activities are completed. The status of construction works is as-

**Main Access Tunnel (MAT):**

Excavation of MAT (Main Access Tunnel) to Power House of total length of 267 m has been completed on **19.12.2018**.

**Adit to PH Top:**

Excavation of Adit to Power House of total length of 160 m has been completed on **13.12.2018**.

**Power House Cavern:**

Excavation of Power House Cavern Crown of total length of 166 m has been completed on 15.09.2019. Excavation of Service Bay Area has been completed. Excavation of PH Unit 1 to Unit 4 upto EL 1253 m is in progress. Excavation of Control Room upto EL. 1253 m is in progress. Raft Concreting on service bay completed on 14.01.2021. Concreting of B-line EOT Crane beam at EL 1272.30 M in service bay area completed on 17.04.2021.

**MIV Cavern:**

Excavation of Adit from MAT Junction to MIV Chamber top of total length of 159.28 m has been completed on **05.12.2019**. Excavation of Pilot to MIV of total length of 107m has been completed on **28.06.2020**.

Enlargement of MIV Cavern of total length of 107m has been completed on **14.10.2020**. Benching down of MIV Cavern (EL 1257- 1245.5 m) has been completed. The excavation for Pit from EL.1245.5 to 1241.5 m for servomotor shall be carried after completion of all four Lower Horizontal Pressure

Shafts from MIV to Power House. Raft concreting of service bay in MIV has been completed on 29.06.2021. EOT beam in service bay for handed over to M/s Voith for E&M work.

#### **Transformer Hall and Bus Ducts:**

Excavation of Adit to Transformer Hall of total length of 74 m completed on 31.03.2019. Excavation of Pilot to Transformer Hall of length of 123.60m completed on 30.09.2019. Side Slashing (1A) has been completed on 26.08.2020 and Side Slashing (1B) has been completed on 04.09.2020. Benching down of Transformer Hall (EL 1264.6 m to EL 1263 m) completed. Benching down of Transformer Hall (EL 1263 m to EL 1260 m) completed. Excavation of Connecting Tunnel from Transformer Cavern to Power House has been completed as 30.12.2020. Excavation of all 4 nos. of Bus Ducts completed on 24.02.2021. Invert level (EI 1260) achieved upto Bus duct No.2. Reinforcement for raft concreting has been completed and handed over to M/s Voith for E&M work. Shuttering work for raft concreting work upto unit 1 is in progress. Raft concreting from Grid 1 to 5 has been completed on 23.09.2021

#### **Surge Shafts:**

The Portal Work for Surge Gallery Adit (Road Tunnel) Started on 02.09.2020 with a Cumulative of 453.5 m progress achieved till date. Adit to Surge Shaft Bottom-1 has been completed on 27.02.2020. Adit to Surge Shaft Bottom-2 is in Progress. HRT-1(SS-1 Bottom) (SS1 to HRT 1B) & HRT-2 (SS-2 Bottom) has been completed on 16.08.2020.

#### **Valve House:**

Excavation of Access Tunnel to Valve House is completed. Excavation of Valve House (Central heading) has been started and 67m achieved out of total length of 101.50m.

#### **Pressure Shafts:**

Excavation of Adit to Pressure Shaft Bottom of total length of 151 m has been completed on 03.07.2020.

Pressure Shaft Lower Erection Gallery of total length of 88 m completed on 11.09.2020.

Adit to PS Top (Bifurcation from Adit to Valve House) of total length of 128.88 m has been completed on 31.12.2020. Excavation of HRT/PS

6.0m dia: D/s of SS1 (Horizontal PS-1) of total length of 221 m has been completed on 01.03.2021. Excavation of HRT/PS 6.0m dia: D/s of SS2 (Horizontal PS-2) of total length of 190 m has been completed on 19.04.2021. Link Adit from HRT-1 to HRT-2: Link Adit to HRT-1 and HRT-2 of total length of 44m has been completed on 10.07.2020. Excavation of Pressure Shaft (Vertical): 113m achieved out of total length 291m.

**Cable/Ventilation Tunnel:**

Excavation of VT/Cable Tunnel: 46.5 m achieved out of total length of 198 m and the remaining excavation shall be carried out from Switch Yard Area.

**Tail Race Tunnel:**

Excavation of Adit to TRT: 222m achieved out of total length 259 m. Excavation of TRT-1: 31m achieved out of total length 89 m.

**Drainage Galleries:**

Excavation of Drainage Gallery (D/S) has been completed. Excavation of Drainage Gallery (U/S): - 96 m achieved out of total length of 186 m.

**HM Package**

- i. LOA has been issued to **M/s PES Engineers Pvt. Ltd** on dated **26.08.2019**.
- ii. Contract agreement signed between CVPPPL and M/s PES on 21.10.2019. Detailed Engineering of HM components including submission/checking of drawings is in progress.
- iii. Contractor has started construction of site fabrication shop.
- iv. Design and drawings of Pressure shaft (Liners & Bends) and Trash Racks has been approved.
- v. 1<sup>st</sup> stage embedded parts of intake Trash rack panels have been supplied.
- vi. Fabrication of HM Workshop at Power House site has been started.
- vii. Fabrication of Pressure shaft liners has been started at Sitarganj (Uttarakhand) workshop of M/s PES Engineers Pvt. Ltd.
- viii. MDCC-1 issued on 29.04.2021 for despatch of 28 Nos. Half shells (14 Nos. ferrules) from Sitarganj.
- ix. 20 Nos. Half Shells (10 Nos. Ferrules) against MDCC-1 are delivered at Shalimar, Kishtwar.
- x. MDCC-2 issued on 05.07.2021 for despatch of 52 Nos. Half Shells (26 Nos. ferrules) from Sitarganj.
- xi. MDCC-3 and MDCC-4 has been issued.



- xii. 58 Nos. Half Shells (29 Nos. Ferrules) against MDCC-3 are delivered at Shalimar, Kishtwar.
- xiii. 55 Nos. of Half shells out of 64 Nos. against MDCC-4 have been received at site.
- xiv. Total of 800 MT of Pressure Shaft Liners is received at site till date.

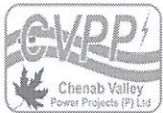
**E&M package**

- : i. LOA has been issued to M/s Voith Hydro Ltd. on dated 02.01.2019.
- ii. Detailed Engineering of E&M equipment's including submission/checking of drawings, layout plan are in progress.
- iii. Turbine Model testing conducted from 11th to 15th Nov 2019 at Hydraulic Research laboratory, Heidenheim, Germany.
- iv. Draft Tube Liners, Cones & their embedment, Discharge Rings & accessories for all units received at site during Jan-21 to Mar-21.
- v. 0.2 Lot of 1 Lot Earthing Material (first lot) for Service Bay delivered in Oct-2020.
- vi. GSU Transformer rail and embedment delivered in Dec-2020
- vii. LT rail fixing arrangements of PH EOT crane delivered in Jan-2021
- viii. Generator Transformer rails fixing arrangement received in April-2021
- ix. Stage embedment delivered during May-21/Jun-21
- x. Power House EOT Crane rail with clamp & accessories including shrouded type DSL reached at site.
- xi. PH EOT Crane-1 No. is ready to be dispatched for delivery at site for installation.
- xii. Laying of Earthmat for following area completed:
- xiii. Earthmat in PH Service bay completed in Dec-2020.
- xiv. Earthmat in MIV Service bay completed in May-2021.
- xv. Earthmat in GT Interconnecting Tunnel completed in May-2021.
- xvi. Earthmat in Bus Duct U#1, U#2 completed in May-2021.
- xvii. Earthmat in Transformer cavern is in progress.
- xviii. Installation of GT rails and embedment in service bay area completed in Jan-2021.
- xix. Installation of PH EOT crane embedment in

- service bay area completed in Apr-2021.
- xx. 260 T PH EOT Crane: Erection works of PH EOT Crane are in progress. Crab components installation in progress. Erection of 1 no. connecting/tie beam on D line side has been completed and erection of 1no. Connecting/tie beam on B line side is in progress. Rope drum of auxiliary hook has been erected on crab beam after lifting of both the girders.
  - xxi. In Transformer Cavern: -
  - xxii. Erection of GSU Rail embedments has been completed.
  - xxiii. Installation of Jacking Plates is in Progress.
  - xxiv. HRT-TBM Package:
  - xxv. The LOA has been issued to M/s Larsen & Toubro Limited on dated 03.07.2020.
  - xxvi. Contract agreement signed between CVPPPL and M/s Larsen & Toubro Limited on 14.08.2020.
  - xxvii. Mobilisation, Infrastructure and Design works is in progress.
  - xxviii. Excavation for TBM Portal has been started. Contractor has ordered 2 TBMs.
  - xxix. Development of site of residential colony is in Progress.
  - xxx. Approval of Geotechnical Investigation plan and survey has been granted.

#### **5. Status of other allied infrastructural work of Project.**

1. Bailey Suspension Bridge of 320 ft length over river Chenab has been commissioned on 14.09.2015.
2. Main Access Tunnel (MAT) and Construction Adit to Power House (CAP) Portal works are completed.
3. 5.71 Km. road from Bailey Suspension Bridge to HRT (TBM) portal is completed in Power House area.
4. Infrastructural works like approach roads to Dam & Power House are in progress and construction of bridge for Dam site at Bhandarkot is completed and is open for vehicular movement.
5. LOA has been issued on dated 24.05.2019 for Construction of Steel Truss Bridge at Kwar (Dul) for Power House site has been completed.



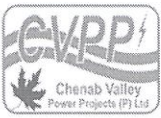
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**PakalDul Hydro Electric Project**  
Chenab Nagar – II, Kishtwar, (J&K) – 18220  
CIN NO. U40105JK2011PTC003321  
Ph No. 01995-260661  
Fax No. 01995-260661

**ANNEXURE-I**

**Six Monthly EC Compliance Report of Pakal Dul HE Project (1000 MW)**  
**(April 2021 to September 2021)**

<b>1</b>	<b>Name of Project</b>	<b>Pakal Dul HE Project</b>
<b>2</b>	<b>Type of Project</b>	<b>Hydro Electric Project</b>
<b>3</b>	<b>Clearance letters OM No. and date</b> <b>(a) Environment Clearance</b>  <b>(b) Forest Clearance</b>	<p>(a) Letter no. J-12011/51/2007-IA dated 29.02.2008 and transferred in favour of CVPPPL vide letter no. J-12011/51/2007-IA-I dated 12.07.2012.</p> <p>(b) Government order no. 334- FST of 2015 dated 15.12.2015 of GoJK for 146.6613 Ha land on Right Bank of river Marusudar.</p> <p>Government order no. 289-FST 2016 dated 29.11.2016 of GoJK with Corrigendum dated 26.12.2016 for 195.9619 Ha of Forest land (188.7619 ha of former KHANP land and 7.2 ha of Forest land) on Left Bank of river Marusudar.</p> <p>Government sanction for diversion of 12.125 ha of Forest land on left bank of river Marusudar stands accorded vide Govt. order no 207-FST of 2018 dated 26.06.2018.</p> <p>Government sanction for felling of trees coming under already diverted forest land at left bank of river Marusudar stands accorded vide Govt. order no 225-FST of 2018 dated 17.07.2018.</p> <p>Government sanction for felling of trees coming under already diverted forest land at right bank of river Marusudar stands accorded vide Order No. 531-(JK) FST of 2019 dated 12.12.2019.</p> <p>Government sanction for diversion of 0.6434 ha of Forest land at left bank of river Marusudar stands</p>



## Chenab Valley Power Projects (P) Ltd

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### PakalDul Hydro Electric Project

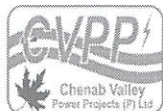
Chenab Nagar – II, Kishtwar, (J&K) – 182206

Ph No. 01995-260661

Fax No. 01995-260661

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		<p>accorded vide Government order no. 17(JK)FST of 2020 dated 30.01.2020.</p>																										
<b>4</b>	<p><b>Locations</b></p> <p>(a) District (s)</p> <p>(b) State/UT</p> <p>(c) Latitude</p> <p>(d) Longitude</p>	<p>(a) Kishtwar</p> <p>(b) Jammu and Kashmir</p> <p>(c) 33°27'30"N</p> <p>(d) 75°48'50"E</p>																										
<b>5</b>	<p><b>Address for Correspondence</b></p> <p>(a) Address of concerned Project Head (with Pin code, Telephone/Fax no.)</p> <p>(b) Address of concerned HOD in Corporate Office (with Pin code, Telephone/Fax no.)</p>	<p>(a) General Manger (I/c), Pakal Dul HE Project, CVPPP Ltd., Chenab Nagar-II, Kishtwar, J&amp;K. Pin code- 182206 Telephone:- 01995-260723/9971955066 Email:gmpdhep@gmail.com</p> <p>(b) Managing Director, Chenab Valley Power Projects (P) Ltd, Chenab Jal Shakti Bhawan, Opposite Saraswati Dham, Rail Head Complex, Panama Chowk, Jammu- 180012, J&amp;K Phone/Fax: 0191 2475516/ 2479835</p>																										
<b>6</b>	<p><b>Detail of Environmental Management Plan</b></p>	<p>Environmental Management Plans to be implemented at the project are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S. No.</th> <th>EMP</th> </tr> </thead> <tbody> <tr><td>1.</td><td>Biodiversity Conservation Plan</td></tr> <tr><td>2.</td><td>Catchment Area Treatment</td></tr> <tr><td>3.</td><td>Fisheries Development</td></tr> <tr><td>4.</td><td>Public Health Delivery System1</td></tr> <tr><td>5.</td><td>Solid Waste Management</td></tr> <tr><td>6</td><td>Provision for fuelwood/ LPG depot &amp; Energy Conservation Measures</td></tr> <tr><td>7.</td><td>Relocation &amp; Rehabilitation of Dumping sites</td></tr> <tr><td>8.</td><td>Landscaping &amp; restoration of construction areas</td></tr> <tr><td>9.</td><td>Creation of Green Belt around reservoir</td></tr> <tr><td>10.</td><td>Disaster Management Plan</td></tr> <tr><td>11.</td><td>Resettlement &amp; Rehabilitation Plan</td></tr> <tr><td>12</td><td>Environmental Monitoring Programme</td></tr> </tbody> </table>	S. No.	EMP	1.	Biodiversity Conservation Plan	2.	Catchment Area Treatment	3.	Fisheries Development	4.	Public Health Delivery System1	5.	Solid Waste Management	6	Provision for fuelwood/ LPG depot & Energy Conservation Measures	7.	Relocation & Rehabilitation of Dumping sites	8.	Landscaping & restoration of construction areas	9.	Creation of Green Belt around reservoir	10.	Disaster Management Plan	11.	Resettlement & Rehabilitation Plan	12	Environmental Monitoring Programme
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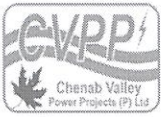
Chenab Nagar – II, Kishtwar, (J&K) – 182201

Ph No. 01995-260661

Fax No. 01995-260661

CIN NO. U40105JK2011PTC003321

<b>7.</b>	<b>Breakup for Project area (Land details)</b>	<p>Forest Land: 355.3918 ha</p> <p>Private/ Revenue Land: 177.81</p> <p>Total Land: 533.2018 ha</p>																					
<b>8</b>	<p><b>Breakup of Project affected population with enumerations of those losing house/dwelling units only, agriculture land only, both house and agriculture land and landless labours/artisans.</b></p> <p>(a) SC/ST/Adivasis</p> <p>(b) Others</p>	<p>No of affected villages:- 6</p> <p>Displaced PAFS:- 110</p> <p>Non displaced PAFs:- 656</p> <p>Total PAFs:- 766</p> <p>(a) Scheduled Tribe:- 2</p>																					
<b>9</b>	<p><b>Financial Details</b></p> <p>(a) Project cost as originally planned and subsequent revised estimates and the year of price reference</p> <p>(b) Actual expenditure incurred on the Project so far</p> <p>(c) Allocation made for Environment Management Plan</p> <p>(d) Actual expenditure incurred on EMP so far</p>	<p>(a) Project cost: 5088.88 Cr (July 2005 PL) CCEA approved: 8112.12 Cr (March 2013 PL)</p> <p>(b) Actual expenditure: Rs.1973.04 Crs (till September 2021)</p> <p>(c) Allocations for EMP (at 2013 PL): 330.32 Crs.</p> <p>(d) Actual expenditure incurred on EMP: Expenditure incurred by CVPPPL on EMP and other related activities as on date:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;">S.No</th> <th style="width: 70%;">Component</th> <th style="width: 20%;">Expenditure (Rs. in Cr)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Forest and wild life Land Diversion</td> <td style="text-align: right;">203.335</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Fund for Wildlife Management including corpus fund</td> <td style="text-align: right;">236.0</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Fisheries Development Plan</td> <td style="text-align: right;">1.96</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Biodiversity Management Plan</td> <td style="text-align: right;">2.30</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Implementation of R&amp;R plan</td> <td style="text-align: right;">54.09</td> </tr> <tr> <td></td> <td><b>Total</b></td> <td style="text-align: right;"><b>497.685</b></td> </tr> </tbody> </table>	S.No	Component	Expenditure (Rs. in Cr)	1.	Forest and wild life Land Diversion	203.335	2	Fund for Wildlife Management including corpus fund	236.0	3.	Fisheries Development Plan	1.96	4.	Biodiversity Management Plan	2.30	5.	Implementation of R&R plan	54.09		<b>Total</b>	<b>497.685</b>
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## Chenab Valley Power Projects (P) Ltd

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### PakalDul Hydro Electric Project

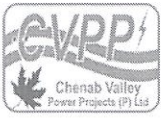
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CIN NO. U40105JK2011PTC003321

10	<b>Forest Land Requirements</b> <b>(a) Status of approval diversion of Forest Land for non-forestry use</b>	<p>(a) Forest clearance for diversion of 146.66 Ha forest land on right bank of dam/reservoir has been accorded by GoJ&amp;K on 15.12.2015. Requisite amount of Rs 17.81 Cr deposited with J&amp;K State Forest department on 15.09.2015. Forest Clearance for diversion of 188.76 Ha forest land (earlier KHANP land) on left bank of dam/ reservoir along with 7.2 Ha of Forest Land for underground works in Dul area has been accorded by GoJ&amp;K on dated 29.11.2016. Requisite amount of Rs 178.2055 Cr deposited with J&amp;K State Forest department on 18.06.2016 and the amount of Rs. 236 Crs towards wildlife management was deposited on 19.09.2016.</p> <p>Government sanction order for additional 12.125 ha of Forest land at left bank of river Marusudar stands accorded vide Govt. order no 207-FST of 2018 dated 26.06.2018. Requisite amount of Rs 6.3083663 Cr deposited with J&amp;K State Forest department on 15.05.2018.</p> <p>Government sanction order for felling of trees coming under already diverted forest land at left bank of river Marusudar stands accorded vide Govt. order no 225-FST of 2018 dated 17.07.2018. Requisite amount of Rs 7613899/- deposited with J&amp;K State Forest department on 15.05.2018. Government sanction order for felling of trees coming under already diverted forest land at right bank of river Marusudar stands accorded vide Govt. Order No. 531-(JK)FST of 2019 dated 12.12.2019. Requisite amount of Rs. 1490391/- deposited with J&amp;K State Forest department.</p> <p>Government sanction order for diversion of 0.6434</p>
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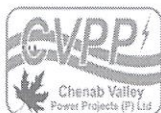
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	<b>(b) The status of clear felling of trees in Forest Land</b>	<p>ha of Forest land at left bank of river Marusudar stands accorded vide Government order no. 17(JK)FST of 2020 dated 30.01.2020. requisite amount of Rs. 505310/- deposited with J&amp;K State Forest department.</p> <p>(b) Clear felling status: The requisite amount of Rs 4.31413 Cr towards cost for extraction of trees has been deposited with J&amp;K State Forest Corporation. The work of tree felling and extraction is in progress.</p>
<b>11</b>	<b>Status of Construction</b> <b>(a) Date of commencement (actual and/or planned)</b>  <b>(b) Date of completion (actual and/or planned)</b>	<p>(a) Date of commencement (actual): Out of the Major project works, the Power House package was the first to be awarded on 21.02.2018.</p> <p>(b) Date of completion (planned): 66 months from the start of major works.</p>
<b>12.</b>	<b>Reasons for the delay (If the Project is yet to be started)</b>	N.A.
<b>13</b>	<b>Details of Site visits</b> <b>(a) By Monitoring Committee</b> <b>(b) By Regional Office</b>	<p>Nil</p> <p>Nil</p>
<b>14.</b>	<b>Brief note on the status of compliance of the conditions stipulated by MOEF&amp;CC</b>	Details are enclosed as Annexure-II.







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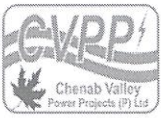
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**ANNEXURE-II**

**Status of Compliance to conditions stipulated by MOEF&CC, Govt. of India vide Environmental Clearance letter dated 29.02.2008**

S.No.	Specific Conditions	Compliance Status
i	Catchment area treatment Plan as proposed should be completed in Five years	<p>The cost provision for CAT Plan as approved by MoEF was Rs. 21.33 Crs which was revised in CCEA approval (Investment Approval by GoI) to Rs. 36.38 Crs.</p> <p>Soil Conservation Department, GoJK was requested to take up the Catchment Area Treatment works. The technical sanction of CAT Plan has been approved by J&amp;K Soil &amp; Water Conservation Department. Implementation shall start after administrative approval of the plan by Soil &amp; Water Conservation Department.</p>
ii	<p>During the construction of the project, if any person/family whose acquired land is more than 70% of the total land holding is identified, such family/person shall be treated as fully affected families. R&amp;R package proposed for the displaced families shall be extended to such families. NRRP- 2007 package will be followed for R&amp;R of PAFs.</p>	<p>The RR Plan of Pakal Dul HEP has been approved by GoJK vide Government Orders no. 12-DMRR&amp;R of 2017 dated 22.02.2017 and 11-DMRR&amp;R of 2019 dated 07.03.2019. The approved R&amp;R Plan is under implementation.</p> <p>The formulation, approval and implementation of R&amp;R plan comes under the purview of State/UT Government which has adopted a uniform approach in providing the R&amp;R benefits for the PAFs of different HE projects in J&amp;K. The recommendations of MOEFCC for considering non-displaced PAFs with more than 70% of total land holdings as displaced PAFs has not been approved by the State Government for any of the HE Project so far. Hence this provision has not been considered by Government of J&amp;K in formulation and approval of R&amp;R plan for Pakal Dul HE project.</p>

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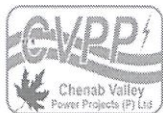


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iii	A Monitoring Committee for R&R should be constituted which must include representatives of project affected persons from SC/ST category and a woman beneficiary.	DC Kishtwar has been appointed as Commissioner, Rehabilitation and Resettlement for Pakal Dul HE Project vide Govt. Order No. 19-DMRR&R of 2017 dated 16.03.2017. Constitution of R&R committee is awaited.  Monitoring committee is to be constituted by Government under the Chairmanship of Commissioner R&R. the matter was discussed in the meeting of Empowered Committee held on 06.04.2018 under the Chairmanship of Chief Secretary, GoJK wherein the Committee has recommended the constitution of R&R committee. The formal Government order in this regard is awaited.																									
iv	The commitment made during the public hearing should be fulfilled.	Being complied.																									
v	All the equipment which are likely to generate high noise levels are to be fully equipped (noise reduction measures) to meet the ambient noise control standards	Being complied.																									
vi	Consolidation and compilation of the muck should be carried-out in the muck dumping sites and the dumping sites should be above high flood level. The proposed plan for 70.85 lakh cum of muck disposal i.e. about 34 lakh cum is proposed to be utilized during construction and the remaining 36.86 lakh cum of muck disposal at two designated areas (DS1-powerhouse site- 14.37 lakh cum; DS2- dam site-22.48 lakh cum) should be strictly implemented.	Being complied.  Details of Muck Generation and Disposal for the period from April 2021 to September 2021:																									
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>S. No.</th> <th>Name of Contractor</th> <th>Generated (CUM)</th> <th>Utilized (CUM)</th> <th>Disposed (CUM)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>M/s Afcon-JAL Joint Venture (PH Works)</td> <td>93024.77</td> <td>69707</td> <td>23317.77</td> </tr> <tr> <td>2</td> <td>M/s Jaypee Group (Dam Works)</td> <td>122911</td> <td>24582.2</td> <td>98328.8</td> </tr> <tr> <td>3.</td> <td>M/s L&amp;T (HRT-TBM Works)</td> <td>164500</td> <td>164500</td> <td>-</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Total</b></td> <td>380435.77</td> <td>258789.20</td> <td>121646.57</td> </tr> </tbody> </table>	S. No.	Name of Contractor	Generated (CUM)	Utilized (CUM)	Disposed (CUM)	1	M/s Afcon-JAL Joint Venture (PH Works)	93024.77	69707	23317.77	2	M/s Jaypee Group (Dam Works)	122911	24582.2	98328.8	3.	M/s L&T (HRT-TBM Works)	164500	164500	-	<b>Total</b>		380435.77	258789.20	121646.57
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## Chenab Valley Power Projects (P) Ltd

### Pakal Dul Hydro Electric Project

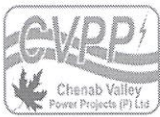
Chenab Nagar – II, Kishtwar, (J&K) – 18220

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vii	The fisheries management plan as proposed in the letter dated 15.01.2008 should be implemented in totality. The total budget of Rs.339.24 lakhs for the fishery development and conservation in the Marusundar river basin should not be diverted for any other purpose.	Being complied. DPR amounting Rs. 430.0 lakh was submitted by J&K Fisheries Department for implementation of Fisheries Development plan of Pakal Dul HEP. An amount of Rs. 196.0 lakhs has been deposited with J&K Fisheries Department. The Fisheries Department has utilized/released an amount of Rs. 135.06 Lakhs for the works under the plan. The work is under execution.
viii	<p>The following conditions imposed by the Standing Committee of National Board for Wildlife (NBWL) while recommending the proposal for de-notification of KHANP area, shall be strictly complied:</p> <p>(a) Provisions proposed for the habitat improvement in the Mitigation Plan should be discussed with Wildlife Institute(WII), Dehradun and be modified accordingly.</p> <p>(b) State Wildlife Department may redefine the core area of the National Park considering the human population pressure etc.</p> <p>(c) NHPC would provide a total of Rs.236 Crs including Rs.100 Crs. for the corpus fund for the protected area for the conservation of the wildlife.</p>	<p>Complied (Mitigation Plan has been prepared/ modified by J&amp;K Wildlife Department in consultation with Wildlife Institute of India, Dehradun.)</p> <p>The core area of the KHANP has been redefined vide SRO no. 212 dated 06.07.2015 of GoJK.</p> <p>Final forest clearance for 195.9619 Ha land (i.e. 188.7619 ha of KHANP land and 7.2 ha of forest land) has been obtained vide Govt. Order no. 289-FST 2016 dated 29.11.2016 of GoJK for which Project has deposited Rs 414.20 Crs to Forest Dept. which includes Rs.236 Crs which further includes Rs.100 Crs for the corpus fund for the protected area for conservation of wildlife. An amount of Rs. 3,82,75,884/- has been incurred for the same till 31.03.2021 by the Office of Wildlife Warden, Chenab Division, Kishtwar.</p>
ix	No construction work/activity should be initiated till Supreme Court grants de-reservation of National Park area.	Complied vide SRO no. 212 dated 06.07.2015 of GoJK issued after grant of approval by Honorable Supreme Court.

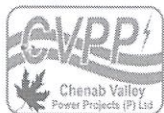


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x	Clear felling of trees should be restricted to 4 m below the FRL and a 50 m greenbelt should be created around the reservoir periphery.	<p style="text-align: center;">Being complied.</p> <p>The tree cutting along the FRL is being done only in the area required for the project construction works.</p> <p>The process for creation of greenbelt shall be initiated at the appropriate time.</p>												
<b>General Conditions</b>														
i	Adequate free fuel arrangement should be made for the labour force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.	<p style="text-align: center;">Being complied.</p> <p>Free fuel arrangements have been made by the respective contractors for their labour force engaged for Power House Works and Dam Works, at their own cost.</p> <p>Details of expenditure on free fuel provided by the major works contractors are as under:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Works Package / Name of contractor</th> <th style="width: 20%;">No. of laborers engaged for the period from April 2021 to September 2021 (average per month)</th> <th style="width: 45%;">Expenditure under free fuel provisions for the period April 2021 to September 2021 (Rs.)</th> </tr> </thead> <tbody> <tr> <td>Power House Works Package (M/s Afcons-JAL Joint Venture)</td> <td style="text-align: center;">310</td> <td style="text-align: right;">6,39,394/-</td> </tr> <tr> <td>Dam Works Package (M/s Jaiprakash Associates Ltd.)</td> <td style="text-align: center;">354</td> <td style="text-align: right;">5,52,760/-</td> </tr> <tr> <td>M/s L&amp;T Limited (HRT-TBM works)</td> <td style="text-align: center;">146</td> <td style="text-align: right;">1,29,266/-</td> </tr> </tbody> </table>	Works Package / Name of contractor	No. of laborers engaged for the period from April 2021 to September 2021 (average per month)	Expenditure under free fuel provisions for the period April 2021 to September 2021 (Rs.)	Power House Works Package (M/s Afcons-JAL Joint Venture)	310	6,39,394/-	Dam Works Package (M/s Jaiprakash Associates Ltd.)	354	5,52,760/-	M/s L&T Limited (HRT-TBM works)	146	1,29,266/-
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ii	Fuel depot's maybe opened at the site to provide the fuel (kerosene/wood/LPG). Medical facilities as well as drinking water & recreational facilities should also be provided to the laborers.	<p style="text-align: center;">Being complied.</p> <p>Free fuel arrangements for labourers have been made by the contractors.</p> <p>Adequate drinking water and sanitation facilities have been provided by the respective contractors at residential areas of their labour force.</p> <p>Details of medical facilities established by major works contractors for their labourers, at their own cost, are as under:</p> <p><b>1. Dam Package (by M/s Jaiprakash Associates Limited):</b> One bed, one Oxygen cylinder, accessories of dispensary, storage</p>												

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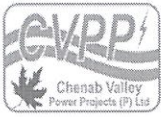


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		<p>for the medicines, stretchers, wheel chairs, one light vehicle and one Ambulance at Dam site is in operation and managed by one Doctor and four no. of Medical Assistants. Total 7771 no. of patients including locals have been treated in the period from April 2021 to September 2021 with total expenditure for this period amounts to Rs.6,26,935/-</p> <p><b>2. Power House Package (by M/s Afcons - JAL Joint Venture):</b> Three no. of first aid centres, two fully equipped Ambulances at Power House Site of the Project is managed by the 1 MBBS doctor and 08 no. of first aiders. The necessary medicines are also made available to nearby local villagers. The total expenditure on medical facilities from April 2021 to September 2021 amounting to Rs.24,08,601/- has been incurred.</p>
iii	All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit	Being complied.
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.	Shall be complied
v	The total amount of Rs. 9979.29 lakhs kept in the budgetary provisions for implementation of environmental management plan should be strictly adhered and not to be diverted for any other purpose.	Shall be complied.

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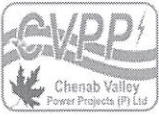
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vi	A Multidisciplinary committee in consultation with the Ministry should be constituted with Ecologists, Environmental Scientists, Conservationists and experienced administrators etc. to oversee the effective implementation of the suggested safeguard measures.	Approval for Constitution of Multidisciplinary committee (MDC) for Pakal Dul HEP was accorded by MoEFCC vide no: J-12011/51/2007-IA-I(Part) dated 10.07.2018 with amendments issued vide No. J-12011/51/2007-IA-I(R) dated 02.05. 2019. & F. No.J-12011/51/2007-IA (R) Dated 11.03.2020
vii	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Chandigarh for review.	Being complied. Six monthly Environment Clearance Compliance Reports are being timely submitted to the Ministry and its Regional Office, Chandigarh.
<b>Other Conditions mentioned in the EC Letter:</b>		
4.	Officials from Regional Office MoEF, Chandigarh who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.	Shall be complied
5.	The responsibility of implementation of environmental safeguards rests fully with the NHPC Ltd. and Government of J&K.  (The EC originally granted in 2008 in favour of NHPC was later transferred to CVPP in 2012)	Noted
6.	In case of change in the scope of the project, project would require a fresh appraisal.	There is no change in the scope of the project. Shall be complied if required.
7.	The project involves 386.186 ha of forest land falling under KHANP. This clearance is subject to Hon'ble Supreme Court's permission with respect to de-reservation of part of KHANP.	Complied.  The core area of KHANP has been redefined vide SRO no. 212 dated 06.07.2015 of GoJ&K.
8.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provisions of the Environment (Protection) Act 1986, to ensure effective implementation of the suggested safeguard measures in a time-	Noted.

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	bound and satisfactory Manner.	
9.	This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.	Complied.
10.	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom any suggestion / representation has been received while processing the proposal.	Complied.
12.	The project proponent should advertise within 7 days at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> .	Complied. The requisite advertisement was published in Dainik Jagran (Hindi) and Daily Uzma (Urdu) newspapers dated 07.03.2008.

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