

**GOVERNMENT OF ASSAM
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND
HEAD OF FOREST FORCE, ASSAM
ARANYA BHAWAN, PANJABARI, GUWAHATI-37**

Email: adlpcfcf.nodal@gmail.com

No. FG.27/FCA/Proposal/Power Grid/Cachar Divn.

Date: 02.01.2026

To

✓ The Special Chief Secretary (Forest) to the Government of Assam,
Environment, Forest & Climate Change Department,
Dispur, Guwahati-6.

Sub: Compliance of the conditions stipulated in the "In-Principle Approval" for diversion proposal of 9.23 Hectare of forest land for 11 Nos. Tower location (123 to 136A) of 132 KV S/C Haflong-Jiribam Transmission Line in Borail Wildlife Sanctuary (East Block) under Cachar Division in favour of PGCIL - reg.

Ref: Government of India letter No. 3 AS C 096/2022-GHY/3579-80 dated 09.02.2023.

Sir,

Reference is invited to the subject and letter cited above. In this context, the undersigned is directed to submit herewith the report regarding compliance of the conditions enlisted in the Central Government's "In-Principle Approval" issued vide letter No. 3 AS C 096/2022-GHY/3579-80 dated 09.02.2023 for the above-mentioned forest diversion proposal as given below:

Condition No. A	Compliance Report/Remarks
1	The User Agency (PGCIL) has deposited Rs. 6,63,02,320/- for Net Present Value in the revised rate of the forest land to be diverted.
2	The User Agency (PGCIL) has deposited Rs. 1,55,58,057/- for raising of Compensatory Afforestation.
3	The User Agency (PGCIL) has deposited a total amount of Rs. 8,70,73,341/- into Ad-hoc CAMPA account through online web portal (www.parivesh.nic.in) of MoEF&CC on 03.04.2023 (copy enclosed). The details are as follows: Net Present Value = Rs. 6,63,02,320/- Compensatory Afforestation = Rs. 1,55,58,057/- Dwarf Plantation Cost = Rs. 52,12,964/- Total Rs. 8,70,73,341/-
4	The KML file of proposed diversion area and Compensatory Afforestation area uploaded in e-Green watch Portal (copy enclosed).
5	The boundary of the diverted forest land has been demarcated on ground at the project cost, by erecting four feet high RCC pillars, each inscribed with its serial number and GPS co-ordinates by the DFO, Cachar Division.
6 (a)	The User Agency (PGCIL) has submitted undertaking for condition No. 6 (a) laid down in the "In Principle Approval" (copy enclosed).
6 (b)	The User Agency (PGCIL) has intimated that the minimum ground clearance of electric conductors for 132 KV line as per Indian Electricity Rule has been maintained which allows free passes of wild animals below the transmission line.
6 (c)	The User Agency (PGCIL) has submitted undertaking for condition No. 6 (c) laid down in the "In Principle Approval" (copy enclosed).
6 (d)	The User Agency (PGCIL) has submitted undertaking for condition No. 6 (d) laid down in the "In Principle Approval" (copy enclosed).

6 (e)	The User Agency (PGCIL) has submitted undertaking for condition No. 6 (e) laid down in the "In Principle Approval" (copy enclosed).
6 (f)	The User Agency (PGCIL) has deposited Rs. 9,64,239/- towards 2% of the Project Cost for mitigation measures & wildlife conservation plan to the Corpus fund of Chief Wildlife Warden, Assam.
6 (g)	The User Agency (PGCIL) has submitted undertaking for condition No. 6 (g) laid down in the "In Principle Approval" (copy enclosed).
6 (h)	The User Agency (PGCIL) has deposited Rs. 5,00,00,000/- towards establishment of wild animal rescue centre to the Corpus fund of Chief Wildlife Warden, Assam.
6 (i)	The User Agency (PGCIL) has deposited Rs. 9,64,239/- towards 2% of the Project Cost for mitigation measures & wildlife conservation plan to the Corpus fund of Chief Wildlife Warden, Assam.
7	The User Agency (PGCIL) has submitted undertaking for condition No. 7 laid down in the "In Principle Approval" (copy enclosed).
8	The User Agency (PGCIL) has submitted undertaking for condition No. 8 laid down in the "In Principle Approval" (copy enclosed).
9	The User Agency (PGCIL) has deposited the cost for felling, logging & transportation of project affected trees to the DFO, Cachar Division (copy enclosed).
10	The User Agency (PGCIL) has deposited the cost for boundary walls, stone pillars, demarcation charges etc. to the DFO, Cachar Division (copy enclosed).
11	The User Agency (PGCIL) has submitted undertaking for condition No. 11 laid down in the "In Principle Approval" (copy enclosed).
12	The User Agency (PGCIL) has submitted FRA-2006 certificate (copy enclosed).
13	The User Agency (PGCIL) has submitted undertaking for condition No. 13 laid down in the "In Principle Approval" (copy enclosed).
14	The User Agency (PGCIL) has deposited Rs. 52,12,964/- for creation and maintenance of plantation of dwarf species in right of way under the transmission line into Ad-hoc CAMPA account through online web portal (www.parivesh.nic.in) of MoEF&CC on 03.04.2023 (copy enclosed).
15	The User Agency (PGCIL) has uploaded the compliance report on e-portal.

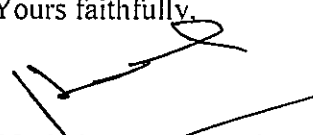
Condition No. B	Compliance Report/Remarks
1	The User Agency (PGCIL) has submitted undertaking for condition No. (1) laid down in the "In Principle Approval" (Copy enclosed)
2	The User Agency (PGCIL) has submitted undertaking for condition No. (2) laid down in the "In Principle Approval" (Copy enclosed)
3	The User Agency (PGCIL) has submitted undertaking for condition No. (3) laid down in the "In Principle Approval" (Copy enclosed)
4	The User Agency (PGCIL) has submitted undertaking for condition No. (4) laid down in the "In Principle Approval" (Copy enclosed)
5	The User Agency (PGCIL) has submitted undertaking for condition No. (5) laid down in the "In Principle Approval" (Copy enclosed)
6	The User Agency (PGCIL) has submitted undertaking for condition No. (6) laid down in the "In Principle Approval" (Copy enclosed)
7	The User Agency (PGCIL) has submitted undertaking for condition No. (7) laid down in the "In Principle Approval" (Copy enclosed)
8	The User Agency (PGCIL) has submitted undertaking for condition No. (8) laid down in the "In Principle Approval" (Copy enclosed)

9	The User Agency (PGCIL) has submitted undertaking for condition No. (9) laid down in the "In Principle Approval" (Copy enclosed)
10	The User Agency (PGCIL) has submitted undertaking for condition No. (10) laid down in the "In Principle Approval" (Copy enclosed)
11	The User Agency (PGCIL) has submitted undertaking for condition No. (11) laid down in the "In Principle Approval" (Copy enclosed)
12	The User Agency (PGCIL) has submitted undertaking for condition No. (12) laid down in the "In Principle Approval" (Copy enclosed)
13	The User Agency (PGCIL) has submitted undertaking for condition No. (13) laid down in the "In Principle Approval" (Copy enclosed)
14	The User Agency (PGCIL) has submitted undertaking for condition No. (14) laid down in the "In Principle Approval" (Copy enclosed)
15	The User Agency (PGCIL) has submitted undertaking for condition No. (15) laid down in the "In Principle Approval" (Copy enclosed)
16	The User Agency (PGCIL) has submitted undertaking for condition No. (16) laid down in the "In Principle Approval" (Copy enclosed)
17	The User Agency (PGCIL) has submitted undertaking for condition No. (17) laid down in the "In Principle Approval" (Copy enclosed)
	The PCCF, Wildlife & Chief Wildlife Warden, Assam has submitted the Approved Wildlife Mitigation Plan (Copy enclosed)

Therefore, you are requested to kindly forward the compliance report to the Government of India, MoEF & CC, Sub Office under Regional Office, Guwahati for onward necessary action.


Encl: As above.

Yours faithfully,


(Dr. C Muthukumaravel, IFS)
 Chief Conservator of Forests &
 Nodal Officer (FC Act), Assam
 O/o the Principal Chief Conservator of Forests and
 Head of Forest Force, Assam

Copy for information to:

1. The Deputy Director General of Forest (Central), Sub Office, Guwahati (under Regional Office, Shillong), Government of India, Ministry of Environment, Forest & Climate Change, 4th Floor, Housefed Building, G.S. Road, Rukminigaon, Guwahati.
2. The Conservator of Forests, Southern Assam Circle, Silchar.
3. The Divisional Forest Officer, Cachar Division, Silchar.
4. The Deputy General Manager, Power Grid Corporation of India Limited, 132 KV Haflong Sub Station, Haflong, Dima Hasao.


 Chief Conservator of Forests &
 Nodal Officer (FC Act), Assam
 O/o the Principal Chief Conservator of Forests and
 Head of Forest Force, Assam

**DIVERSION OF FOREST LAND FOR 132 KV S/C TRANSMISSION LINE
PROPFORMA**

1	State/ District /Forest Division to which the proposal relates	Assam/ Silchar / Cachar Division.
2	Name of User Agency, nature of proposal	The Deputy General Manager, Power Grid Corporation of India Limited, 132 KV Haflong Sub Station, Haflong, Dima Hasao. Proposal for diversion of forest land for 11 Nos. Tower location (123 to 136A) of 132 KV S/C Haflong-Jiribam Transmission Line in Borail Wildlife Sanctuary (East Block) under Cachar Division in favour of PGCIL.
3	Extent of Forest area involved	9.23 hectare of Reserved Forest area
4	Whether original, or extension	Original
5	If extension of lease, please clarify if proposal involves additional forest area, and if so, specify	Does not arise.
6	Date of 1 st stage clearance	09.02.2023.
7	Extent of CAMPA charges, head wise viz.	
	(a) Compensatory Afforestation	Rs. 1,55,58,057/-
	(b) Additional CA.	NIL
	(c) Penal CA	NIL
	(d) Catchment Area Treatment	NIL
	(e) Wildlife Management Plan	NIL
	(f) Additional charges for diversion of area falling under notified/ protected areas	NIL
	(g) Net Present Value	Rs. 6,63,02,320/-
	(h) Any other charges/ Levies (Pl specify)	Dwarf Plantation Cost Rs. 52,12,964/-
8	Details of Bank Drafts (Bank, Draft No, Date & Amount), head wise against items indicated in paragraph 7 above	NIL
9	Whether deposited by RTGS, if so the particulars and date of remittance	The User Agency has deposited an amount of Rs. 8,70,73,341/- into the Ad-hoc CAMPA account through online web portal (www.parivesh.nic.in) of MoEF & CC on 03.04.2023.
10	Bank (Corporation Bank, Lodhi Complex/ Union Bank of India, Sunder Nagar) in which deposited with date deposition.	As stated in column No. 9 above.
11	Any other remarks	NIL


 Chief Conservator of Forests &
 Notal Officer (FC Act)



GOVT. OF ASSAM

OFFICE OF THE DIVISIONAL FOREST OFFICER ::: CACHAR DIVISION :::

SILCHAR.

Letter No. A/35/Powergrid/ 1336-37

Dtd. Silchar, the 27/10/2025

To

The Nodal Officer &
Chief Conservator of Forests (FC Act.)
Panjabari, Guwahati-37.

Sub: In Principle Approval for the forest diversion proposal of 9.23 ha forest land for 11 nos. Tower location (123 to 136A) of 132 kV S/C Haflong-Jiribam Transmission Line in Borail Wildlife Sanctuary (East Block) under Cachar Division in favour of PGCIL - reg.

Ref: 1) Your letter no. FG.27/FCA/Proposal/Powergrid/Cachar Division dtd. 20-08-2025.
2) This office letter no. A/35/Diversion/741-742 dtd. 10-04-2023.

Sir,

With reference to the subject cited above, I have the honour to submit herewith the Compliance Report in connection with forest diversion proposal of 9.23 ha forest land for 11 nos. Tower location (123 to 136A) of 132 kV S/C Haflong-Jiribam Transmission Line in Borail Wildlife Sanctuary (East Block) under Cachar Division in favour of PGCIL.

S N	Conditions	Compliance
A. Conditions which need to be complied prior to handing over of forest land by the State Forest Department.		
(1)	The User Agency shall transfer the Net Present Value (NPV) of the forest land being diverted under this proposal in the revised rates as per the orders of the Hon'ble Supreme Court of India dated 28/03/2008, 24/04/2008 and 09/05/2008 in Writ petition (Civil) No. 202/1995 and as per the guidelines issued by the Ministry vide letters No 5-3/2007-FC dated 05.02.2009 and File No. 5-3/2011-Fc (Vol-1) dated 21.03.2022. The requisite funds shall be transferred through online portal into CAMPA account of the State Concerned.	<i>Complied with.</i> The NPV value of Rs. 6,63,02,320/- as per the demand note has been deposited to Ad-hoc CAMPA account of Assam. "UTR No. CMS3215661359 ICICR22023033100030593"
(2)	The User Agency shall transfer the cost of raising and maintaining the compensatory afforestation at the current wage rate in consultation with the State Forest Department in the account of CAMPA of the concerned State through online portal. The scheme may include appropriate for anticipated cost increase for works scheduled for subsequent years.	<i>Complied with.</i> An amount of Rs. 1,55,58,057/- as per the demand note towards Compensatory Afforestation (CA) has already been deposited to Ad-hoc CAMPA account of Assam. "UTR No. CMS3215661359 ICICR22023033100030593"
(3)	All the funds received from the User Agency (CA and dwarf plantation cost, NPV etc) under the project shall be transferred/deposited to Compensatory Afforestation Fund of	<i>Complied with.</i>

286
289

	Assam managed by the Ad-hoc CAMPA only through e-portal (https://parivesh.nic.in). Amount deposited through other mode will not be accepted as compliance of Stage-I clearance.	
(4)	The KML files of the area to be diverted, the CA areas, the proposed SMC work, the proposed Catchment Area Treatment area and WLMP area shall be uploaded on the E-Green watch portal with all requisite details before issuing working permission towards linear projects or submitting compliance report for seeking Stage-II approval, as the case may be;	<i>Complied with.</i>
(5)	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.	An amount of Rs. 1,50,000.00 has been received from the User Agency to carryout survey and demarcation and accordingly carried out. "UTR No. CMS3215661360 ICICR22023033100030594".
(6) The State Govt shall comply to the recommendation of 71st meeting of the Standing Committee of National Board of Wildlife held on 29th December, 2022 as under		
a)	The User Agency shall resort to minimal felling of trees.	<i>Complied with.</i>
b)	The User Agency shall take appropriate measures to protect wild animals against electrocution.	<i>Complied with.</i> The minimum ground clearance of electric conductors for 132 kV line as per Indian Electricity Rule has been maintained which allows free passage of wild animals below the transmission line.
c)	The User Agency shall take proper measures to avoid accidents to wild animals during execution of project works.	<i>Complied with.</i>
d)	The User Agency shall submit a certified list of workers including officials with proof of identity, photograph and Mobile phone Nos. to the DFO, prior to execution of the project	<i>Submitted</i>
e)	The User Agency shall not be allowed to work inside the Sanctuary between sunset and sunrise.	<i>Complied with.</i>
f)	The User Agency shall deposit 2% of the project cost into CORPUS Fund at the disposal of the Chief Wildlife Warden, Assam for mitigation measures and preparation of Wildlife Conservation Plan.	<i>Complied with.</i> Rs. 9,64,269/- towards mitigation measures & wildlife conservation plan has already been deposited by POWERGRID to the Corpus fund of Chief Wildlife Warden, Assam. Accordingly, Wildlife Conservation Plan has been submitted to the PCCF Wildlife & Chief Wildlife Warden, Assam vide this

		office letter no. A/35/Powergrid/1173-74 dtd. 22-08-2025.
g)	The animal passage plan and the management plan for the area below transmission lines submitted along with the proposal shall be implemented by the User Agency in toto.	<i>Complied with.</i>
h)	The User Agency shall provide funds for establishment of wild animal rescue centre at a location to be decided by the Chief Wild Life Warden, Assam.	<i>Complied with.</i> Rs. 5 Cr. towards establishment of animal rescue center has already been deposited by User Agency to the CWW, Assam. "UTR No. CMS3215661361 ICICR22023033100030595"
i)	An annual compliance certificate on the stipulated conditions shall be submitted by the project proponent to the State Chief Wild Life Warden and an annual compliance certificate shall be submitted by the State Chief Wild Life Warden to Government of India. The User Agency to deposit 2% of the total project cost for HEC mitigation and wildlife purposes in the Ad-hoc CAMPA account.	This will be complied with. 2% of the project cost amounting to Rs. 9,64,239/- as per the demand note received from CWW, Assam towards "HEC mitigation and wildlife purpose" has already been deposited to the CWW, Assam through demand draft.
(7)	In case the portion of transmission line to be constructed is located in hilly area, where adequate clearance is already available, trees shall not be cut.	<i>Complied with.</i>
(8)	The User Agency shall explore the possibility of successful translocation of maximum number of trees identified to be felled and shall ensure that any tree felling shall be done when it is unavoidable and that too under strict supervision of the State Forest Department;	<i>Complied with</i>
(9)	The charges for felling, logging and transportation of project affected trees should be collected from the User Agency at the rates approved by the State Govt and deposited with the DFO concerned for utilization immediately following the diversion of forest land.	<i>Complied with.</i> The charges for felling, logging & transportation of project affected trees amounting to Rs. 6,96,766.00 has already been deposited by User Agency to the DFO of Cachar Forest Division. "UTR No. CMS3215661360 ICICR22023033100030594"

(10)	The expenditure like boundary walls, stone pillars, demarcation charges, cost of damage of trees the fund on these accounts, should be deposited with DFO concerned.	<i>Complied with.</i> The User Agency has deposited an amount of Rs. 8,99,500.00 in connection with construction of boundary pillars. Accordingly, 70 nos. boundary pillars were erected in the diverted area. Some photographs of boundary pillars is enclosed herewith. "UTR No. CMS3215661360 ICICR22023033100030594".
(11)	The User Agency shall restrict the felling of trees to minimum number in the diverted forest land and the trees shall be felled under strict supervision of State Forest Department and the cost of the felling of trees shall be deposited by the user agency with the State Forest Department.	<i>Complied with.</i>
(12)	The complete compliance of the FRA, 2006 shall be ensured by the way of prescribed certificate from the concerned District Collector.	Certificate enclosed as Annexure-I.
(13)	Violation of any of these conditions will amount to violation of Forest (Conservation) Act, 1980 and action would be taken as prescribed in para 1.21 of Chapter 1 of the Handbook of comprehensive guideline of Forest (Conservation) Act, 1980 as issued by this Ministry's letter No. 5-2/2027-Fc dated 28.03.2019.	Noted.
(14)	The User Agency in consultation with the State Forest Department prepare a detailed scheme for creation and maintenance of plantation of dwarf species (preferably medicinal plants) in right of way under the transmission line for execution of the said scheme to the State Forest Department.	<i>Complied with.</i> An amount of Rs. 52,12,964.00 towards "dwarf species plantation" has already been deposited to Ad-hoc CAMPA account of Assam through PARIVESH portal.
(15)	The compliance report shall be uploaded on e-portal (https://parivesh.nic.in/)	<i>This shall be complied with.</i>
B. Conditions which need to be strictly complied on field after handing over of forest land to the User Agency by the State Forst Department but the compliance in form of undertaking shall be submitted prior to Stage-II approval:		
(1)	Legal status of the forest land shall remain unchanged.	Noted. Undertaking enclosed as Annexure-II.
(2)	The compensatory afforestation shall be taken up on double the degraded forest land of 20 ha in Lower Jiri Reserved Forest, Lower Jirighat Range, Lakhimpur, Cachar	An area of 20 Ha. degraded forest land has been identified in Alney area of Lower Jiri RF

(13)	No additional or new path will be constructed inside the forest area for transportation of construction materials for execution of the project work.	Noted. Undertaking enclosed as Annexure-XI.
(14)	The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favour of the User Agency or the project life, whichever is less.	Noted. Undertaking enclosed as Annexure-XII.
(15)	The forest land shall not be used for any purpose other than that specified in the project proposal. Any other conditions that the North Eastern Regional Office, Ministry of Environment, Forest & Climate Change may be stipulated from time to time in the interest of conservation, protection and development of forests & Wildlife.	Noted. Undertaking enclosed as Annexure-XIII.
(16)	As per Ministry's letter no 11-30/96-FC(pt) dt. 14.9.2001, if the compliance of stipulated conditions is awaited from the State Govt. for more than 5 (five) years, the in-principle approval would summarily be revoked considering that the user agency is no longer interested in the project.	Noted.
(17)	Any other conditions that the Integrated Regional Office, Guwahati, Ministry of Environment, Forest & Climate Change may be stipulated from time to time in the interest of conservation, protection and development of forests & Wildlife.	Noted. Undertaking enclosed as Annexure-XIV.

Moreover, I am also enclosing herewith a copy of undertaking submitted by the PGCIL Dt. 03-04-2023 for your information and needful.

This is for favour of your kind information and necessary action.

Yours faithfully,


Divisional Forest Officer,
Cachar Division : Silchar.

Copy to the Conservator of Forests, Southern Assam Circle, Silchar for favour of kind information and needful.


Divisional Forest Officer,
Cachar Division : Silchar.

	Forest Division under Southern Assam Circle, Silchar in Haflong district and maintained thereafter by the State Forest Department at the cost of the User Agency. As far as possible, a mixture of local indigenous species shall be planted and monoculture of any species may be avoided. The CA will be maintained for 10 years.	of this division. Accordingly, plantation activity has been carried out on receipt of fund from CAMPA, Assam.
(3)	At the time of payment of the Net Present Value (NPV) at the prevailing rate, the User Agency shall furnish an undertaking to pay the additional amount of NPV, if so determined as per the final decision of the Hon'ble Supreme Court of India.	Noted. Undertaking enclosed as Annexure-III.
(4)	The User Agency shall obtain Environment Clearance as per the project provisions of the Environment (Protection) Act, 1986, if required ;	N/A. (EC is not applicable for transmission line projects)
(5)	No labour camp shall be established on the forest land and the User Agency shall provide fuels preferably alternate fuels to the laborers and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas;	Complied with. Undertaking in this regard is enclosed as Annexure-IV
(6)	The forest land proposed to be diverted shall under no circumstances be transferred to any other Agencies, department or person without prior approval of Govt. of India.	Noted. Undertaking enclosed as Annexure-V.
(7)	No damage to the flora and fauna of the adjoining area shall be caused.	Noted. Undertaking enclosed as Annexure-VI.
(8)	The layout of the proposal shall not be changed without the prior approval of the Central Government.	Noted. Undertaking enclosed as Annexure-VII.
(9)	The concerned Divisional Forest Officer will monitor and take necessary mitigative measures to ensure that there is no adverse impact on the forests in the surrounding area.	This is being complied with.
(10)	The User Agency at its cost shall provide bird deflectors, which are to be fixed on upper conductor of transmission line at suitable intervals to avoid bird hits.	Noted. Undertaking enclosed as Annexure-VIII.
(11)	The User Agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and NGT (s) pertaining to this project, if any, for the time being in force as applicable to the project.	Noted. Undertaking enclosed as Annexure-IX.
(12)	The User Agency shall comply with the guidelines for laying transmission through forest area issued by Ministry vide letter no. 7-25/2012-Fc dated 05.05.2014 & 17.11.2014.	Noted. Undertaking enclosed as Annexure-X.



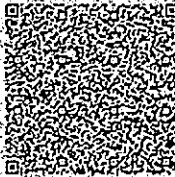
सत्यमेव जयते

INDIA NON JUDICIAL

Government of Assam

e-Stamp

Certificate No.	IN-AS98541979429583X
Certificate Issued Date	15-Nov-2025 12:35-PM
Account Reference	NONACC (SV) /as17050404/ GUWAHATI/AS-KM
Unique Doc. Reference	SUBIN-ASAS1705040481723613136216X
Purchased by	POWER GRID CORPORATION OF INDIA LTD
Description of Document	Article 4 Affidavit
Property Description	UNDERTAKING
Consideration Price (Rs.)	0 (Zero)
First Party	POWER GRID CORPORATION OF INDIA LTD
Second Party	NA
Stamp Duty Paid By	POWER GRID CORPORATION OF INDIA LTD
Stamp Duty Amount (Rs.)	100 (One Hundred only)



Please write or type below this line

Sub: **UNDERTAKINGS** by Power Grid Corporation of India Limited, Haflong pertaining to diversion of 9.23 ha of forest land for 11 nos. Tower location (12 to 136A) of 132 KV S/C Haflong-Jiribam Transmission Line in Borail Wildlife Sanctuary (East Block) under Cachar Division by Power Grid Corporation of India Ltd.

Ref : 1) RMoEF Shillong Letter No. 3-AS-G-096/2022-ghy/3579-80 dtd: 09th Feb, 2023
2) NO(FC Act) Letter No. FG/27/FCA/Proposal/Powergrid/Cachar Div dtd: 28.08.2025

All the **UNDERTAKINGS** required for compliance of Stage-I conditions pertaining to diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136-A) of 132 KV S/C Haflong-Jiribam Transmission Line are enclosed herewith.

0027414580

Statutory Alert:

- The authenticity of the Stamp Certificate should be verified at www.e-stamp.com or using e-Stamp Mobile App of Stock Holding.
- Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
- The onus of checking the legitimacy is on the users of the certificate.

269

289

UNDERTAKINGS

- **(Condition-B-1)** I on behalf of Power Grid Corporation of India, hereby, undertake that *"The Legal status of the forest land shall remain unchanged"* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **(Condition-B-3)** I on behalf of Power Grid Corporation of India, hereby, undertake *"to pay the additional amount of NPV, if so determined as per the final decision of the Hon'ble Supreme Court of India"* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **(Condition-B-5)** I on behalf of Power Grid Corporation of India, hereby, undertake that *"No labour camp shall be established on the forest land and the User Agency shall provide fuels preferably alternate fuels to the laborers and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas"* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-6)** I on behalf of Power Grid Corporation of India, hereby, undertake that the *"The forest land proposed to be diverted shall under no circumstances be transferred to any other Agencies, department or person without prior approval of Govt. of India."* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-7)** I on behalf of Power Grid Corporation of India, hereby, undertake that *"No damage to the flora and fauna of the adjoining area shall be caused."* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-8)** I on behalf of Power Grid Corporation of India, hereby, undertake that *"The layout of the proposal shall not be changed without the prior approval of the Central Government."* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-10)** I on behalf of Power Grid Corporation of India, hereby, undertake that *"The User Agency at its cost shall provide bird deflectors, which are to be fixed on upper conductor of transmission line at suitable intervals to avoid bird hits"* pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".

Chiranjib Karman

268

288

- **Condition-B-11)** I on behalf of Power Grid Corporation of India, hereby, undertake that "The User Agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and NGT (s) pertaining to this project, if any, for the time being in force as applicable to the project." pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-12)** I on behalf of Power Grid Corporation of India, hereby, undertake that "The User Agency shall comply with the guidelines for laying transmission through forest area issued by Ministry vide letter no. 7-25/2012-Fc dated 05.05.2014 & 17.11.2014" pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-13)** I on behalf of Power Grid Corporation of India, hereby, undertake that "No additional or new path will be constructed inside the forest area for transportation of construction materials for execution of the project work." pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-14)** I on behalf of Power Grid Corporation of India, hereby, undertake that "The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favour of the User Agency or the project life, whichever is less" pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-15)** I on behalf of Power Grid Corporation of India, hereby, undertake that "The forest land shall not be used for any purpose other than that specified in the project proposal. Any other conditions that the North Eastern Regional Office, Ministry of Environment, Forest & Climate Change may be stipulated from time to time in the interest of conservation, protection and development of forests & Wildlife." pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".
- **Condition-B-17)** I on behalf of Power Grid Corporation of India, hereby, undertake to abide by "Any other conditions that the Integrated Regional Office, Guwahati, Ministry of Environment, Forest & Climate Change may be stipulated from time to time in the interest of conservation, protection and development of forests & Wildlife" pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".

Signature:
Office Seal :

Chiranjib Berman
20/11/2025

सी. बार्मान/C. BARMAN
उप महाप्रबंधक (प्रभारी)
Dy. General Manager (I/c)
पावरग्रिड /POWERGRID
हाफलोंग/HAF-LONG



FCA Projects, Diverted Land, CA Land Management

Main Menu

[icems as admin]
State- Assam
9 Dec 2025, 16:25:52 IST

Home FCA-1980 Projects Diverted Lands CA Lands Reports

Detailed Summary of Selected FCA Project

Project Basic details

S.No.	Project Name	Project Year	Project Type	Purpose of Diversion	Total Land Diverted	User Agency
1	Diversion of Forest Land for 11 nos. of Tower Location (123 to 136A) against "Diversion work of 132KV S/C Haflong-Jiribam transmission line of POWERGR	2023	Transmission Line	Diversion of 9.23 Ha. Forest land for installing 11 nos. of Tower at Location (123 to 136A) for work of 132KV S/C Haflong-Jiribam transmission line of POWERGRID in the section between tower location no. 104 to location no. 164 for facilitating the construction of NH-54" under Divisional Forest Office	9.230	

Details of Diverted forest land

S.No.	Area Diverted (In Hac)	Division	Range	Forest Type	Location
1	9.230	Cachar	Udharbandh	Reserved Forest (RF)	Borail Wildlife

Details of Lands received from user agency for Compensatory Afforestation

S.No.	Land Type	Area(in Ha)	District	Range	Notification order No.
1	Degraded Notified Forest	20.000	Jirighat [Cachar]		

Details of the amount demanded from UA against the FCA project

S.No.	FCA Proj. File No	Project Name	State	Proj. Year	Order No.	Date	NPV	CA	ACA	PCA	PAF	CAT	SZ	Others	Total Demand
1	FP/AS/TRANS/119559/2021	Diversion of Forest Land for 11 nos. of Tower Location (123 to 136A) against "Diversion work of 132KV S/C Haflong-Jiribam transmission line of POWERGR	AS	2023	B/35/Diversion/1539	24/02/2023	66302320	15558057	0	0	0	0	0	5212964	87073341
Total							66302320	15558057	0	0	0	0	0	0	87073341

Details of the amount received from UA against the FCA project.

S.No.	FCA Project File No	Proj. Name	State	Proj. Year	Ref. No.	Ref.Date	Receipt Date	NPV	CA	ACA	PCA	PAF	CAT	SZ	Others	Total Received	
1	FP/AS/TRANS/119559/2021	Division of Forest Land for 11 nos. of Tower Location (123 to 136A) against "Division work of 132KV S/C Haflong-Jiribam transmission line of POWERGR	AS	2023	B/35/Diversion/1539	24/02/2023	03/04/2023	66302320	15558057	0	0	0	0	0	5212964	87073341	
Total								66302320	15558057	0	0	0	0	0	0	5212964	87073341

Lock and Print Details Go Back

FORM-I
(for linear projects)

GOVT. OF ASSAM
OFFICE OF THE DEPUTY COMMISSIONER : CACHAR : SILCHAR

No. CLA.5/2020/Pt/ 44


Dated, Silchar the 26th October, 2022

TO WHOM IT MAY CONCERN

In compliance of the Ministry of Environment and Forest (MoEF), Government of India's Letter No. 11-9/98-FC(pt) dated 3rd August 2009 wherein the MoEF issued guidelines on submission of evidence for having initiated and completed the process for settlement of right under the schedule tribes and other traditional forest Dwellers (Recognition of Forest Right) Act, 2006 ("FRA" for short) on the forest land proposed to be diverted for non-forest purposes read with MoEF's letter dated 5th February 2013 wherein MoEF issued certain relaxation in respect of linear projects, it is certified that 9.23 hectares of forest land proposed to be diverted in favour of Power Grid Corporation of India (name of user agency) for Diversion of Forest Land for 11 nos of Towers location (123 to 136 A) against diversion work of 132 kv S/C Haflong - Jiribam transmission line of POWERGRID in the section between tower location 104 to location No 164 for facilitating the construction of NH-54 (E) under Borail Wildlife Sanctuary under Cachar District (purpose for diversion of forest land) in Cachar district falls within jurisdiction of three villages i.e. Debinala Khasia Punjee, Durbin Tilla Khasia Punjee and Durgacherra Khasia Punjee village (s) in Silchar (Sadar) tehsils.

It is further certified that :

- as per report communicated vide DFO, Cachar letter No B/35/Power Grid /7353-54 dtd. 19/10/2022 no Forest Right Act claims has been granted in the proposed diversion area as mentioned above.
- The diversion of forest land for facilities managed by Government as required under section 3(2) of FRA have been completed and the Gram Sabha have given their consent to it;
- The proposal does not involve recognize right of primitive Tribal Groups and Pre- agricultural communities.


(Rohan Kumar Jha, IAS)
Deputy Commissioner,
Cachar, Silchar

132 KV Haflong Substation, Lungkhok, Haflong
पी.ओ. लोअर हाफलॉग, जिला: - दीमा हसाओ, असम, पिन: 788820
फोन नंबर- 9435723577
P.O. Lower Haflong, Dist:- Dima Hasao, Assam, Pin: 788820
Phone no- 9435723577

Annexure-II

UNDERTAKING (Condition-B-1)

I on behalf of Power Grid Corporation of India, hereby, undertake that "The Legal status of the forest land shall remain unchanged" pertaining to "Diversion of 9.23 ha of forest land for 11 nos. Tower location (123 to 136 A) of 132 kV S/C Haflong-Jiribam Transmission Line".

Date: - 09/10/2025
Place: - Haflong

ति ०९/१०/२०२५
सी. बर्मन/C. BARMAN
उप महाप्रबंधक (प्रभारी)
Dy. General Manager (I/c)
पावरग्रिड /POWERGRID
हाफलॉग/HAF LONG

267

Humanga
29/10/25



GOVERNMENT OF ASSAM

OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (WILDLIFE) AND
CHIEF WILDLIFE WARDEN, ASSAM::PANJABARI::GUWAHATI-37

Email Id : pccf.wl.assam@gmail.com

No. WL/FG.35/Diversion/Towers

Date: 10.10.2025

To.

The Principal Chief Conservator of Forests
& Head of Forest Force, Assam, Aranya Bhawan,
Panjabari, Guwahati-37.

Sub: Proposal for diversion of 9.23 ha of forest land for 11 Nos. Tower location (123 to 136 A) of 132 KV S/C Haflong-Jiribam Transmission line in Borail Wildlife Sanctuary (East Block) under Cachar Division by Power Grid Corporation of India Ltd.

Ref: Your office letter No. FG.27/FCA/Proposal/Power Grid/Cachar Division, dated 14.02.2023.

Sir,

With reference to the subject and letter cited above a copy of approved "Wildlife Mitigation Plan" for the project "diversion of 9.23 ha of forest land for 11 Nos. Tower location (123 to 136 A) of 132 KV S/C Haflong-Jiribam Transmission line in Borail Wildlife Sanctuary (East Block) under Cachar Division by Power Grid Corporation of India Ltd." for an amount of Rs 9,64,269/- is enclosed herewith, for favour of your kind information and necessary action.

Encl: As stated above.

Yours faithfully,

(Dr. Vinay Gupta, IFS)

Principal Chief Conservator of Forests,
Wildlife & Chief Wildlife Warden, Assam

Copy for information and necessary action to:

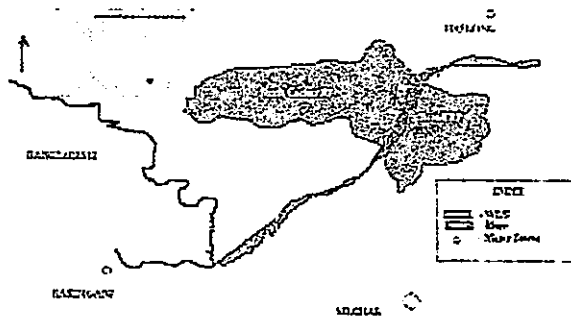
1. Chief Conservator of Forests & Nodal Officer (FCA), O/o the PCCF & HoFF, Assam.
2. Divisional Forest Officer, Cachar Division, Silchar.

Principal Chief Conservator of Forests,
Wildlife & Chief Wildlife Warden, Assam

"WILDLIFE MITIGATION PLAN"

FOR

DIVERSION WORK OF 132 KV S/C HAFLONG- JIRIBAM TRANSMISSION LINE PASSING THROUGH BORAIL WILDLIFE SANCTUARY ON ACCOUNT OF NHIDCL



OWNER	:- Power Grid Corporation of India Limited
IMPLEMENTING AGENCY	:- National Highway Infrastructure Development Corporation Limited

Vinay Gupta
Principal Chief Conservator of Forest
Wildlife & CWLW, Assam
Panjabari, Guwahati-37

[Signature]

265

CONTENTS

	Description	Pages Nos
Chapter-I :- Introduction		
	1.0 Project Background	3
	1.1 Justification & benefit of the project	3
	1.2 Details of the proposed transmission sub-project	5
	1.3 Requirement of Wildlife clearance	5
Chapter-II :- Description of the protected area & likely impact of project		
	2.0 Borail Wildlife Sanctuary	7
	2.1 Major Habitat, Flora & fauna	10
	2.2 Major activities involved in the T/L project	11
	2.3 Likely impact of the project on Borail Wildlife Sanctuary	15
Chapter-III :- Proposed wildlife mitigation measures		
	3.1 Safeguard against bird electrocution/collision	18
	3.2 General mitigation measures	21
Chapter-IV :- Conclusion		23

SECTION - I - INTRODUCTION

1.0 PROJECT BACKGROUND:-

The North Eastern Region (NER) in India is endowed with rich energy resources but faces significant bottlenecks in electricity access and availability levels. The per capita power consumption in NER is one-third of the national average.

The Project Highway from "Balachera (Km.275.000) – Harangajao (Km244.000) passes entirely through hilly terrain. Hills are on Left Hand Side (Eastern side) whereas river Jatinga flows in the valley on the other side (Western side). Along the existing alignment, at many places, there are number of sharp horizontal curves and steep gradients (due to hill terrain) and these are required to be improved as per IRC Specifications.

The 132kV S/C Haflong - Jiribam transmission line of POWERGRID provided electricity to two States i.e., Assam and Manipur and back-bone of the transmission system in NER. It also plays an important role for providing power to Dima Hasao District of Assam. Any failure of tower due to delay in shifting of transmission line within ROW for construction of 4 laning of Road will lead to shortage of electricity of Dima Hasao District.

The 11 towers are lying within the acquired 45 m ROW for Construction of Four-Laning of Balachera to Harangajao section of NH-54 (Ext) from Km.275 000 to Km.244.000 in the State of Assam as per IRC Specifications.

For construction of NH-54 undertaken by NHIDCL, 11 Nos tower of 132 kV Haflong-Jiribam Transmission Line need to be shifted. Accordingly, an agreement between POWERGRID & NHIDCL on 30.03.2019. As per the agreement the work to be executed by NHIDCL through its EPC contractor under the supervision of POWERGRID.

1.1 JUSTIFICATION & BENEFIT OF THE PROJECT: -

The Project Highway from "Balachera (Km.275.000) – Harangajao (Km244.000) passes entirely through hilly terrain. Hills are on Left Hand Side (Eastern side) whereas river Jatinga flows in the valley on the other side (Western side). Along the existing alignment, at many places, there are number of sharp horizontal curves and steep gradients (due to hill terrain) and these are required to be improved as per IRC Specifications.

The National Highway i.e., Balachera-Harangajao is an important stretch of East-West Corridor i.e., East - West National highway starts from Porbandar and terminates in Silchar, the highway passes through the states of Gujarat, Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal, Assam.

The 11 towers are lying within the acquired 45 m ROW for Construction of Four-Laning of Balachera to Harangajao section of NH-54 (Ext) from Km.275 000 to Km.244.000 in the State of Assam as per IRC Specifications. To construct the NH, the existing 11 nos. 132 Kv of PGCIL Tower to be shifted immediately as it leading to delay in completion of project. Former Prime Minister late Shri Atal Bihari Vajpayee's dream project 3300 km long East-West Corridor between Silchar and Porbandar in Gujrat is of national importance and the 4 laning stretch of Balacherra to Harangajao in Cachar and Dima Hasao Districts is struck up.

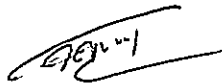
The agreement was signed on 30.03.2019 between National Highways & Infrastructure Development Corporation Limited. (NHIDCL) and Power Grid Corporation of India Ltd. (POWERGRID) for "Diversion Work of 132 kV S/C Haflong - Jiribam Transmission Line of POWERGRID In The Section Between Tower Location No. 104 to Location No. 164 For facilitating Construction of National Highway-54, Undertaken By NHIDCL.

The entry point of 132kV S/C Haflong - Jiribam transmission line is located at 132kV POWERGRID Sub-Station, Lower Haflong. The line passes through Dima hasao District (Assam), Cachar District (Assam) and terminated at 132kV POWERGRID Sub-Station, Jiribam (Manipur).

The 132kV S/C Haflong - Jiribam transmission line provided electricity to two States i.e., Assam and Manipur and back-bone of the transmission system in NER. It also plays an important role for providing power to Dima Hasao District of Assam. Any failure of tower due to delay in shifting of transmission line within ROW for construction of 4 laning of Road will lead to shortage of electricity of Dima Hasao District.

The construction of this line was not an easy task due to hilly terrain, dense vegetation, approachability issue along with other local issues. But as we ensure principles of Reliability, Security and Economy matched with the rising/ desirable expectation of a cleaner, safer, healthier Environment of people, both affected and benefited by its activities so we have taken this opportunity & worked out for best possible route and possible alternatives.

The route alignment survey has been started from Debinala Khasia Punjee S/s (PGCIL), District Cachar. Due to presence of dense forest along with wildlife sanctuary (Borail wildlife sanctuary) all possible efforts have been made to avoid this Wild life sanctuary and route is deviated from wildlife area. In spite of all efforts Borail wild life sanctuary could not be


 K. Paul
 Project Manager
 NHIDCL
 Dispur, Assam

avoided fully and the line is passing through 3.416 km length in this Forest Area. However, the line is passing through small patches of RF which could not be avoided.

Moreover, Transmission line Projects are environment friendly and do not involve any disposal of solid effluents and hazardous substance in land, air and water. Moreover, in forest area trees are felled below each conductor to facilitate stringing. On completion of construction only one strip is maintained for O & M purpose. Therefore, the actual loss of forest is restricted to some selected area only.

Hence, the Forest area to be diverted is the most feasible and shortest route for Diversion of 132kV S/C Haflong – Jiribam Transmission Line between tower location no. 104 and location no. 164 for facilitating construction of NH-54 by installing 11 nos. of Tower at Location (123 to 136A) for work of 132kV S/C Haflong - Jiribam transmission line of POWERGRID and the forest strip located along with is declared as protected forest and we have no other land falling in non-forest area. Therefore, it is necessary for us to use protected forest land for installing 11 nos. of Tower at Location (123 to 136A).

1.2 DETAILS OF THE PROPOSED TRANSMISSION SUB-PROJECT:-

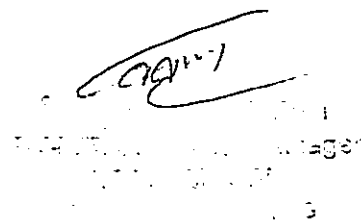
The 132kV S/C Haflong - Jiribam transmission line of POWERGRID provided electricity to two States i.e., Assam and Manipur and back-bone of the transmission system in NER. It also plays an important role for providing power to Dima Hasao District of Assam.

1.3 REQUIREMENT OF WILDLIFE CLEARANCE:-

In order to minimize impact on forest and wildlife, the route of the 132 kV Haflong-Jiribam T/L is proposed along the road from Balachara to Hrangajao which is presently under construction by NHIDCL. This will enable transportation of construction equipment/tower materials through the road and also facilitate the operation and maintenance of the line in future. The proposed route is the shortest and the most feasible route from all aspects which has been selected among all the alternatives routes explored during detail survey.

However, a portion of the route has to pass through Borail Wildlife Sanctuary. The avoidance of the Wildlife Sanctuary is entirely not possible due to the physical & complex terrain of the area.

The technical details of the proposed route & status of forest/wildlife clearances are states as below:


Project Manager

261

Name of project for which WL clearance is required	Diversion of Forest Land for 11 nos. of Tower Location (123 to 136A) against "Diversion work of 132KV S/C Haflong-Jiribam transmission line of POWERGRID in the section between tower location no. 104 to location no. 164 for facilitating the construction of NH-54 in Borail Wildlife Sanctuary under Cachar District
Total Line Length	14.6 KM
Details of wildlife area involved	Borail Wildlife Sanctuary (9.23 HA)
Total no of towers to be erected in WL area	11 Nos
Total wildlife area involved	9.23 Ha
Present Status of WL proposal	Submitted on 27.05.2022
Present Status of Forest proposal	Submitted online on 15/01/2021. Presently under process at Regional office.
Likely impact of the project on protected area (PA)	The overall impact of the project on protected area (PA) i.e. Borail Wildlife Sanctuary is assessed as minimum which can be addressed through proper mitigation measures as recommended.


SECTION-II: DETAILS OF PROTECTED AREA

2.0 BORAIL WILDLIFE SANCTUARY

Borail Wildlife Sanctuary is located in the southern part of Assam, India in Cachar and Dima Hasao districts and lies between 24°55'53"-25°05'52" N latitude and 92°27'40"-93°04'30" E longitude. The altitude ranging between 55-1000 m above mean sea level. It spreads over 326.24 km². The annual average rainfall and temperature ranges from 2500-4000 mm and 9.2 °C to 36.2 °C respectively; whereas the Humidity varies from 62% to 83%. The sanctuary consists of the North Cachar Reserve Forest and Borail Reserve Forest, which are classified as tropical moist evergreen and semi-evergreen forests. The forest is home to a wide diversity of wildlife. Mammals include serow, Himalayan black bear, Hoolock gibbon, Langur, macaques, Jungle cat, Clouded leopard, Barking deer and more. Birds found include White-backed vulture, Slender-billed vulture, partridge, pheasant, hornbill and more. Reptiles include rock python and King cobra.

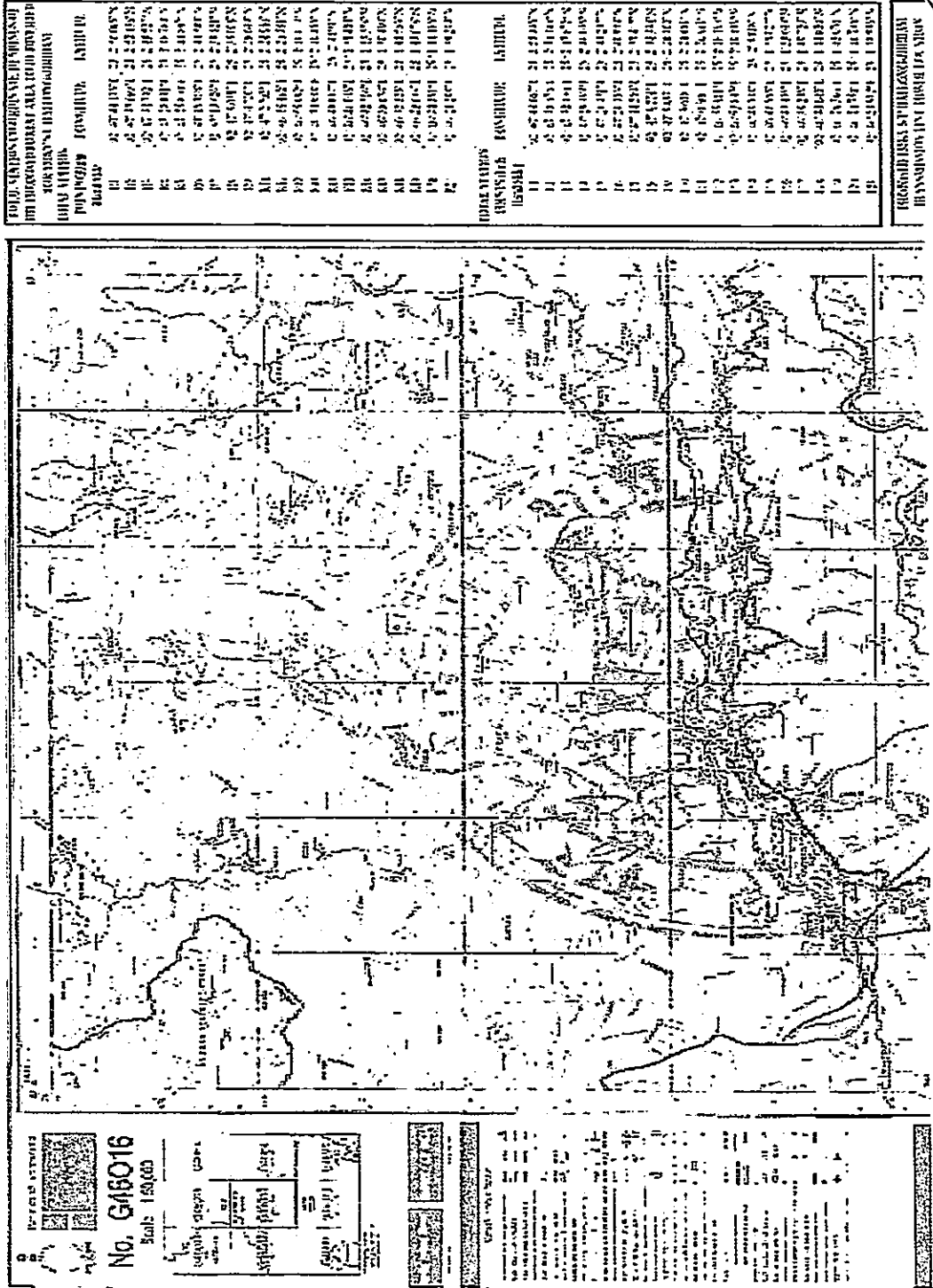
Besides above the sanctuary also harbors a vast amount floristic diversity e.g. *Ornithochilus cacharensis* an epiphytic orchid species, *Larsenianthus assamensis* a terrestrial zingiber species, *Diospyros cacharensis* a small deciduous tree belonging to family Ebenaceae and *Alseodaphne keenanii* a large tree belonging to family Lauraceae were described for the first time for this sanctuary and all are endemic to north-east India.

The nearest town is Silchar, which is 40 km away.


 श्री. अ. च. ...
 मुख्य अधिकारी, ...
 पर्यटन विभाग
 ...

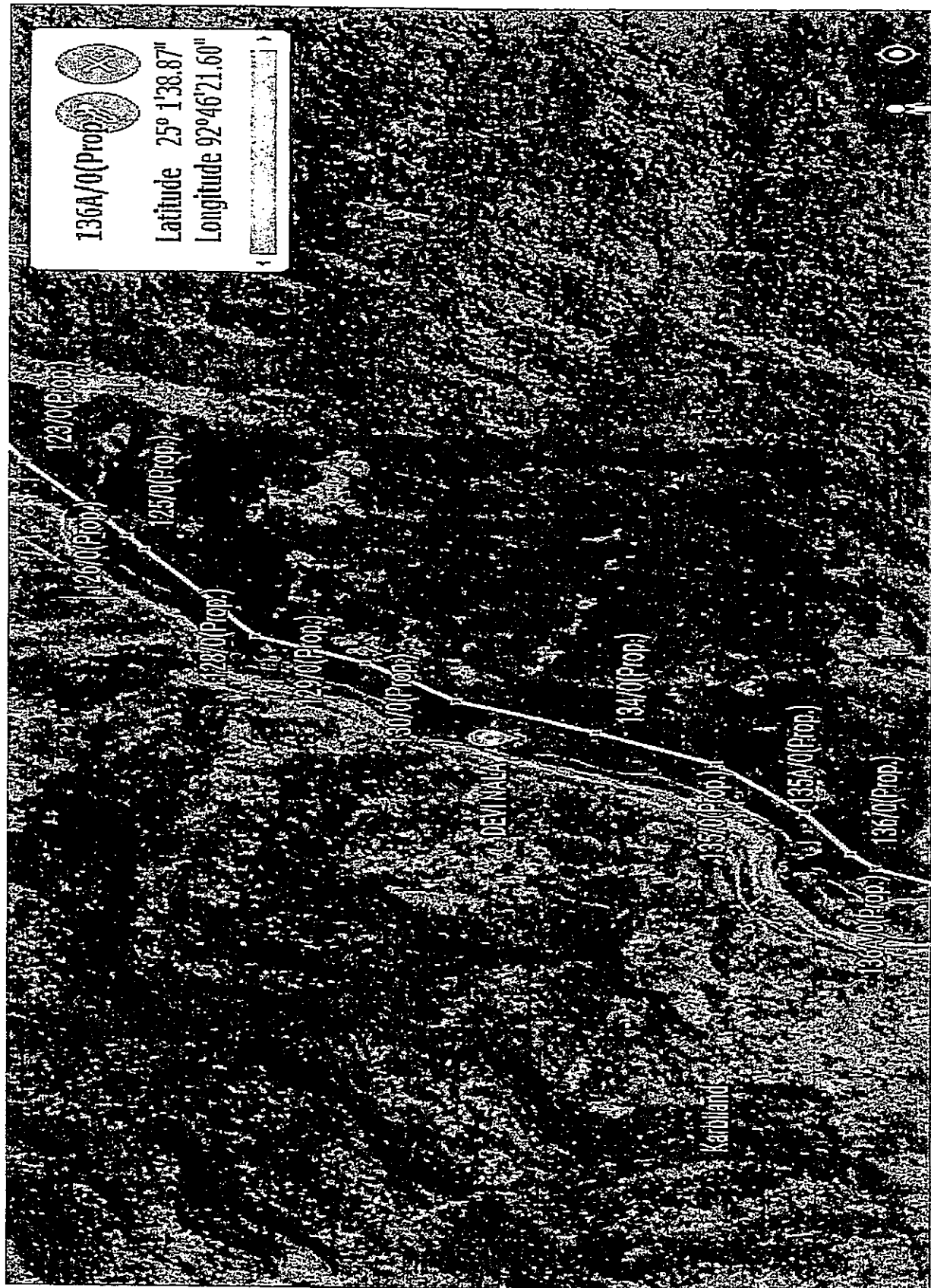
259

TOPUSHEET MAP SHOWING THE PROPOSED 923 HECTARE AREA OF FOREST LAND FOR CONSTRUCTION OF 12KV SIC HAFLONG-JIRIBAM TRANSMISSION LINE
 (11 NOS. OF TRANSMISSION LINE TOWER (23 TO 126A)) FOR FACILITATING THE CONSTRUCTION OF NO.54 (G)
 AT BORAIL WILDLIFE SANCTUARY UNDER CACHAR FOREST DIVISION, ASSAM



NO.	COORDINATES (Easting)	COORDINATES (Northing)	AREA (Sq. Meters)	PERCENTAGE
23	474100	2124000	10000	1.08
24	474200	2124000	10000	1.08
25	474300	2124000	10000	1.08
26	474400	2124000	10000	1.08
27	474500	2124000	10000	1.08
28	474600	2124000	10000	1.08
29	474700	2124000	10000	1.08
30	474800	2124000	10000	1.08
31	474900	2124000	10000	1.08
32	475000	2124000	10000	1.08
33	475100	2124000	10000	1.08
34	475200	2124000	10000	1.08
35	475300	2124000	10000	1.08
36	475400	2124000	10000	1.08
37	475500	2124000	10000	1.08
38	475600	2124000	10000	1.08
39	475700	2124000	10000	1.08
40	475800	2124000	10000	1.08
41	475900	2124000	10000	1.08
42	476000	2124000	10000	1.08
43	476100	2124000	10000	1.08
44	476200	2124000	10000	1.08
45	476300	2124000	10000	1.08
46	476400	2124000	10000	1.08
47	476500	2124000	10000	1.08
48	476600	2124000	10000	1.08
49	476700	2124000	10000	1.08
50	476800	2124000	10000	1.08
51	476900	2124000	10000	1.08
52	477000	2124000	10000	1.08
53	477100	2124000	10000	1.08
54	477200	2124000	10000	1.08
55	477300	2124000	10000	1.08
56	477400	2124000	10000	1.08
57	477500	2124000	10000	1.08
58	477600	2124000	10000	1.08
59	477700	2124000	10000	1.08
60	477800	2124000	10000	1.08
61	477900	2124000	10000	1.08
62	478000	2124000	10000	1.08
63	478100	2124000	10000	1.08
64	478200	2124000	10000	1.08
65	478300	2124000	10000	1.08
66	478400	2124000	10000	1.08
67	478500	2124000	10000	1.08
68	478600	2124000	10000	1.08
69	478700	2124000	10000	1.08
70	478800	2124000	10000	1.08
71	478900	2124000	10000	1.08
72	479000	2124000	10000	1.08

[Signature]
 Mr. K. Paul
 Project Manager
 POWERGRID, HAFLONG



[Handwritten Signature]
 2011
 2011
 2011
 2011

2.2 MAJOR ACTIVITIES INVOLVED IN THE TRANSMISSION PROJECT:-

The major construction activity envisages in the proposed transmission project are as follows:-

- ❖ Construction of Tower Foundation (An average of 12 M x 12 M tower base and activities involves excavation of soil and concreting)
- ❖ Erection of transmission towers (involves joining of tower members/lattice structure)
- ❖ Stringing of electrical conductor wires between adjacent towers.

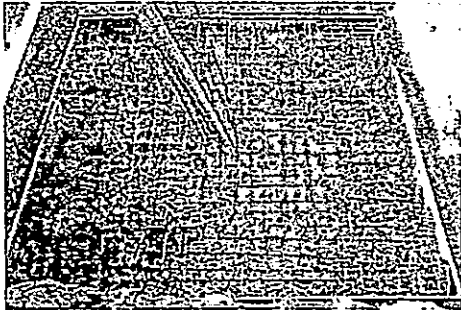
The above activities will be carried out by engaging suitable Contractor. For tower foundation works, local gangs/manpower are usually engaged as petty Contractor and temporary makeshift camps are set nearby the construction site till completion of work. For hill areas construction of new approach road generally not encouraged & the existing village tract or jungle tract are used for head loading of tower materials. Tower erection and stringing of conductor is generally carried out by specialized gangs and temporary construction camps are also required to be set up for this purpose.

TOWER FOUNDATION:

Foundation of a transmission tower is the basic structure to support the tower in its position. It plays an important role in safety and satisfactory performance of the structure as it transmits mechanical loads of the electrical transmission system to earth. The foundations in various types of soils have to be designed to suit the soil conditions of particular type. In addition to foundations of normal towers, there are situations where considering techno-economical aspect for special towers required or river crossing which may be located either on the bank of the river or in the mind stream or both, pile foundation may be provided. The various activities involved in the foundation work are illustrated below:-

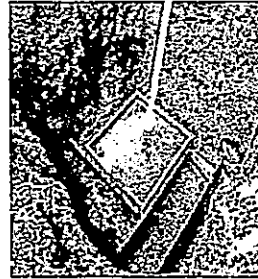
Transmission Tower Foundation

Raft Concrete

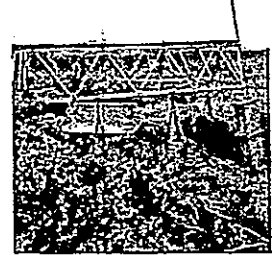


Transmission Tower Foundation

Stub Footing concrete

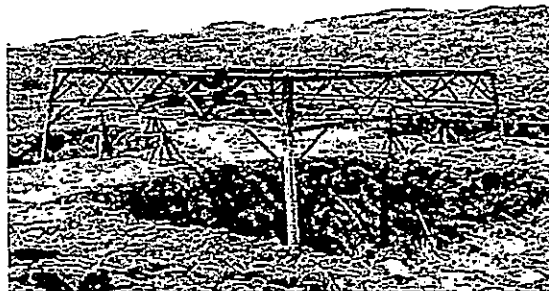


Stub Concrete



Transmission Tower Foundation

Stub setting & Template Assembly



TOWER ERECTION:

There are four main methods of erection of steel transmission towers which are as below:

- ❖ Build-up method or Piecemeal method
- ❖ Section method
- ❖ Ground assembly method.
- ❖ Helicopter method.

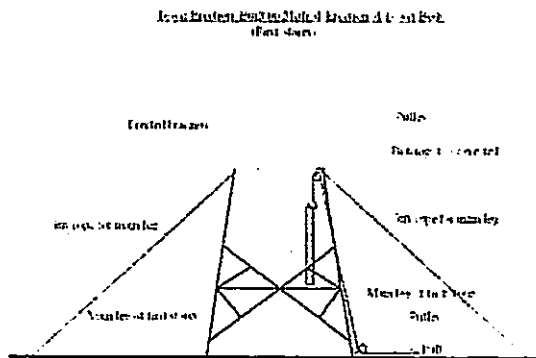
Build Up Method of Tower Erection

- ❖ This method is most commonly used in India for the erection of 66 kV, 220 kV and 400 kV transmission line towers. This method consists of erecting the towers, member by member. The tower members are kept ground serially according to erection sequence to avoid search or time loss.

- ❖ The erection progresses from the bottom upwards. The four main corner leg members of the first section of the tower are first erected and bolted with the stub.

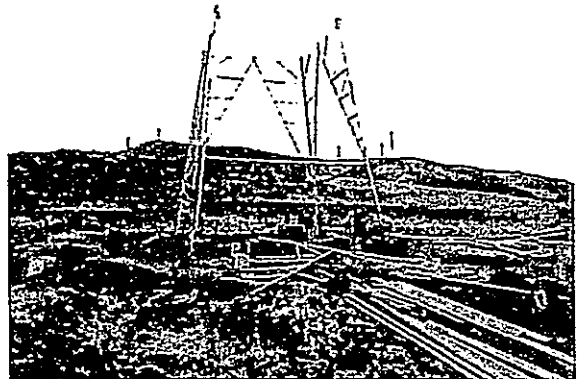
Transmission Tower Erection

Build Up Method of Tower Erection

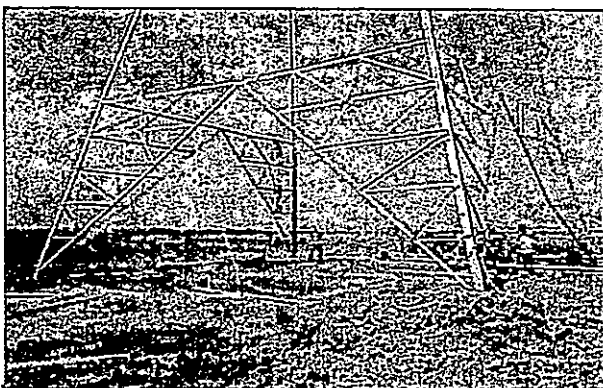


Transmission Tower Erection

Tower Erection in progress

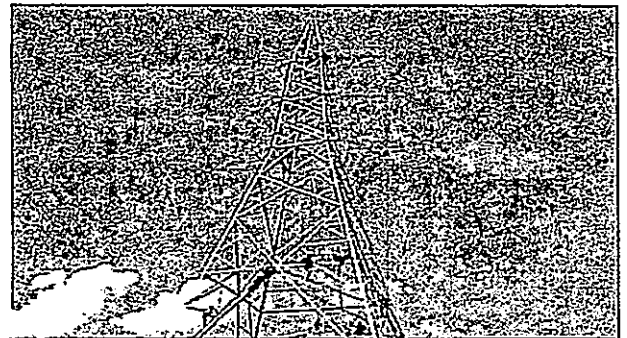


Transmission Tower Erection



Transmission Tower Erection

Cross Arms Erected



TOWER STRINGING:

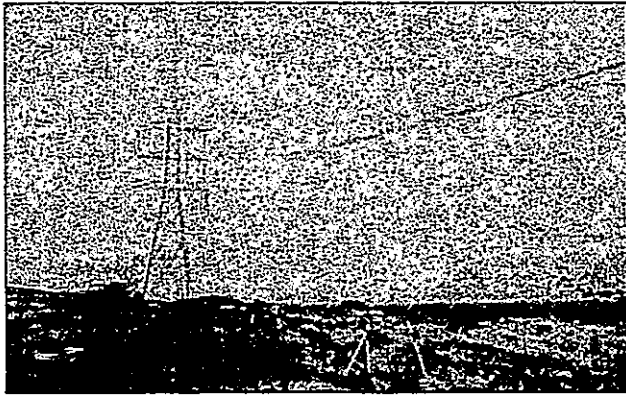
- ❖ Stringing of Transmission line a process of joining and fixing of the electrical conductor wires from tower to tower and various other assemblies for transmission of electricity.
- ❖ Stringing overhead conductors in transmission is a very specialized type of construction requiring years of experience as well as equipment and tools that have been designed, tried and proven to do the work.

[Handwritten signature]
 Mr. ...
 ...
 ...

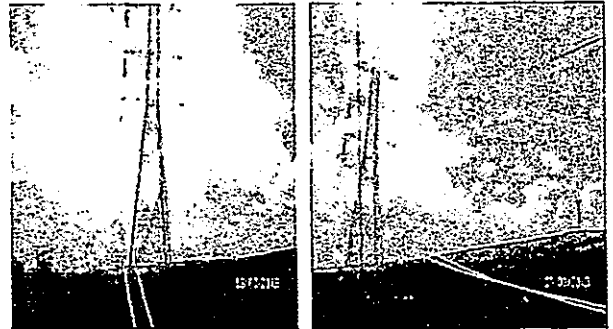
Steps of stringing

- o Proper guying
- o Insulator Hoisting
- o Paying out of pilot wire & conductor
- o Rough sagging of conductor
- o Clipping & spacing
- o Finishing activities
- o Jumpering
- o Final checking

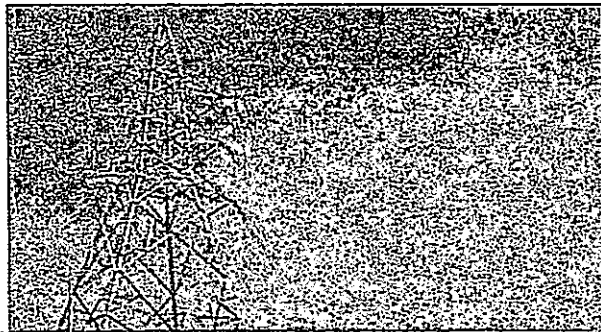
Conductor Payout for each Phase



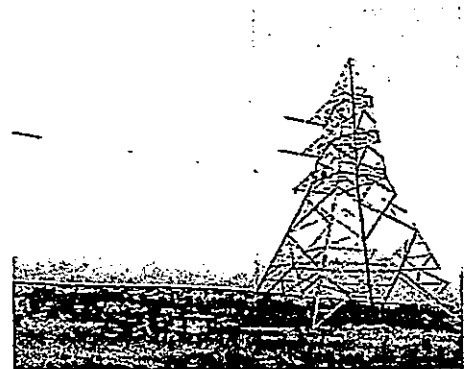
Conductor Payout through Suspension Towers




Conductor Rough Sag in progress



Conductor Stringing Completed




श्री. सं. पाठ.
मुंबई ४०
१९९९
POWERGRID, RAJONG

- **ELECTROCUTION & ACCIDENTAL COLLISION OF BIRDS.**

Electrocution of birds and their collision with powerlines, is not only a topic of conservation concern but also an issue of serious economic and financial costs. Powerlines cause large scale mortality of birds around the world due to electrocution and collision. Powerlines located close to Important Bird areas (especially water bodies having large congregation of birds, or carcass or garbage dumps) or bisecting critical flight paths pose a significant risk of electrocution or collision in birds. Transmission lines (typically >66 kV) are placed on tall metal lattice towers holding multiple conductor wires on cross arms. The phase to phase and phase to ground separation in transmission lines is usually sufficient to prevent electrocution of birds. However, electrocution of birds can occur when a bird, perched on a live wire, power pole or on a metal cross arm comes in contact with another live or earth wire, power pole or cross arm. Apart from structural aspects of the powerlines, biological characteristics of birds including body size, age class and behaviors affect electrocution risk. Birds with large wing spans that show preference for using power lines during hunting or for perching and roosting, particularly raptors are known to be more susceptible to electrocution. Raptors and strokes are to be most at risk of electrocution since they use power poles extensively as nesting platforms. With regard to the aspect of bird collision with powerlines, it is found that birds frequently collide with the earth wires installed at the top of transmission lines, as it is less visible and smaller in diameter. *A recent survey of 675 power poles in western Rajasthan recorded 162 birds which had been electrocuted, including five species of raptors. In the past ten years, six great indian bustards died as a consequence of collision or electrocution by powerlines.*

There are various birds found in Borail Wildlife Sanctuary viz. Lesser Adjutant Stork, White-backed Vulture, Slender-billed Vulture, White cheeked Hill Partridge, Mountain Bamboo partridge, Khaleej Pheasant, Grey Peacock-Pheasant, Rufus necked Hornbill, Wreathed Hornbill, Great Pied Hornbill etc. therefore, accidental electrocution and collision of birds (*specially the large winged species*) cannot be completely denied in case of the proposed 132 kV S/C Haflong-Jiribam Transmission line which is passing through the Borail Wildlife Sanctuary.

- **ELECTROCUTION OF MAMMALS**

Electrocution from powerlines is not only limited to birds, but other animal species like bats, monkeys, primates and other arboreal species are also vulnerable to

[Handwritten signature]
[Faint stamp]

electrocution. The Borail Wildlife Sanctuary area is a suitable habitat of Chinese pangolin, Flying fox, Slow loris, Stump-tailed macaque, Assamese macaque, Rhesus macaque, Capped langur, Hoolock gibbon, Himalayan black bear, Yellow-throated marten, Hog-badger, Jungle cat, Leopard cat, Fishing cat, Marbled cat, Clouded leopard, Leopard, Wild pig, Sambar, Barking deer, Serow, Giant squirrel, Porcupine etc. also and accidental electrocution of these species cannot be completely ruled out from the proposed power transmission line.

• **ACCIDENTAL FALLINGS OF ANIMALS IN EXCAVATED PITS FOR TOWER FOUNDATION.**

The average pit dimension of 132 kV Tower is (3 m x 3 m x 3 m), which are required to be excavated for placing the tower foundation. For each 132 kV tower foundation, four (4) nos of such pits are required to be excavated and a total of 11 no of towers are required to be erected in the Borail wildlife sanctuary. If such excavated pits are left unattended or left without backfilling, the accidental falling of wild animals like baby elephants and other species cannot be ruled out during the project construction period.



• **INDUCED IMPACT ON WILDLIFE FROM CONSTRUCTION WORKERS.**

Construction manpower will be required for execution of the project and makeshift construction camps and will be set up at the tower foundation/erection sites as per site requirement. Generally for tower foundation works, local manpower/workers will be engaged. However, for specialized works like tower erection and stringing, migrant labours are usually engaged. The induced impact on the Borail wildlife sanctuary from such construction workers is the likelihood of involvement in hunting/trafficking of wild animals and other unlawful activity during the execution of the project.

[Handwritten signature]
[Faint, illegible text]

269

SECTION-III: PROPOSED MITIGATION MEASURES

3.1 SAFEGUARD OF BIRDS FROM ELECTROCUTION AND ACCIDENTAL COLLISION:-

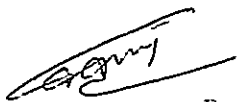
There are many birds found in Borail wildlife sanctuary viz. Lesser Adjutant Stork, White-backed Vulture, Slender-billed Vulture, White cheeked Hill Partridge, Mountain Bamboo partridge, Khaleej Pheasant, Grey Peacock-Pheasant, Rufus necked Hornbill, Wreathed Hornbill, Great Pied Hornbill etc.. Therefore, the following mitigation measures are proposed for safeguard of birds:-

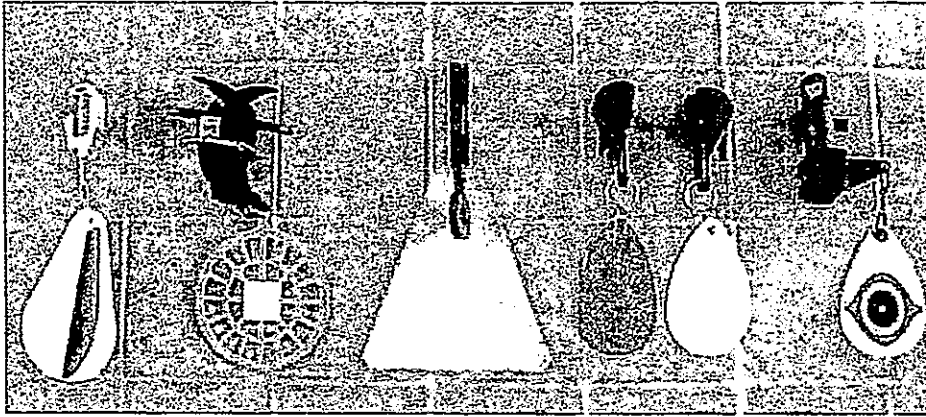
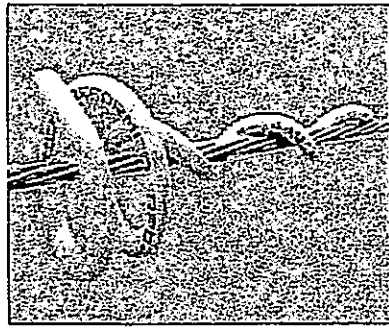
- ❖ The Stringing of conductor for the transmission line shall be carried out maintaining a separation between energized conductors as follows:

Vertical distance between two conductors : 4 m (appx.)
Horizontal distance between two conductors : 9 m (appx.)

The above arrangement, will nullify the likelihood of electrocution of large winged birds like hornbill, because the distance between energized conductors will be always more than the maximum wing span of the bird. *A figure showing the above arrangement is shown in Annexure-II*

- ❖ To prevent accidental collision of birds with the conductor **bird diverter/colored/contrast marker devices** will be installed on the earth wire to make it visible to birds from long distance as shown in the photographs as below.
- ❖ **Bird Guard** will be provided on towers as per requirement to prevent birds from sitting in the insulator strings which may result in puncture of insulator due to defecation by birds.


[Illegible text]



[Handwritten signature]
Special Agent in Charge
Federal Bureau of Investigation
Washington, D.C.
20535

- b. Line markers should be as large as possible. The spacing between them should not be more than 5 to 10 m. Marker devices should be chosen to contrast as much as possible with the background colours of figure 12.8a, and, importantly, should be visible at night; most land collisions are said to occur at night.

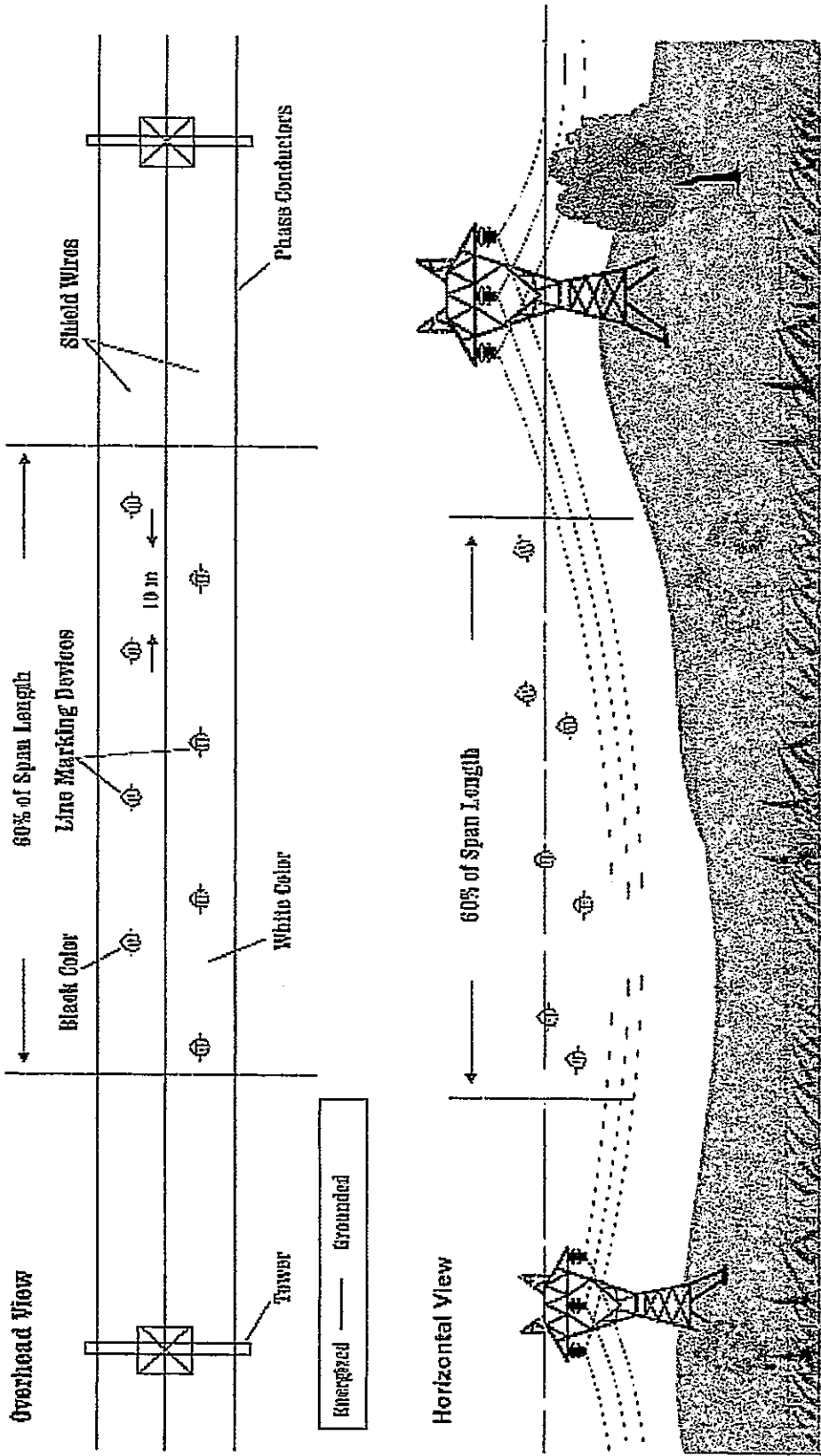
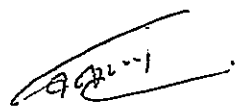


Figure 12.8. Design and configuration of markers at poles and towers. From: Energy Transfer, vol. 1, Figure 12.8, p. 20054. Source: IPEC 2012.

- ❖ The excavated pits shall be properly barricaded and fenced so as to prevent accidental falling of mammals like baby elephants in the vicinity of the construction sites.
- ❖ All pollution related aspects and waste management will be duly taken care during the implementation of the project.
- ❖ In addition to above, any other measures as envisaged by the State Board of Wildlife/national Board of Wildlife and as per provisions of wildlife (Protection) Act, 1972 will be strictly adhered to during execution of the project by POWERGRID.


S. S. ...
POWERGRID

SECTION -IV: CONCLUSION

The National Highway i.e., Balachera-Harangajao is an important stretch of East-West Corridor i.e., East - West National highway starts from Porbandar and terminates in Silchar, the highway passes through the states of Gujarat, Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal, Assam.

The 11 towers are lying within the acquired 45 m ROW for Construction of Four-Laning of Balachera to Harangajao section of NH-54 (Ext) from Km.275 000 to Km.244.000 in the State of Assam as per IRC Specifications. To construct the NH, the existing 11 nos. 132 Kv of PGCIL Tower to be shifted immediately as it leading to delay in completion of project. Former Prime Minister late Shri Atal Bihari Vajpayee's dream project 3300 km long East-West Corridor between Silchar and Porbandar in Gujrat is of national importance and the 4 laning stretch of Balacherra to Harangajao in Cachar and Dima Hasao Districts is struck up.

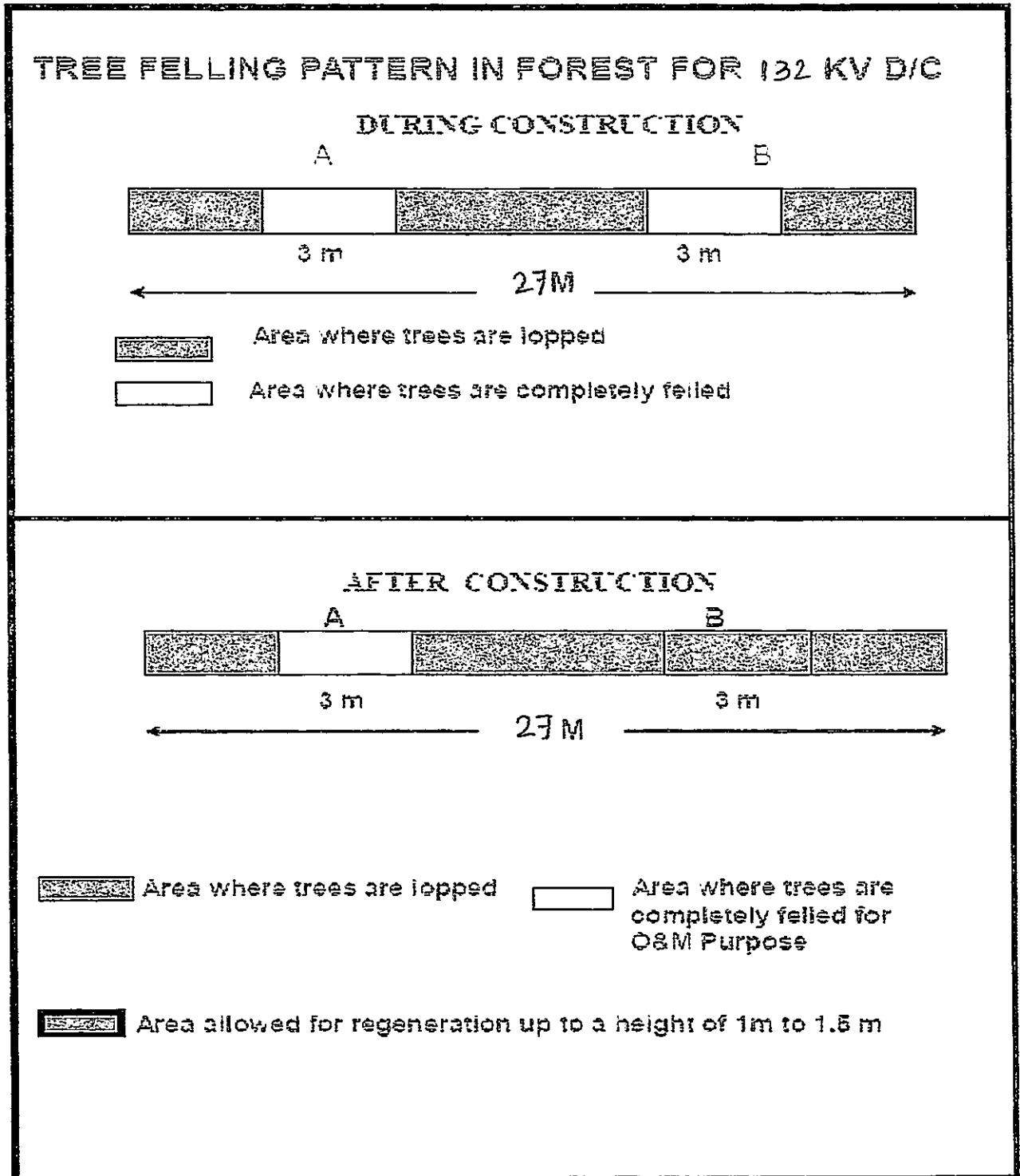
The construction of the above transmission line requires wildlife clearance since, a section of the proposed transmission line has to pass through the Borail wildlife sanctuary since the avoidance of the wildlife sanctuary is not possible due to location of the Sub-stations and due to physical & complex terrain of the area. The EIA and environmental clearance is not required for this project since power transmission lines are kept outside the purview of EIA as per MoEF notification and considered as green project due to its pollution free nature.

Considering the importance of conservation of biodiversity and the rich wildlife habitat, flora and fauna of Borail wildlife sanctuary, it is found that there will be some temporary and permanent impact from the aforesaid transmission project on the wildlife sanctuary area. However, the User Agency and POWERGRID has made a holistic approach towards protection of the buffer zone through the principle of avoidance, minimization and mitigation in their project activity and committed for implementation of various mitigation measures for birds, monkeys etc. including general measures for overall protection of the forest and wildlife in the Borail wildlife sanctuary.

Therefore, it is summarized that the overall impact on biodiversity on Borail wildlife sanctuary due to the proposed transmission project is assessed as low which can be minimized through proper mitigation measures as per guidelines.

[Handwritten signature]
 [Faint official stamp]

**FIGURE-3 : TREE FELLING ARRANGEMENT IN THE PROJECT
AS PER GUIDELINE OF MI**

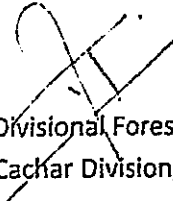


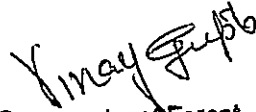
[Signature]
 J. S. ...
 ...
 ...

242

Budget with detailed plan & estimate of Wildlife Mitigation Plan for Diversion of 9.23 ha of forest land for 11 tower locations (Nos. 123 to 136A) of the 132 KV S/C Haflong-Jiribam Transmission Line in the Borail Wildlife Sanctuary (East Block), under Cachar Division.

Sl. No.	Particulars	Year	Unit	Unit Price	Amount
1	Hiring of vehicle (Mahindra Bolero) with POL	1 st	1	40,000/- per month	4,80,000/-
2	Hiring of vehicle (Mahindra Bolero) with POL	2 nd	1	40,000/- per month	4,80,000/-
3	Contingency				4269/-
				Total	9,64,269/-


Divisional Forest Officer
Cachar Division, Silchar.


Principal Chief Conservator of Forest
Wildlife & CWLW, Assam
Panjabari, Guwahati-37