सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली संचार विकास प्रभाग
Power System Communication Development Division
****

On behalf of
Central Level Power & Telecommunication Co-ordination Committee

No: As assigned **Date:** As assigned

Subject: Certificate of Approval for the Route of Power Line of NTPC Renewable Energy Limited.

Route Approval Certificate for the following listed lines of NTPC Renewable Energy Limited is annexed to this letter:

S.No.	Name
1	33 kV S/C3Rx1Cx400 Sq.mm cable (1.691km) from 17.6 MW HT ICOG Panel at ICR Block no 1 to Main HT Panel No 1A (I/C Feeder 01) at 400/33kV Pooling station Length- 1.691 km
2	33 kV S/C3Rx1Cx400 Sq.mm cable (2.424km) from 17.6 MW HT ICOG Panel at ICR Block no 2 to Main HT Panel No 1A (I/C Feeder 02) at 400/33kV Pooling station Length- 2.424 km
3	33 kV S/C3Rx1Cx400 Sq.mm cable (3.357km) from 17.6 MW HT ICOG Panel at ICR Block no 3 to Main HT Panel No 1A (I/C Feeder 03) at 400/33kV Pooling station Length- 3.357 km
4	33 kV S/C3Rx1Cx400 Sq.mm cable (3.535km) from 17.6 MW HT ICOG Panel at ICR Block no 4 to Main HT Panel No 1A (I/C Feeder 04) at 400/33kV Pooling station Length- 3.535 km
5	33 kV S/C3Rx1Cx400 Sq.mm cable (4.293km) from 17.6 MW HT ICOG Panel at ICR Block no 5 to Main HT Panel No 1A (I/C Feeder 05) at 400/33kV Pooling station Length- 4.293 km
6	33 kV S/C3Rx1Cx400 Sq.mm cable (4.436km) from 17.6 MW HT ICOG Panel at ICR Block no 6 to Main HT Panel No 1A (I/C Feeder 06) at 400/33kV Pooling station Length- 4.436 km
7	33 kV S/C3Rx1Cx400 Sq.mm cable (3.63km) from 17.6 MW HT ICOG Panel at ICR Block no 7 to Main HT Panel No 1A (I/C Feeder 07) at 400/33kV Pooling station Length- 3.63 km
8	33 kV S/C3Rx1Cx400 Sq.mm cable (4.062km) from 17.6 MW HT ICOG Panel at ICR Block no 8 to Main HT Panel No 1A (I/C Feeder 08) at 400/33kV Pooling station Length- 4.062 km
9	33 kV S/C3Rx1Cx400 Sq.mm cable (4.591km) from 17.6 MW HT ICOG Panel at ICR Block no 9 to Main HT Panel No 1B (I/C Feeder 09) at 400/33kV Pooling station Length- 4.591 km

10	33 kV S/C3Rx1Cx400 Sq.mm cable (4.358km) from 17.6 MW HT ICOG Panel at ICR Block no 10 to Main HT Panel No 1B (I/C Feeder 10) at 400/33kV Pooling station Length- 4.358 km
11	33 kV S/C3Rx1Cx400 Sq.mm cable (2.827km) from 17.6 MW HT ICOG Panel at ICR Block no 11 to Main HT Panel No 1B (I/C Feeder 11) at 400/33kV Pooling station Length- 2.827 km
12	33 kV S/C3Rx1Cx400 Sq.mm cable (5.080km) from 17.6 MW HT ICOG Panel at ICR Block no 12 to Main HT Panel No 1B (I/C Feeder 12) at 400/33kV Pooling station Length- 5.080 km
13	33 kV S/C3Rx1Cx400 Sq.mm cable (4.088km) from 17.6 MW HT ICOG Panel at ICR Block no 13 to Main HT Panel No 1B (I/C Feeder 13) at 400/33kV Pooling station Length- 4.088 km
14	33 kV S/C3Rx1Cx400 Sq.mm cable (3.764km) from 17.6 MW HT ICOG Panel at ICR Block no 14 to Main HT Panel No 1B (I/C Feeder 14) at 400/33kV Pooling station Length- 3.764 km
15	33 kV S/C3Rx1Cx400 Sq.mm cable (3.404km) from 17.6 MW HT ICOG Panel at ICR Block no 15 to Main HT Panel No 1B (I/C Feeder 15) at 400/33kV Pooling station Length- 3.404 km
16	33 kV S/C3Rx1Cx400 Sq.mm cable (2.793km) from 17.6 MW HT ICOG Panel at ICR Block no 16 to Main HT Panel No 1B (I/C Feeder 16) at 400/33kV Pooling station Length- 2.793 km
17	33 kV S/C3Rx1Cx400 Sq.mm cable (3.148km) from 17.6 MW HT ICOG Panel at ICR Block no 17 to Main HT Panel No 2A (I/C Feeder 17) at 400/33kV Pooling station Length- 3.148 km
18	33 kV S/C3Rx1Cx400 Sq.mm cable (2.763km) from 17.6 MW HT ICOG Panel at ICR Block no 18 to Main HT Panel No 2A (I/C Feeder 18) at 400/33kV Pooling station Length- 2.763 km
19	33 kV S/C3Rx1Cx400 Sq.mm cable (2.211km) from 17.6 MW HT ICOG Panel at ICR Block no 19 to Main HT Panel No 2A (I/C Feeder 19) at 400/33kV Pooling station Length- 2.211 km
20	33 kV S/C3Rx1Cx400 Sq.mm cable (0.629km) from 17.6 MW HT ICOG Panel at ICR Block no 20 to Main HT Panel No 2A (I/C Feeder 20) at 400/33kV Pooling station Length- 0.629 km
21	33 kV S/C3Rx1Cx400 Sq.mm cable (1.172km) from 17.6 MW HT ICOG Panel at ICR Block no 21 to Main HT Panel No 2A (I/C Feeder 21) at 400/33kV Pooling station Length- 1.172 km
22	33 kV S/C3Rx1Cx400 Sq.mm cable (2.462km) from 17.6 MW HT ICOG Panel at ICR Block no 22 to Main HT Panel No 2A (I/C Feeder 22) at 400/33kV Pooling station Length-2.462 km
23	33 kV S/C3Rx1Cx400 Sq.mm cable (1.339km) from 17.6 MW HT ICOG Panel at ICR Block no 23 to Main HT Panel No 2A (I/C Feeder 23) at 400/33kV Pooling station Length- 1.339 km
24	33 kV S/C3Rx1Cx400 Sq.mm cable (1.782km) from 17.6 MW HT ICOG Panel at ICR Block no 24 to Main HT Panel No 2A (I/C Feeder 24) at 400/33kV Pooling station Length- 1.782 km
25	33 kV S/C3Rx1Cx400 Sq.mm cable (3.49km) from 17.6 MW HT ICOG Panel at ICR Block no 25 to Main HT Panel No 2A (I/C Feeder 25) at 400/33kV Pooling station Length- 3.49 km
26	33 kV S/C3Rx1Cx400 Sq.mm cable (4.250km) from 17.6 MW HT ICOG Panel at ICR Block no 26 to Main HT Panel No 2B (I/C Feeder 26) at 400/33kV Pooling station Length- 4.205 km
27	33 kV S/C3Rx1Cx400 Sq.mm cable (4.455km) from 17.6 MW HT ICOG Panel at ICR Block no 27 to Main HT Panel No 2B (I/C Feeder 27) at 400/33kV Pooling station Length- 4.455 km

28	33 kV S/C3Rx1Cx400 Sq.mm cable (4.725km) from 17.6 MW HT ICOG Panel at ICR Block no 28 to Main HT Panel No 2B (I/C Feeder 28) at 400/33kV Pooling station Length- 4.725 km
29	33 kV S/C3Rx1Cx400 Sq.mm cable (5.111km) from 17.6 MW HT ICOG Panel at ICR Block no 29 to Main HT Panel No 2B (I/C Feeder 29) at 400/33kV Pooling station Length- 5.111 km
30	33 kV S/C3Rx1Cx400 Sq.mm cable (5.154km) from 17.6 MW HT ICOG Panel at ICR Block no 30 to Main HT Panel No 2B (I/C Feeder 30) at 400/33kV Pooling station Length-5.1545 km
31	33 kV S/C3Rx1Cx400 Sq.mm cable (5.807km) from 17.6 MW HT ICOG Panel at ICR Block no 31 to Main HT Panel No 2B (I/C Feeder 31) at 400/33kV Pooling station Length-5.807 km
32	33 kV S/C3Rx1Cx400 Sq.mm cable (6.228km) from 17.6 MW HT ICOG Panel at ICR Block no 32 to Main HT Panel No 2B (I/C Feeder 32) at 400/33kV Pooling station Length-6.228 km
33	33 kV S/C3Rx1Cx400 Sq.mm cable (1.198km) from 17.6 MW HT ICOG Panel at ICR Block no 33 to Main HT Panel No 2B (I/C Feeder 33) at 400/33kV Pooling station Length-1.198 km

Digitally signed by
Suman Kumar Maharana
Date: 06-04-2026
13:11:38

Chief Engineer

1.	NTPC Renewabl Energy Limited	NTPC Bhawan, Scope Complex, New Delhi

CEA Case No.: RAJ-906 - 1

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (1.691km) from 17.6 MW HT ICOG Panel at ICR Block no 1 to Main HT Panel No 1A (I/C Feeder 01) at 400/33kV Pooling station Length- 1.691 km** particulars of which are given in Annexure I.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure II.

Annexure I

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewable Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (1.691km) from 17.6 MW HT ICOG Panel at ICR Block no 1 to Main HT Panel No 1A (I/C Feeder 01) at 400/33kV Pooling station Length- 1.691 km
(d)	Length of Power line:	1.691 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-II
(b)	Length of parallelism:	As per Annexure-II
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-II

Annexure II

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (1.691km) from 17.6 MW HT ICOG Panel at ICR Block no 1 to Main HT Panel No 1A (I/C Feeder 01) at 400/33kV Pooling station Length- 1.691 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 2

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.424km) from 17.6 MW HT ICOG Panel at ICR Block no 2 to Main HT Panel No 1A (I/C Feeder 02) at 400/33kV Pooling station Length- 2.424 km** particulars of which are given in Annexure III.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure IV.

Annexure III

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewable Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.424km) from 17.6 MW HT ICOG Panel at ICR Block no 2 to Main HT Panel No 1A (I/C Feeder 02) at 400/33kV Pooling station Length- 2.424 km
(d)	Length of Power line:	2.424 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-IV
(b)	Length of parallelism:	As per Annexure-IV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-IV

Annexure IV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.424km) from 17.6 MW HT ICOG Panel at ICR Block no 2 to Main HT Panel No 1A (I/C Feeder 02) at 400/33kV Pooling station Length- 2.424 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 3

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.357km) from 17.6 MW HT ICOG Panel at ICR Block no 3 to Main HT Panel No 1A (I/C Feeder 03) at 400/33kV Pooling station Length- 3.357 km** particulars of which are given in Annexure V.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure VI.

Annexure V

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.357km) from 17.6 MW HT ICOG Panel at ICR Block no 3 to Main HT Panel No 1A (I/C Feeder 03) at 400/33kV Pooling station Length- 3.357 km
(d)	Length of Power line:	3.357 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-VI
(b)	Length of parallelism:	As per Annexure-VI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-VI

Annexure VI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.357km) from 17.6 MW HT ICOG Panel at ICR Block no 3 to Main HT Panel No 1A (I/C Feeder 03) at 400/33kV Pooling station Length- 3.357 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 4

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.535km) from 17.6 MW HT ICOG Panel at ICR Block no 4 to Main HT Panel No 1A (I/C Feeder 04) at 400/33kV Pooling station Length- 3.535 km** particulars of which are given in Annexure VII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure VIII.

Annexure VII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.535km) from 17.6 MW HT ICOG Panel at ICR Block no 4 to Main HT Panel No 1A (I/C Feeder 04) at 400/33kV Pooling station Length- 3.535 km
(d)	Length of Power line:	3.535 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-VIII
(b)	Length of parallelism:	As per Annexure-VIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-VIII

Annexure VIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.535km) from 17.6 MW HT ICOG Panel at ICR Block no 4 to Main HT Panel No 1A (I/C Feeder 04) at 400/33kV Pooling station Length- 3.535 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 5

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.293km) from 17.6 MW HT ICOG Panel at ICR Block no 5 to Main HT Panel No 1A (I/C Feeder 05) at 400/33kV Pooling station Length- 4.293 km** particulars of which are given in Annexure IX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure X.

Annexure IX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.293km) from 17.6 MW HT ICOG Panel at ICR Block no 5 to Main HT Panel No 1A (I/C Feeder 05) at 400/33kV Pooling station Length- 4.293 km
(d)	Length of Power line:	4.293 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-X
(b)	Length of parallelism:	As per Annexure-X
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-X

Annexure X

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.293km) from 17.6 MW HT ICOG Panel at ICR Block no 5 to Main HT Panel No 1A (I/C Feeder 05) at 400/33kV Pooling station Length- 4.293 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 6

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.436km) from 17.6 MW HT ICOG Panel at ICR Block no 6 to Main HT Panel No 1A (I/C Feeder 06) at 400/33kV Pooling station Length- 4.436 km** particulars of which are given in Annexure XI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XII.

Annexure XI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.436km) from 17.6 MW HT ICOG Panel at ICR Block no 6 to Main HT Panel No 1A (I/C Feeder 06) at 400/33kV Pooling station Length- 4.436 km
(d)	Length of Power line:	4.436 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XII
(b)	Length of parallelism:	As per Annexure-XII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XII

Annexure XII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.436km) from 17.6 MW HT ICOG Panel at ICR Block no 6 to Main HT Panel No 1A (I/C Feeder 06) at 400/33kV Pooling station Length- 4.436 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 7

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.63km) from 17.6 MW HT ICOG Panel at ICR Block no 7 to Main HT Panel No 1A (I/C Feeder 07) at 400/33kV Pooling station Length- 3.63 km** particulars of which are given in Annexure XIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XIV.

Annexure XIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.63km) from 17.6 MW HT ICOG Panel at ICR Block no 7 to Main HT Panel No 1A (I/C Feeder 07) at 400/33kV Pooling station Length- 3.63 km
(d)	Length of Power line:	3.63 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XIV
(b)	Length of parallelism:	As per Annexure-XIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XIV

Annexure XIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.63km) from 17.6 MW HT ICOG Panel at ICR Block no 7 to Main HT Panel No 1A (I/C Feeder 07) at 400/33kV Pooling station Length- 3.63 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 8

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.062km) from 17.6 MW HT ICOG Panel at ICR Block no 8 to Main HT Panel No 1A (I/C Feeder 08) at 400/33kV Pooling station Length- 4.062 km** particulars of which are given in Annexure XV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XVI.

Annexure XV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.062km) from 17.6 MW HT ICOG Panel at ICR Block no 8 to Main HT Panel No 1A (I/C Feeder 08) at 400/33kV Pooling station Length- 4.062 km
(d)	Length of Power line:	4.062 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XVI
(b)	Length of parallelism:	As per Annexure-XVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XVI

Annexure XVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.062km) from 17.6 MW HT ICOG Panel at ICR Block no 8 to Main HT Panel No 1A (I/C Feeder 08) at 400/33kV Pooling station Length- 4.062 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 9

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.591km) from 17.6 MW HT ICOG Panel at ICR Block no 9 to Main HT Panel No 1B (I/C Feeder 09) at 400/33kV Pooling station Length- 4.591 km** particulars of which are given in Annexure XVII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XVIII.

Annexure XVII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.591km) from 17.6 MW HT ICOG Panel at ICR Block no 9 to Main HT Panel No 1B (I/C Feeder 09) at 400/33kV Pooling station Length- 4.591 km
(d)	Length of Power line:	4.591 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XVIII
(b)	Length of parallelism:	As per Annexure-XVIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XVIII

Annexure XVIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.591km) from 17.6 MW HT ICOG Panel at ICR Block no 9 to Main HT Panel No 1B (I/C Feeder 09) at 400/33kV Pooling station Length- 4.591 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 10

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.358km) from 17.6 MW HT ICOG Panel at ICR Block no 10 to Main HT Panel No 1B (I/C Feeder 10) at 400/33kV Pooling station Length- 4.358 km** particulars of which are given in Annexure XIX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XX.

Annexure XIX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.358km) from 17.6 MW HT ICOG Panel at ICR Block no 10 to Main HT Panel No 1B (I/C Feeder 10) at 400/33kV Pooling station Length- 4.358 km
(d)	Length of Power line:	4.358 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XX
(b)	Length of parallelism:	As per Annexure-XX
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XX

Annexure XX

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.358km) from 17.6 MW HT ICOG Panel at ICR Block no 10 to Main HT Panel No 1B (I/C Feeder 10) at 400/33kV Pooling station Length- 4.358 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 11

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.827km) from 17.6 MW HT ICOG Panel at ICR Block no 11 to Main HT Panel No 1B (I/C Feeder 11) at 400/33kV Pooling station Length- 2.827 km** particulars of which are given in Annexure XXI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXII.

Annexure XXI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.827km) from 17.6 MW HT ICOG Panel at ICR Block no 11 to Main HT Panel No 1B (I/C Feeder 11) at 400/33kV Pooling station Length- 2.827 km
(d)	Length of Power line:	2.827 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXII
(b)	Length of parallelism:	As per Annexure-XXII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXII

Annexure XXII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.827km) from 17.6 MW HT ICOG Panel at ICR Block no 11 to Main HT Panel No 1B (I/C Feeder 11) at 400/33kV Pooling station Length- 2.827 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 12

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (5.080km) from 17.6 MW HT ICOG Panel at ICR Block no 12 to Main HT Panel No 1B (I/C Feeder 12) at 400/33kV Pooling station Length- 5.080 km** particulars of which are given in Annexure XXIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXIV.

Annexure XXIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (5.080km) from 17.6 MW HT ICOG Panel at ICR Block no 12 to Main HT Panel No 1B (I/C Feeder 12) at 400/33kV Pooling station Length- 5.080 km
(d)	Length of Power line:	5.080 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXIV
(b)	Length of parallelism:	As per Annexure-XXIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXIV

Annexure XXIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (5.080km) from 17.6 MW HT ICOG Panel at ICR Block no 12 to Main HT Panel No 1B (I/C Feeder 12) at 400/33kV Pooling station Length- 5.080 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 13

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.088km) from 17.6 MW HT ICOG Panel at ICR Block no 13 to Main HT Panel No 1B (I/C Feeder 13) at 400/33kV Pooling station Length- 4.088 km** particulars of which are given in Annexure XXV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXVI.

Annexure XXV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.088km) from 17.6 MW HT ICOG Panel at ICR Block no 13 to Main HT Panel No 1B (I/C Feeder 13) at 400/33kV Pooling station Length- 4.088 km
(d)	Length of Power line:	4.088 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXVI
(b)	Length of parallelism:	As per Annexure-XXVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXVI

Annexure XXVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.088km) from 17.6 MW HT ICOG Panel at ICR Block no 13 to Main HT Panel No 1B (I/C Feeder 13) at 400/33kV Pooling station Length- 4.088 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 14

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.764km) from 17.6 MW HT ICOG Panel at ICR Block no 14 to Main HT Panel No 1B (I/C Feeder 14) at 400/33kV Pooling station Length- 3.764 km** particulars of which are given in Annexure XXVII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXVIII.

Annexure XXVII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.764km) from 17.6 MW HT ICOG Panel at ICR Block no 14 to Main HT Panel No 1B (I/C Feeder 14) at 400/33kV Pooling station Length- 3.764 km
(d)	Length of Power line:	3.764 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXVIII
(b)	Length of parallelism:	As per Annexure-XXVIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXVIII

Annexure XXVIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.764km) from 17.6 MW HT ICOG Panel at ICR Block no 14 to Main HT Panel No 1B (I/C Feeder 14) at 400/33kV Pooling station Length- 3.764 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 15

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.404km) from 17.6 MW HT ICOG Panel at ICR Block no 15 to Main HT Panel No 1B (I/C Feeder 15) at 400/33kV Pooling station Length- 3.404 km** particulars of which are given in Annexure XXIX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXX.

Annexure XXIX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.404km) from 17.6 MW HT ICOG Panel at ICR Block no 15 to Main HT Panel No 1B (I/C Feeder 15) at 400/33kV Pooling station Length- 3.404 km
(d)	Length of Power line:	3.404 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXX
(b)	Length of parallelism:	As per Annexure-XXX
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXX

Annexure XXX

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.404km) from 17.6 MW HT ICOG Panel at ICR Block no 15 to Main HT Panel No 1B (I/C Feeder 15) at 400/33kV Pooling station Length- 3.404 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 16

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.793km) from 17.6 MW HT ICOG Panel at ICR Block no 16 to Main HT Panel No 1B (I/C Feeder 16) at 400/33kV Pooling station Length- 2.793 km** particulars of which are given in Annexure XXXI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXXII.

Annexure XXXI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.793km) from 17.6 MW HT ICOG Panel at ICR Block no 16 to Main HT Panel No 1B (I/C Feeder 16) at 400/33kV Pooling station Length- 2.793 km
(d)	Length of Power line:	2.793 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXXII
(b)	Length of parallelism:	As per Annexure-XXXII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXXII

Annexure XXXII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.793km) from 17.6 MW HT ICOG Panel at ICR Block no 16 to Main HT Panel No 1B (I/C Feeder 16) at 400/33kV Pooling station Length- 2.793 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 17

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.148km) from 17.6 MW HT ICOG Panel at ICR Block no 17 to Main HT Panel No 2A (I/C Feeder 17) at 400/33kV Pooling station Length- 3.148 km** particulars of which are given in Annexure XXXIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXXIV.

Annexure XXXIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.148km) from 17.6 MW HT ICOG Panel at ICR Block no 17 to Main HT Panel No 2A (I/C Feeder 17) at 400/33kV Pooling station Length- 3.148 km
(d)	Length of Power line:	3.148 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXXIV
(b)	Length of parallelism:	As per Annexure-XXXIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXXIV

Annexure XXXIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.148km) from 17.6 MW HT ICOG Panel at ICR Block no 17 to Main HT Panel No 2A (I/C Feeder 17) at 400/33kV Pooling station Length- 3.148 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 18

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.763km) from 17.6 MW HT ICOG Panel at ICR Block no 18 to Main HT Panel No 2A (I/C Feeder 18) at 400/33kV Pooling station Length- 2.763 km** particulars of which are given in Annexure XXXV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXXVI.

Annexure XXXV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.763km) from 17.6 MW HT ICOG Panel at ICR Block no 18 to Main HT Panel No 2A (I/C Feeder 18) at 400/33kV Pooling station Length- 2.763 km
(d)	Length of Power line:	2.763 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXXVI
(b)	Length of parallelism:	As per Annexure-XXXVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXXVI

Annexure XXXVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.763km) from 17.6 MW HT ICOG Panel at ICR Block no 18 to Main HT Panel No 2A (I/C Feeder 18) at 400/33kV Pooling station Length- 2.763 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 19

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.211km) from 17.6 MW HT ICOG Panel at ICR Block no 19 to Main HT Panel No 2A (I/C Feeder 19) at 400/33kV Pooling station Length- 2.211 km** particulars of which are given in Annexure XXXVII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXXVIII.

Annexure XXXVII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.211km) from 17.6 MW HT ICOG Panel at ICR Block no 19 to Main HT Panel No 2A (I/C Feeder 19) at 400/33kV Pooling station Length- 2.211 km
(d)	Length of Power line:	2.211 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XXXVIII
(b)	Length of parallelism:	As per Annexure-XXXVIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XXXVIII

Annexure XXXVIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.211km) from 17.6 MW HT ICOG Panel at ICR Block no 19 to Main HT Panel No 2A (I/C Feeder 19) at 400/33kV Pooling station Length- 2.211 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 20

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (0.629km) from 17.6 MW HT ICOG Panel at ICR Block no 20 to Main HT Panel No 2A (I/C Feeder 20) at 400/33kV Pooling station Length- 0.629 km** particulars of which are given in Annexure XXXIX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XXXX.

Annexure XXXIX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (0.629km) from 17.6 MW HT ICOG Panel at ICR Block no 20 to Main HT Panel No 2A (I/C Feeder 20) at 400/33kV Pooling station Length- 0.629 km
(d)	Length of Power line:	0.629 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XL
(b)	Length of parallelism:	As per Annexure-XL
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XL

Annexure XL

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (0.629km) from 17.6 MW HT ICOG Panel at ICR Block no 20 to Main HT Panel No 2A (I/C Feeder 20) at 400/33kV Pooling station Length- 0.629 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 21

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (1.172km) from 17.6 MW HT ICOG Panel at ICR Block no 21 to Main HT Panel No 2A (I/C Feeder 21) at 400/33kV Pooling station Length- 1.172 km** particulars of which are given in Annexure XLI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XLII.

Annexure XLI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (1.172km) from 17.6 MW HT ICOG Panel at ICR Block no 21 to Main HT Panel No 2A (I/C Feeder 21) at 400/33kV Pooling station Length- 1.172 km
(d)	Length of Power line:	1.172 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XLII
(b)	Length of parallelism:	As per Annexure-XLII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XLII

Annexure XLII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (1.172km) from 17.6 MW HT ICOG Panel at ICR Block no 21 to Main HT Panel No 2A (I/C Feeder 21) at 400/33kV Pooling station Length- 1.172 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 22

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (2.462km) from 17.6 MW HT ICOG Panel at ICR Block no 22 to Main HT Panel No 2A (I/C Feeder 22) at 400/33kV Pooling station Length-2.462 km** particulars of which are given in Annexure XLIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XLIV.

Annexure XLIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (2.462km) from 17.6 MW HT ICOG Panel at ICR Block no 22 to Main HT Panel No 2A (I/C Feeder 22) at 400/33kV Pooling station Length-2.462 km
(d)	Length of Power line:	2.462 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XLIV
(b)	Length of parallelism:	As per Annexure-XLIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XLIV

Annexure XLIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (2.462km) from 17.6 MW HT ICOG Panel at ICR Block no 22 to Main HT Panel No 2A (I/C Feeder 22) at 400/33kV Pooling station Length-2.462 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 23

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (1.339km) from 17.6 MW HT ICOG Panel at ICR Block no 23 to Main HT Panel No 2A (I/C Feeder 23) at 400/33kV Pooling station Length- 1.339 km** particulars of which are given in Annexure XLV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XLVI.

Annexure XLV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (1.339km) from 17.6 MW HT ICOG Panel at ICR Block no 23 to Main HT Panel No 2A (I/C Feeder 23) at 400/33kV Pooling station Length- 1.339 km
(d)	Length of Power line:	1.339 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XLVI
(b)	Length of parallelism:	As per Annexure-XLVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XLVI

Annexure XLVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (1.339km) from 17.6 MW HT ICOG Panel at ICR Block no 23 to Main HT Panel No 2A (I/C Feeder 23) at 400/33kV Pooling station Length- 1.339 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 24

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (1.782km) from 17.6 MW HT ICOG Panel at ICR Block no 24 to Main HT Panel No 2A (I/C Feeder 24) at 400/33kV Pooling station Length- 1.782 km** particulars of which are given in Annexure XLVII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XLVIII.

Annexure XLVII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (1.782km) from 17.6 MW HT ICOG Panel at ICR Block no 24 to Main HT Panel No 2A (I/C Feeder 24) at 400/33kV Pooling station Length- 1.782 km
(d)	Length of Power line:	1.782 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-XLVIII
(b)	Length of parallelism:	As per Annexure-XLVIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-XLVIII

Annexure XLVIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (1.782km) from 17.6 MW HT ICOG Panel at ICR Block no 24 to Main HT Panel No 2A (I/C Feeder 24) at 400/33kV Pooling station Length- 1.782 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 25

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (3.49km) from 17.6 MW HT ICOG Panel at ICR Block no 25 to Main HT Panel No 2A (I/C Feeder 25) at 400/33kV Pooling station Length- 3.49 km** particulars of which are given in Annexure XLIX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure XLX.

Annexure XLIX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (3.49km) from 17.6 MW HT ICOG Panel at ICR Block no 25 to Main HT Panel No 2A (I/C Feeder 25) at 400/33kV Pooling station Length- 3.49 km
(d)	Length of Power line:	3.49 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-L
(b)	Length of parallelism:	As per Annexure-L
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-L

Annexure L

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (3.49km) from 17.6 MW HT ICOG Panel at ICR Block no 25 to Main HT Panel No 2A (I/C Feeder 25) at 400/33kV Pooling station Length- 3.49 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 26

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.250km) from 17.6 MW HT ICOG Panel at ICR Block no 26 to Main HT Panel No 2B (I/C Feeder 26) at 400/33kV Pooling station Length- 4.205 km** particulars of which are given in Annexure LI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LII.

Annexure LI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.250km) from 17.6 MW HT ICOG Panel at ICR Block no 26 to Main HT Panel No 2B (I/C Feeder 26) at 400/33kV Pooling station Length- 4.205 km
(d)	Length of Power line:	4.205 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LII
(b)	Length of parallelism:	As per Annexure-LII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LII

Annexure LII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.250km) from 17.6 MW HT ICOG Panel at ICR Block no 26 to Main HT Panel No 2B (I/C Feeder 26) at 400/33kV Pooling station Length- 4.205 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 27

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.455km) from 17.6 MW HT ICOG Panel at ICR Block no 27 to Main HT Panel No 2B (I/C Feeder 27) at 400/33kV Pooling station Length- 4.455 km** particulars of which are given in Annexure LIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LIV.

Annexure LIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.455km) from 17.6 MW HT ICOG Panel at ICR Block no 27 to Main HT Panel No 2B (I/C Feeder 27) at 400/33kV Pooling station Length- 4.455 km
(d)	Length of Power line:	4.455 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LIV
(b)	Length of parallelism:	As per Annexure-LIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LIV

Annexure LIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.455km) from 17.6 MW HT ICOG Panel at ICR Block no 27 to Main HT Panel No 2B (I/C Feeder 27) at 400/33kV Pooling station Length- 4.455 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 28

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (4.725km) from 17.6 MW HT ICOG Panel at ICR Block no 28 to Main HT Panel No 2B (I/C Feeder 28) at 400/33kV Pooling station Length- 4.725 km** particulars of which are given in Annexure LV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LVI.

Annexure LV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (4.725km) from 17.6 MW HT ICOG Panel at ICR Block no 28 to Main HT Panel No 2B (I/C Feeder 28) at 400/33kV Pooling station Length- 4.725 km
(d)	Length of Power line:	4.725 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LVI
(b)	Length of parallelism:	As per Annexure-LVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LVI

Annexure LVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (4.725km) from 17.6 MW HT ICOG Panel at ICR Block no 28 to Main HT Panel No 2B (I/C Feeder 28) at 400/33kV Pooling station Length- 4.725 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 29

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (5.111km) from 17.6 MW HT ICOG Panel at ICR Block no 29 to Main HT Panel No 2B (I/C Feeder 29) at 400/33kV Pooling station Length- 5.111 km** particulars of which are given in Annexure LVII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LVIII.

Annexure LVII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (5.111km) from 17.6 MW HT ICOG Panel at ICR Block no 29 to Main HT Panel No 2B (I/C Feeder 29) at 400/33kV Pooling station Length- 5.111 km
(d)	Length of Power line:	5.111 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LVIII
(b)	Length of parallelism:	As per Annexure-LVIII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LVIII

Annexure LVIII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (5.111km) from 17.6 MW HT ICOG Panel at ICR Block no 29 to Main HT Panel No 2B (I/C Feeder 29) at 400/33kV Pooling station Length- 5.111 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 30

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (5.154km) from 17.6 MW HT ICOG Panel at ICR Block no 30 to Main HT Panel No 2B (I/C Feeder 30) at 400/33kV Pooling station Length-5.1545 km** particulars of which are given in Annexure LIX.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LX.

Annexure LIX

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (5.154km) from 17.6 MW HT ICOG Panel at ICR Block no 30 to Main HT Panel No 2B (I/C Feeder 30) at 400/33kV Pooling station Length-5.1545 km
(d)	Length of Power line:	5.1545 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LX
(b)	Length of parallelism:	As per Annexure-LX
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LX

Annexure LX

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (5.154km) from 17.6 MW HT ICOG Panel at ICR Block no 30 to Main HT Panel No 2B (I/C Feeder 30) at 400/33kV Pooling station Length-5.1545 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 31

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (5.807km) from 17.6 MW HT ICOG Panel at ICR Block no 31 to Main HT Panel No 2B (I/C Feeder 31) at 400/33kV Pooling station Length-5.807 km** particulars of which are given in Annexure LXI.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LXII.

Annexure LXI

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (5.807km) from 17.6 MW HT ICOG Panel at ICR Block no 31 to Main HT Panel No 2B (I/C Feeder 31) at 400/33kV Pooling station Length-5.807 km
(d)	Length of Power line:	5.807 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LXII
(b)	Length of parallelism:	As per Annexure-LXII
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LXII

Annexure LXII

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (5.807km) from 17.6 MW HT ICOG Panel at ICR Block no 31 to Main HT Panel No 2B (I/C Feeder 31) at 400/33kV Pooling station Length-5.807 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 32

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (6.228km) from 17.6 MW HT ICOG Panel at ICR Block no 32 to Main HT Panel No 2B (I/C Feeder 32) at 400/33kV Pooling station Length-6.228 km** particulars of which are given in Annexure LXIII.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LXIV.

Annexure LXIII

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (6.228km) from 17.6 MW HT ICOG Panel at ICR Block no 32 to Main HT Panel No 2B (I/C Feeder 32) at 400/33kV Pooling station Length-6.228 km
(d)	Length of Power line:	6.228 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LXIV
(b)	Length of parallelism:	As per Annexure-LXIV
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LXIV

Annexure LXIV

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (6.228km) from 17.6 MW HT ICOG Panel at ICR Block no 32 to Main HT Panel No 2B (I/C Feeder 32) at 400/33kV Pooling station Length-6.228 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.

CEA Case No.: RAJ-906 - 33

Approval for the Route of Extra High Tension (EHT) Power Line / Telecommunication Line

Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed for **33 kV S/C3Rx1Cx400 Sq.mm cable (1.198km) from 17.6 MW HT ICOG Panel at ICR Block no 33 to Main HT Panel No 2B (I/C Feeder 33) at 400/33kV Pooling station Length-1.198 km** particulars of which are given in Annexure LXV.

The approval is for the route only and is subject to the following conditions.

1. The approval is based on the Power system/ Telecom system conditions' details as reported by the Power supply authority/ Telecom authority at present. Any changes either to Transmission line or the Power system or the paralleling telecommunication lines which are likely to alter the low frequency induction from the estimated at present should be reported to PTCC for its prior approval.
2. The Power and Telecommunication authorities shall be required to adopt such measures as may be recommended by PTCC for counteracting any interference that might arise when the EHT line is in normal operation.
3. Each crossing should satisfy the conditions as laid down in Para 6 -10 of PTCC Code of Practice for crossings.
4. The angle of crossing shall be 90 degrees but in no case less than 60 degrees.
5. The power line shall be equipped with protective switchgear such that the duration of earth current shall be as short as possible but never exceeding 0.5 seconds.
6. The power line shall be energized within a mutually acceptable time limit after obtaining a Certificate from the concerned Telecom and/or Railway authority regarding completion of provision of all protective measures as recommended by PTCC and also under specific clearance from the Telecom and/or Railway authority maintaining the Telecom system.
7. The energization of Extra High Tension power lines would not be held up for want of installation of GD tubes on telecom lines when the induced voltages are in the range of 430 to 650 V.
8. The telecom line shall be commissioned within a mutually acceptable time after completing provision of all protective measures as recommended by PTCC and also after obtaining specific clearance from the Power authority, if certain measures as recommended by PTCC are to be carried out on power system.
9. The later entrant in the field shall bear the entire cost of providing GD tubes and their fitting as recommended by PTCC, including 15% spares and/or any other protective measures as recommended by PTCC.
10. The route approval shall be subject to special conditions as laid down under Annexure LXVI.

Annexure LXV

1		
(a)	Name of the Power Supply authority seeking approval	NTPC Renewabl Energy Limited
(b)	Reference number & date:	NTPC REL/STU/500MWBhadla-II Dated: 16.09.2025 e-Mail Dated: 28.02.2026
(c)	Name of the Power line	33 kV S/C3Rx1Cx400 Sq.mm cable (1.198km) from 17.6 MW HT ICOG Panel at ICR Block no 33 to Main HT Panel No 2B (I/C Feeder 33) at 400/33kV Pooling station Length-1.198 km
(d)	Length of Power line:	1.198 km
(e)	Operating Voltage	33 kV
(f)	Number of circuits	1
2		
(a)	Names of parallel telecom lines:	As per Annexure-LXVI
(b)	Length of parallelism:	As per Annexure-LXVI
3	Average value of earth resistivity in the region:	10000 ohm-cms
4	Whether LF test necessary:	No
5	Special conditions subject to which this certificate will be effective	As per Annexure-LXVI

Annexure LXVI

Name of the Power Line: 33 kV S/C3Rx1Cx400 Sq.mm cable (1.198km) from 17.6 MW HT ICOG Panel at ICR Block no 33 to Main HT Panel No 2B (I/C Feeder 33) at 400/33kV Pooling station Length-1.198 km

1. **BSNL Telecom Details:**
   AGM (NWO), Jodhpur vide Letter No: RJDPD-18/16/13/2021-ADMNANDPLG dated: 02.12.2025 has mentioned the non-existence of BSNL's Block&Telecom details within the 5 km boundary of proposed Transmission Line and hence BNSL's NOC is considered.

2. **Railway Telecom Details:**
   North Western Railway vide Letter No: SG/158/NWR/PTCC/1219 Dated: 06.10.2025 has issued their NOC for charging of Transmission Line.

3. **Defense Telecom Details:**
   DG-Signals, MoD vide Letter No: B/46937/Sigs-7(b)/5150 Dated: 03.11.2025 has issued their NOC for charging of Transmission Line.

4. EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
33 kV Switchyard	18	25	0.629	640	417	22	10
400 kV PSS	128	63	0.106	1860	1187	N.A	N.A

Telecom authorities to ensure the protection of telecom equipment and personnel within the EPR zone of the proposed substation at the cost of the later entrant.