



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: Provisional Certificate of Approval for the Route of Power Lines of M/s NTPC Renewable Energy Ltd.

Provisional Route Approval Certificate for the following listed lines of M/s NTPC Renewable Energy Ltd is annexed to this letter:

S.No.	Name
1	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-01 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length :7.24 KM)
2	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-02 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 17.87 KM)
3	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-03 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 22.81 KM)
4	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-04 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 23.03 KM)
5	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-05 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 12.11 KM)
6	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-06 to

	33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 20.00 KM)
7	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-07 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 17.36 KM).
8	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-08 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 13.71 KM)
9	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-09 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 15.34 KM)
10	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-10 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 29.90 KM)
11	33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-11 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 10.36 KM)

Chief Engineer

To,

1.	M/s NTPC Renewable Energy Ltd	Lalpur Site Office, Post: Lalpur-361170, Distt. - Jamnagar (Gujrat)
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CEA Case No.: GUJ-1120 - Feeder 01

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-01 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length:7.24 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-01 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length :7.24 KM)
- (d) Length of Power line: 7.24 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-01 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length :7.24 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 02

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-02 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 17.87 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-02 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 17.87 KM)
- (d) Length of Power line: 17.87 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-02 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 17.87 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 03

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-03 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 22.81 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-03 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 22.81 KM)
- (d) Length of Power line: 22.81 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-03 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 22.81 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 04

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-04 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 23.03 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-04 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 23.03 KM)
- (d) Length of Power line: 23.03 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-04 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 23.03 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 05

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-05 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 12.11 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-05 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 12.11 KM)
- (d) Length of Power line: 12.11 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-05 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talpapur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 12.11 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 06

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-06 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 20.00 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-06 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 20.00 KM)
- (d) Length of Power line: 20.00 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-06 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 20.00 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 07

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-07 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 17.36 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-07 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 17.36 KM).
- (d) Length of Power line: 17.36 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-07 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 17.36 KM).

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 08

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-08 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 13.71 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-08 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 13.71 KM)
- (d) Length of Power line: 13.71 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-08 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 13.71 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 09

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-09 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 15.34 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-09 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 15.34 KM)
- (d) Length of Power line: 15.34 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-09 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 15.34 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 10

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-10 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 29.90 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-10 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 29.90 KM)
- (d) Length of Power line: 29.90 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-10 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length : 29.90 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.: GUJ-1120 - Feeder 11

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

Provisional Approval of the Central Level Power & Telecommunication Co-ordination Committee is hereby conveyed having a validity of 60 days from the date of issuance for **33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-11 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 10.36 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 M/s NTPC Renewable Energy Ltd
- (b) Reference number & date: NTPC REL/JJWEP/25-26/01-21 Dated 31.01.2026
Undertaking for Provisional PTCC Clearance Dated 13.03.2026
- (c) Name of the Power line 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-11 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Ta- Lalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 10.36 KM)
- (d) Length of Power line: 10.36 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: 33KV S/C line on S/C & D/C Pole from 33 KV Wind Power Project of M/S. NTPC Renewable Energy Limited (NTPC REL) SPSS/DP Yard Feeder-11 to 33/220 KV S/S of M/s. NTPC Renewable Energy Limited (NTPC REL) PSS 01 at Village -Jam Ambardi, Talalpur, Dist.- Jamnagar with AL59 Panther & Dog Conductor (Length: 10.36 KM)

1. BSNL Telecom Details:

DET (PTCC), WZ, BSNL vide letter: IC/MBI/PTCC/Offline/GUJ-3210 dated 20.02.2026 has given their NOC.

2. Railway Telecom Details:

General Manager (S&T), Western Railway vide letter SG.158/28/12/1773 dated 16.04.2026 has issued their NOC.

3. 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
220/33 kV PSS 1 at Jam Ambardi	75.8	50	0.4558	3942	2582	171	97
33 kV NTPC REL SPSS/DP Yard	7.32	30	0.205	97	62	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.