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भारत सरकार / GOVERNMENT OF INDIA
नागर विमानन मंत्रालय / MINISTRY OF CIVIL AVIATION
रेल संरक्षा आयोग / COMMISSION OF RAILWAY SAFETY



रेल संरक्षा आयुक्त / Commissioner of Railway Safety
उत्तर पूर्व परिमण्डल, / North Eastern Circle
हजरतगंज, लखनऊ- 226 001 / Hazratganj, Lucknow- 226 001

No. 21301332/S-596

Dated 16.08.2021

INTRODUCTION OF 25 kV AC, SINGLE PHASE, 50 Hz, ELECTRIC TRACTION, BETWEEN MAU JN.(EXCL) to AZAMGARH (Incl.) (Loc. MAU/1092 CHAINAGE-00/426.75) TO (Loc. 43/40 CHAINAGE-43/929.05) FOR PUBLIC CARRIAGE OF GOODS AND PASSENGER TRAFFIC.

GAUGE : 1676 MM

LENGTH: RKM: 43.00
TKM: 53.00

AUTHORISATION

A. 1.0 General Manager, North Eastern Railway has submitted opening documents in connection with introduction of 25kV AC, Single Phase, 50Hz, Electric traction in Mau JN.(EXCL) to Azamgarh (INCL) section (Loc. MAU/1092 CHAINAGE-00/426.75) to (Loc. 43/40 CHAINAGE-43/929.05), in Varanasi Division of North Eastern Railway vide letter No. W/CON/GKP/RE/MAU-AMH/CRS dated 08.07.2021, the observation of the commission were replied vide letter no W/CON/33/Elect/CRS/MAU-AMH dated 09.08.2021. The electrification works were inspected on 14.08.2021 by Tower Wagon and Inspection Carriage accompanied by CAO/CON/NER, PCEE/NER, DRM/Varanasi, CEDE, CSE, CEE/CON, CE/CON/HQ, CE/WORKS, CSTE/CON along with branch officers and other headquarters officers, followed by speed trial with electric locomotive and current collection test with Oliver-G from AZAMGARH to MAU. I was assisted by Dy.CRS/ S&T/LKO and Dy.CEE/TRD/HQ/NER as Dy.CRS/ET.

Based on the inspection, sample check made in the section and on the basis of various certificates given by GM/NER, PCEE/NER and HODs regarding satisfactory completion of works and operational fitness of the line, I am satisfied that the provisions of section 22(1) of the Indian Railways act, 1989 have been substantially complied with. I, under powers delegated to me vide rule 22 (1) of the Railway opening for public carriage of passengers rules 2000, Railway Board's Notification no. G.S.R. 625 (E) dated 21.07.2000, Notification no. G.S.R.762 (E) dated 08.10.2001, Notification no. G.S.R.44 (E) dated 27.01.2005 and G.S.R.76(E) dated 16.2.2005, hereby authorize its opening for public carriage of passenger and goods traffic with electric locomotive up to the authorised sectional speed or the sanctioned speed of electrical locomotive/rolling stock or the speed proposed in joint safety certificate, whichever is the least.

B. 2.0 This authorization is subject to the observance of the following stipulations:

- 2.1. Observance of all temporary and permanent speed restrictions in force or as may be imposed from time to time.
- 2.2. Completion of Electrical (TRD works) and Signaling works in all respects, recording of various parameters before commissioning and ensuring their values within stipulated permissible limits. A certificate duly signed by Sr.DEE/TRD/BSB shall be submitted before charging/commissioning of the section regarding rectification of OHE contact wire heights and staggers.

- 2.3. The SWR with Annexure-'G' as per the present power supply scheme shall be provided to the stations in the section. All train passing staff at the station shall be made to understand the new Station Working Rule and assurance for the same shall be obtained.
- 2.4. It shall be ensured by Railway administration that SWR and GWR of stations and level crossing gates are correctly/completely been amended both in English and local vernacular language and issued before running of services with electric locomotives in the section.
- 2.5. There is no TSS in the inspected section and TSS planned for this section is under construction at Sarai Rani (RKS). 25 KV Power supply in the section is temporarily extended from ARJ TSS through CB no 178. Upon commissioning of Pipridih TSS power supply will be extended from Pipridih/TSS till such time TSS at RKS is made ready. Railway has committed during the inspection that Pipridih TSS will be commissioned by 30.09.2021. The target date given by Railway for commissioning of the RKS/TSS is 31.03.2022. GM/NER to ensure that targets given are adhered. The entire section is presently fed by TSS at ARJ. The load at ARJ TSS shall be re-assessed and relays shall be adjusted for extension of feed. Passenger services shall not be taken on electric traction in Azamgarh- MAU section till commissioning of Pipridih/TSS.
- 2.6. GM/NER will arrange to regulate number of electric trains in this section as per voltage drop calculations approved by PCEE/NER based on load on existing TSS-ARJ/TSS PPH.
- 2.7. Traction SWR (Appendix'G') shall be revised as and when there is change in power supply scheme and assurance obtained again after proper counseling. Trip test shall be repeated whenever there is change in power supply arrangements.
- 2.8. SCADA has been commissioned at SP/MAU and SSP/KRT. SCADA work at SSP/SAA still under progress for which target date informed by Railway is 31.08.2021. Till such time SCADA is commissioned and stabilized, all switching stations shall be manned with competent staff.
- 2.9. SS/Dy.SS/SM at the station shall be used with competency certificate for isolator operation after proper training and evaluation; they should also be given training for giving First Aid for electric shock and burn injuries. All SS/Dy.SS/SM should be given proper hands-on training for isolator operation and proper record shall be kept regarding training details including date of training, name of training imparting officials and name & signature of the trainee. It shall be ensured and certified by DRM/BSB that all the staff who are required to operate isolators, have been properly trained for isolator operations supplied with safety equipment.
- 2.10. A list of names of the authorized personnel for opening of isolator duty signed by traction supervisors shall be exhibited prominently in the office of the Station Master (SM) and Train Examiner (TXR) of the station concern. Each such personnel should also carry an Identity Card with photograph and specimen signature. The keys of isolators shall be inscribed with the distinguishing marks and locked in glass fronted key box and kept in the custody of the SM on duty. The description of each key shall be painted above each peg to avoid confusion. "OHE Key Box" name shall also be properly painted on box.
- 2.11. The person operating the Isolator Switch shall not open it unless specifically ordered by the section controller/TPC by a clear message supported by Private Number.
- 2.12. Sufficient number of Staff Caution notices, Public caution notices, Danger Boards have been provided at the prominent as well as prescribed locations. Caution Boards/Danger Board for staff as well as public should be provided at all the entrance of platform/station.
- 2.13. Prescribed electrical clearances shall be maintained in the section.



- 2.14. FOBs & ROBs in the section shall be provided with protective screens in all full spans along with caution boards.
- 2.15. Contact catenary shall be provided under all FOBs & ROBs extending for a length of 2 to 3 m from edge of the structure.
- 2.16. All the bonds shall be provided as per the schedule of bonding. This includes provisions of all structure bonds, transverse bonds, and longitudinal bonds, shunt bonds, cross bonds, platform shed & fencing bonds, Girder to rail bonds, C bonds as per prescribed norms. The platform sheds and fobs shall be provided at least two earth connections. All the earth connection strips shall be connected with separate bolts so that loosening of one connection does not affect other earth connection.
- 2.17. Earthing pits provided in the section shall be treated/maintained so that IR values (individual & combined) are within stipulated permissible limits.
- 2.18. All the ATDs in the section shall be with adjusted for X-Y parameters. Proper marking of temperature to be done on mast. Half tension length shall also be mentioned on the mast with ATD. OHE pre-sag shall be maintained as prescribed.
- 2.19. Necessary attention is given at all the locations where sparks of high/medium intensity were noted during the current collection test. After introduction of commercial services on electric traction, current collection test for the entire section should be done with one month at JAG officer's level and necessary corrective action thereof.
- 2.20. Railway administration shall ensure inspection of OHE as per GR 17.03 and maintenance of OHE as per codes and manuals.
- 2.21. TPC phone provided at SP/SSPs and station.
- 2.22. OHE mast no. shall be painted on the mast on the reverse to the side on which number plate are fixed. Marking of all prescribed parameters including mast location number shall be done on all the masts.
- 2.23. Platform sheds provided with caution boards and earth pits.
- 2.24. The observance of the precautions during P. Way maintenance as detailed in part F of chapter 6 of IRPWM 2020 and para 10420 to 10428 of ACTM Vol-I shall be ensured. Short and long rail jumpers and hand gloves shall be made available to every gang and additional pair of gloves shall be provided to the gang. It shall be ensured that rails stacked alongside the track do not form a continuous length of 300 m or more to safeguard against danger of induced voltage by the OHE.
- 2.25. One more round of counseling of P. Way gangs of the sections shall be done. P-way gangs in the section shall be properly counseled/trained for the safety precautions and working in electrified section.
- 2.26. Bilingual shock treatment chart shall be provided at station/LC gates. Details of nearest hospitals and doctors shall also be displayed at station.
- 2.27. Height gauges of all the LC gates shall be adjusted for prescribe height. Danger board with skull mark shall be provided on these height gauges.
- 2.28. Insulator shall be provided in the wire connected to the winch and Roding/wire connecting lever. The LC equipment like winch and lever should be earthed.



- 2.29. Precaution for working in electrified territory should be included in GWR.
- 2.30. All the gateman shall be properly trained for safety precautions in electrified section.
- 2.31. Properly constituted Signal Sighting Committee shall go over the section on the footplate of the locomotive during day and night hours and it shall be ensured that the signals are properly focused and visible to the train driving crew from specified distance.
- 2.32. Unwired turnouts and engine stop boards shall be provided at required locations.
- 2.33. AT shall be connected to CLS Power Panel at station and LC gates. Staff caution Board with skull mark on CLS Panel shall be provided. Goods quality standard Rubber mat shall be provided near CLS Power Panel. In terms of Railway Board's letter no. 82/RE/250/1 dated 13.09.2002, a separate Power cable shall be laid from CLS Panel to OFC Room.
- 2.34. Isolators were provided at all stations and keys are kept under the custody of SM.
- 2.35. Power block caps to be kept on operating panel.
- 2.36. Retro reflective number plate should be provided as per norms in the entire section.
- 2.37. The cantilever arrangement at platforms shall be modified to ensure that there are no live parts over the platforms.
- 2.38. Sidhari- Trees shall be pruned. Joint survey shall be done in the section and trees identified for cutting/pruning and ensured by PCEE/NER.

3. Neutral section at MAU/SP at loc 01/26

- | | | |
|----|------------------------------------|--------------------------|
| a. | Height of Contact Wire at Mau end | - 5.80 m |
| | Height of catenary wire at Mau end | - 7.18 m |
| b. | Height of Contact wire at MID | - 5.80 m |
| | Height of catenary wire at MID | - 7.20 m |
| c. | Height of Contact wire at KRT end | - 5.80 m |
| | Height of catenary wire at KRT end | - 7.18 m |
| d. | Length of PTFE | - 9.50 m |
| e. | Implantation | -3.34 m |
| f. | Earthing | IR Value - 4.37 Ω |
| | | CR Value - 0.38 Ω |

4. SP/ MAU at Loc KM 01/28-30:

- a. Danger boards, name boards and restricted area boards are provided.
- b. Message book and private number book are available.
- c. Fire buckets, shock treatment chart, schematic diagram, key box and hand gloves were available.
- d. TPC phone was provided which was tested and found in working order.
- e. Flexible jumper for isolator provided.
- f. Sealed First Aid box was available.
- g. Rubber mat was provided.
- h. Anti-acid tiles are provided in battery room floor. Exhaust fan and light fitting was provided in battery room.

i. SPG measurement were as under

Cell No.	Specific Gravity	Individual Voltage	Combined Voltage
Cell No. 37	1220	2.0V	111.4V
Cell No. 23	1220	2.0V	
Cell No. 16	1220	2.0V	

j. Bus bar height of BM-925 was found 3.84 m from Ground level.

k. Buried rail was provided which was connected to traction rail by means of two 75 X 8 GI flats. EPR value of Buried Rail was EP-07 - CR – 0.24 Ω , IR – 6.18 Ω & EP-08 - CR – 0.35 Ω , IR – 7.15 Ω

l. Total 6 earth pits were provided. Stenciling of values on earth pits was done. Earth pit box covers were provided.

m. Safety shoes should be provided in SP.

n. Competency certificate should carry the reference of identity card.

o. Separate earthing should be done for SCADA panel .

p. Earth filling should be done around SP.

q. BM operation instruction board should be provide inside SP/SSP.

r. Railway to ensure initial charging according to manufacturers recommendation.

Measurement done was as under -

Earth Pit no.	Individual Value	Combined Value
EP-01	3.50 Ohms	0.35 Ohms
EP-02	6.10 Ohms	
EP-03	5.26 Ohms	
EP-04	4.31 Ohms	
EP-05	4.10 Ohms	
EP-06	6.15 Ohms	

Operation of BM- 925 (MAU/SP) is done by manning person Mr. Rahul Yadav was available with competency issued by AEE/TRD/GKP. He should be trained further.

5. LC- 3A at Loc 04/26-28 (Interlock gate)

- Shri Raj Kishore Yadav GK was on duty at the gate. His knowledge in safety rule was good. Modified GWR has been issued.
- Retro reflective stop board to be provided on lifting barrier boom. This should be done at all LC's.
- AT has been provided not yet connected to CLS panel. AT resent supply from station has been extended. Both supplies shall be brought to CLS panel and CLS panel commissioned.
- Public Caution Notices and shock Treatment Chart were provided.
- Danger boards with skull mark were available on height gauges. Caution board on upright were provided. 3.76mtr marking was provided.
- Gate winch, lever, fencing were bonded to rail.
- Cross bonds were provided.
- Height of Height Gauge was measured as 4.72m and 4.72m.
- Contact wire height at mid span was 5.79 meter.
- Distance of height gauge from gate/lifting barrier is left side 17.10 m & right side 18.55m.
- Distance gate/lifting barrier from track center left side 10.50 m & right side 6.65 m.
- Contact wire height at nearest mast is 5.80m.
- Mr. Raj kishor Yadav was available and was aware about electrified working.



6. P-Way Gang no. 1- MS : At LC 3A

- Gang mate Mr. Shahnwaj Ahmad was aware of the precautions to be taken on electrified section.
- Hand gloves were provided. Jumper was provided with length of 3 m-02 nos, & 13m-01 nos.
- All the metallic Tools provided to the gang were found insulated

7. SSP/KRT at KM : 13/8-10

- Sri Sudhir Kumar singh contractor staff was on duty he has valid competency issued by AEE/TRD/GKP. Protected Area Board, name board, Danger Boards, 6 Nos. Fire buckets, fire extinguishers, shock treatment chart, first aid box, schematic diagram board and OHE key box provided.
- TPC phone was provided and working. Emergency socket provided and found working.
- Value of Earth pit is as follow

Earth pit Location /Number	Individual Value	Combined Value
EP -1	4.50 Ω	0.61 Ω
EP -2	3.15 Ω	
EP -3	5.31 Ω	
EP -4	6.31 Ω	
EP -5	4.21 Ω	
EP -6	4.38 Ω	

- Specific Gravity & Voltage of Battery cells are as follow

Cell Number	Voltage	Cell Number	Specific Gravity
Cell No. 14	2.1 V	Cell No. 05	1220
Cell No. 12	2.0 V	Cell No. 15	1220
Cell No. 43	2.0 V	Cell No. 35	1220

- Total Voltage 110.0 V
- Depth of the buried rail :1.00 Mtr.
- Height of bottom bus bar from ground 3.86 M.
- Thickness of gravel 110 mm.
- There is gap between SSP room & fencing it should be closed, To protect entry of animal.
- Safety shoes should be provided in SP.
- Identity card should be issued to staff and same should be maintained in competency certificate.
- Separate earthing should be done for SCADA panel.
- Earth filling should be done around SP.
- BM operation instruction board should be provide inside SP/SSP.
- Battery charging procedure should be provide in SP.

8. Muhammadabad (MMA) Station

- Shri Mushtak Ahmad SM was on panel. He has valid competency for isolator operation and assurance was available. He explained procedure of power block in station area. He need further counselling.
- Implantation measurement at location 21/24 was found 5.30m and at PF No 1

- c. Assurance Register, TRD Competency, Isolator Key Register, Power block & TRD staff list for opening Isolators Register checked and found ok.
- d. EPR value has been taken of MMA Platform No.1 of EP No-12 are, IR - 10.02 Ω , CR - 0.73 Ω . It should be shifted to another suitable location and the value should be kept in limit.
- e. Shock treatment chart, Hand Gloves and Sectioning diagram was provided.
- f. Modified SWR along with Annexure-G was available. Assurance for the same was taken.
- g. OHE Key box was provided. List of technician was posted on isolator key box register.
- h. Power block register and TPC phone was provided. Number of TPC should be mentioned on the TPC phone itself. TPC phone tested and found in proper working condition.
- i. 02 nos. Fire extinguisher was available.
- j. Sealed First Aid box was available.
- k. CLS panel functioning checked and found normal. The local supply is selected as preferred supply in auto changeover. AT shall be preferred supply as it is more reliable. As soon as AT supply is stabilised it shall be preferred supply at all stations. PCEE/NER to issue necessary instructions in this regard.
- l. TPC phone with TPC CNL and gate phone tested. Found in working order.
- m. FOB, protective screen provided for full length and warning and caution board provided at the entrance and also gang way. FOB was bonded to rail as well connected with earth pit at both ends and IR value of earth station was 5.38 Ω individual and 0.47 Ω combined.
- n. Exhaust fan should be provide in battery room.

Clearance Measurement

Height from Rail Level (M)	L-1 (M)	L-2 (M)	L-3 (M)
Bottom of Contact Wire	5.82	5.80	5.83
Top of Catenary Wire	6.13	6.13	6.15
Bottom of Girder of ROB	6.68	6.50	6.49
Clearance	0.55	0.37	0.34

n. AT Inspection

1)	Implantation	3.97 m
2)	At Channel to Bottom	4.35 m
3)	Top Insulated to GL	7.36 m
4)	Bottom Insulated to Ground	6.82 m
5)	Anti Climbing Frame	Yes
6)	Is Caution Board provided	Yes

9. **Inspection of curve no. 2 at Km.22/16-23/12**

Curve no.-2Degree of curve -1.15°

S.No.	Type of Mast	Location	Implantation(m)	Stagger(mm)	Contact height(m)
1	B-175	22/24	3.02	-300	5.80
2	B-150	22/26	2.97	-300	5.80
3	B-150	22/28	4.07	-300	5.80
4	B-150	22/30	3.02	-300	5.80

10. **Inspection of ATD at location 22/24**

- a. Half Tension Length- 625.5
- b. Temp - 32°C
- c. Value of X = 1280 mm, Value of Y = 2300mm

11. **LC- 16C at Loc25/16-18**

- Shri Kedar Chauhan, GK was on duty, he has valid competency. Modified GWR available.
- Public Caution Notices and shock Treatment Chart were provided.
- Danger boards with skull mark were available on height gauges. Caution board on upright were provided. 3.76mtr marking was provided.
- Gate Machine, Fencing & boom was earthed.
- Cross bonds were provided.
- Height of Height Gauge was measured as 4.76m and 4.77m.
- Contact wire height at mid span was 5.78meter.
- Distance of height gauge from gate/lifting barrier is left side 15.10m & right side 10.15m.
- Distance gate/lifting barrier from track center left side 6.20m & right side 6.45m.
- Contact wire height at nearest mast is 5.79m.
- The light (Red) for road user is provided on the boom and can be obscured by vehicle or person on road. It should be mounted at proper height as per standard arrangements on the gate post. This should be done at all engineering gates.

12. **HT Line Crossing 132 kV at location 38/08-10**

S N	Name of Owner	Location	Voltage Level	Measured Value (Meter)				Vertical Clearance of lowest conductor from RL in (m)	Catenary Height below lowest Condu-	Clearance Highest traction conductor with lowest EHT	Clearance required as per IRSOD 2004, ACTM
				Tower Height in (m)		Horizontal distance from TC					
				North	South	North	South				
	A	B	E	F	G	H	I	J	K	(J-K)	
1	UPPTCL	38/08-10	132KV	42.25	42.44	73.03	73.60	23.17	6.52	16.65	3.05

13. **ROB at KM 40/20-22**

- ROB, protective screen shall be provided for full length.
- ROB girder were bonded to rail as well connected with earth pit at both ends and IR value of earth station was 6.52 Ω individual and 0.47 Ω combined.
- Bond used for earthing of girder at both side should be properly dressed and clamped along pillar of the ROB.

Height from Rail Level (m)	L-1 (m)
Bottom of Contact Wire	5.77
Top of Catenary Wire	6.13
Bottom of Girder of ROB	6.60
Clearance	0.47

14. **AMH Station Loc km. 43**

- Shri Mahendra Nath Ram SM was on duty. Modified SWR with appendix 'G' issued. Assurance of group 'C' and group 'D' staff available. Competency for isolator operation issued by AEE/TRD/
- Implantation measurement at location 43/04 was found 4.78 m at PF No 1.
- Assurance Register, TRD Competency, Isolator Key Register, Power block & TRD staff list for opening Isolators Register checked and found ok.
- EPR value has been taken of AMH Platform No.2 of EP No-16 are IR-7.90 Ω , CR – 0.26 Ω .

- e. Shock treatment chart, Hand Gloves and Sectioning diagram was provided.
- f. OHE Key box was provided. List of technician was pasted on isolator key box register.
- g. Power block register and TPC phone was provided. Number of TPC should be mentioned on the TPC phone itself. TPC phone tested and found in proper working condition.
- h. 02 no. Fire extinguisher was available.
- i. Sealed First Aid box was available.
- j. CLS panel functioning checked and found normal.
- k. TPC phone with TPC CNL and gate phone tested. Found in working order.
- l. The earth pits of relay room are close to drain and submerged in water. This is dangerous for equipment's. All earth pit should be shifted to higher ground and compliance ensured by DRM/BSB.
- m. The USFBI racks are installed in separate room and entry to the room is neither regulated nor monitored by data logger. A partition shall be made in this room and opening made to connect it with relay room and existing door sealed with brick masonry.
- n. FOB, protective screen provided for full length and warning and caution board provided at the entrance and also gang way. FOB was bonded to rail as well connected with earth pit at both ends and IR value of earth station was 7.20 Ω individual and 0.45 Ω combined.
Clearance Measurement

Height from Rail Level (M)	L-1 (M)	L-2 (M)	L-3 (M)
Bottom of Contact Wire	5.49	5.62	5.65
Top of Catenary Wire	6.06	5.95	5.93
Bottom of Girder of ROB	6.51	6.27	6.31
Clearance	0.55	0.32	0.38

- 15. Doubling works are in progress in this section and all along track metallic fencing has been provided for demarcation of work area, the fencing should be earthed with independent earth at 300m interval. Doubling works being done by RVNL, DRM/BSB to ensure.

16. **EARTH FAULT TEST:**

- 1. Location of 42/16
- 2. FCB No. 178 at ARJ TSS
- 3. R= 8.54 ohm, X= 24.45 ohm,
distance=105.27 km


17. **Signal and Telecommunication:**

- 17.1 In terms of IRSEM Pt-III para no. 19.91, a minimum distance of 3M shall be maintained between two earth electrodes at all stations.
- 17.2 Signal and telecom cable armor to be soldered and earth lead shall conform to para 19.93 of IRSEM Pt.-II.
- 17.3 Parallel transverse track bonding shall be provided by S&T department at all stations to minimize damage to installation due to traction short circuit, when traction bond become loose.
- 17.4 Earthing of signal posts and location boxes shall be ensured. In terms of IRSEM Pt-II Para :19.93.2, MS Flat shall be used for earthing signal post and Location box.

- 17.5 Earth value of all earth pits at all stations to be measured jointly by SSE/Sig/CN and SSE(Sig.)/Maintenance/BSB Division. The measured value shall be written on the enclosure. Separate earth shall be provided in parallel where earth value crosses the limit. Earth value of electronic gears such as Axle counter, data – longer, IPS etc. shall be less than 1 ohm as per IRSEM Pt.-II Para No. 22.14.2.3 (c).
- 17.6 Contacts of all new relays shall be tested at all stations and recorded in a Register. Flashing of Relays more than 3 year old shall be ensured.
- 17.7 Maintenance free earth shall be provided at all stations for Axle counters used for BPAC, data Logger, UFSBI and IPS. Earth value of electronic gears such as Axle counter, data-Logger, IPS etc shall be 1 ohm as per IRSEM Pt-II para no. 22.14.2.3 (c).
- 17.8 Indoor earth connection of all equipment shall be terminated in all insulated bus bar and shall be connected with Earth through cable.
- 17.9 Analogue input of AT and local power to be fed in Data-logger at all Stations to monitor quality of supply.
- 17.10 Screened cable shall be used for PA system at all stations.
- 17.11 Point machine crank handle key shall be riveted with EKT key.
- 17.12 Insulated tools to be supplied to Signal & Telecom Maintainers, JEs and SSEs.
- 17.13 Joint inspection shall be done by SSE(Sig.) and SSE(TRD) at all stations to check the continuity of Traction bond and shall be recorded in a register. Joint inspection shall also be done by SSE (Sig) and SSE (Elec) to check the condition of Power cable, terminations, working of auto/manual change-over in CLS panel earthing, voltage etc. and shall be recorded in a Register.
- 17.14 Block earth shall be colored red.
- 17.15 Exhaust fan shall be provided in battery room.
- 17.16 Earth lead wire shall be short in size.
- 17.17 New Relays shall be connected with data logger.
- 17.18 DG Power source to be terminated on Auto Change-over Panel.
- 17.19 All cable entry holes inside Relay Room including Relay huts are to be sealed.
- 17.20 Sand filling and plastering of Apparatus cases to be done.
- 17.21 Track Charger failure indication to be provided at SM's room at all stations.
- 18 Compliance of all the stipulation of EIG to be ensured by PCEE/NER.
- 19 The sand humps provided in the section are in bad condition of maintenance. SR of 15 Kmph shall be imposed on loop lines till such time sand hump are made standard and certified by DyCSO/ SrDSO. DRM/BSB to ensure improvements are made in timebound manner.
- 20 All items of SAG and JAG inspection to be complied.



- 21 All Diesel locomotives and other track machines working the section should have statutory warning signs against climbing up the roof in the electrified section.
- 22 Required number of trained maintenance staff shall be posted for the maintenance of new assets of all departments i.e. P-way, TRD, S&T etc.
- 23 Adequate publicity regarding regular running of trains on the electric traction shall be given for information of passengers as well as all Railway staff working in the section. Frequent announcement shall be made to prevent Roof top travel and rules framed by Railway administration under Para 312 of commercial manual.
- 24 Working of Emergency sockets shall be ensured in the section.
- 25 Electric locomotives (maximum 02 units when coupled) and rolling stock as per joint safety certificate are permitted to run on this section up to the authorized sectional speed or the sanctioned speed of electrical locomotive/rolling stock or the speed proposed in joint safety certificate, whichever is the least.
- 26 The Railway administration is not expected to dilute any of the stipulations given in this Authorization sou-motu. Any dilution without the consultation and concurrence of the commission shall automatically render this Authorization invalid.
- 27 Immediate intimation should be given to the commission for:
 - (i) Compliance of the conditions/stipulations of the authorization prior to introduction of services with electric locomotive.
 - (ii) Date of introduction of electric traction in the section.


(Mohammad Latief Khan) 17/08/2021
Commissioner of Railway Safety
North Eastern Circle, Lucknow

Copy forwarded for information and necessary action to: -

1. Chief Commissioner of Railway Safety, Ashok Marg, Lucknow -226001.
2. Secretary (Electrical Engineering) Ministry of Railway, Railway Board, New Delhi-1.
3. General Manager, North Eastern Railway, Gorakhpur.
4. Chief Administrative Officer/Con, North Eastern Railway, Gorakhpur.
5. Principal Chief Electrical Engineer, North Eastern Railway, Gorakhpur.
6. Divisional Railway Manager, North Eastern Railway, Varanasi.