# AGENDA FOR THE 108th CENTRAL PTCC MEETING

Date:10TH June 2019 (Monday)Venue:Conference hall, 5th Floor, BSNL Bhawan,<br/>0/o CGM, Assam Telecom Circle,<br/>Pan Bazar ,<br/>Guwahati – 781001

Time: 10:30 Hrs.

## A. CONFIRMATION OF MINUTES OF THE LAST MEETING

The Minutes of the 107th Central PTCC meeting held on 14/12/18 at Hyderabad were prepared and circulated by BSNL.

### Members may like to confirm the minutes.

### B. FOLLOW UP ACTIONS OF DECISIONS TAKEN IN THE LAST MEETING

### B.1 Ensuring 'Zero Level' on unguarded power crossings

| As per the discussion of the last meeting           | <b>DE EZ:</b> There is no existence of aerial OFC   |
|---|---|
| 1 0   |   |
| regarding unguarded power crossings, existence      | with metallic support in Eastern zone as            |
| of aerial OFC with metallic support, if any, should | report received from all Telecom circles of         |
| be discussed in SLPTCC meetings. Report of the      | Eastern zone.                                       |
| findings may be submitted to CLPTCC.                | DE, SZ : In south Zone, no existence of             |
|   | aerial OFC with metallic support is reported        |
|   | so far in SLPTCC meetings.                          |
|   | <b>DE</b> , <b>WZ</b> : No such cases in West Zone. |
|   | <b>DE NZ:</b> In north zone no case of Aerial OFC   |
|   | with metallice support reported by SSA so           |
|   | far.  |
|   | Keeping in view, in present scenario                |
|   | this point as such is not required for              |
|   | discussions any more in CLPTCC meeting              |
|   | hence item may be closed.                           |
|   |   |

## **B.2** Computerization of PTCC Route Approval Process

| <b>1.</b> In the 106th CLPTCC meeting, Power Utilities had expressed difficulties regarding login to the portal, uploading of documents and slow speed. In the last meeting, CGM BSNL informed that high capacity servers have been procured and installation was under progress. He also informed that 8 GB RAM, 250 GB SSD HD PC was being used as server as an interim arrangement. The grievances regarding uploading of Topo sheets, system slowing during multiple logins etc. will be taken care in the version 2 of the software, following installation of high capacity servers. BSNL may inform about the progress. | <b>DE SZ :</b> New server already procured and migration is under progress, after which modification in the present version and version 2 will be developed. |
|--|--|
| <b>2</b> . In the last meeting it has decided that Subcommittee should be continued and meeting should be held, when needed.   |  |
| <b>3.</b> RVPNL had raised grievances regarding accessibility of the portal and it was decided that RVPNL will arrange workshop in association with BSNL JTO concerned. Subsequently, RVPNL has offered to conduct the workshop  | <b>DE SZ:</b> At present, JTO concerned is busy<br>with migration work. Workshop is to be<br>organised after completion of migration<br>work.                |

## **B.3 SLPTCC meetings:**

| In the last meeting Chief Engineer CEA        | PGM (EAST) Kolkata done modification          |
|---|---|
| stated that the existing format on which      | in the existing format and modified format is |
| status of power lines already charged as well | enclosed as Annexure no.I.                    |
| as power lines under construction along with  |   |
| their PTCC Route approval is being submitted  | This para may be closed.                      |
| by power authorities, should be modified.     | 1 7   |
| It was also brought up that no SLPTCC         | (1) Total 30 meeting conducted during last    |
| meetings were conducted in Maharashtra state  | year i.e 2018-19.                             |
| since 12.05.2017 due to dispute between       | (2) <b>DE WZ:</b> No meeting was conducted in |
| MSETCL and BSNL regarding organization of     | Maharashtra by MSTCL.                         |
| the meeting. It was decided that MSETCL       |   |
| would conduct the next meeting                | Action: By MSTECL, Mumbai.                    |

## **B.4** Nomination of members from DISCOMs for SLPTCC meetings:

| In the last meeting, DET (PTCC)          | DE EZ Kolkata :                            |
|--|--|
| Kolkata informed that APDCL, Assam had   | APDCL has been nominated vide letter dated |
| not sent their nomination for SLPTCC     | 18/12/2018 to Shri. Pranjit Handique,AGM,  |
| Meeting. CE, CEA informed that CEA would | R-Apdrp cell, APDCL as DISCOM Member.      |
| write a letter to APDCL, Assam for       | Letter dt 18/12/18 is enclosed as Annexure |
| nomination to SLPTCC meetings.           | no.II. ITEM MAY BE CLOSED                  |
| 0  |  |

# **B.5** Non submission of PTCC proposal of SLPTCC/CLPTCC by PTCUL:

## (i) Charging of transmission lines without PTCC Route Approval

| In the last meeting PTCUL has informed that   | <b>CEA:</b> CEA has so far received only 2 cases for |
|---|--|
| IV calculations were done for 12 nos. cases   | which IV calculations have been forwarded            |
| and have forwarded the details to BSNL.       | to BSNL.   |
| BSNL confirmed the same and informed that     | DE NZ: Out of 12 no cases of PTCUL-RAC               |
| IV calculation (Above 132KV) are awaited      | already have been issued for <b>5 cases</b> , IV     |
| from CEA for <b>3 cases</b> .                 | calculation has been received (up to 132KV)          |
|   | for <b>6 cases</b> , but proposals are incomplete as |
| In the last meeting, CEA informed that only 1 | NOC from Defence & Railways are not                  |
| case had been received and asked PTCUL to     | enclosed. IV calculation (Above 132KV) is            |
| submit the remaining cases.                   | awaited from CEA for <b>1 case</b> .                 |
|   | Action : PTCUL                                       |

### (ii) Other cases of non-submission of PTCC Proposals:

| (ii) Other cases of non-sublinssion of 1 1 CC 1 10posais.   |  |  |
|---|--|--|
| It was informed by BSNL that no   | (1).CEA: As per the discussion of the last CLPTCC, CEA   |  |
| PTCC cases have been received   | has sent letter regarding non-submission of PTCC cases to  |  |
| from the states of Himachal   | various Power Utilities and SLDCs .  |  |
| Pradesh, Bihar, Assam, Haryana  | In the 106th Meeting, CE, CEA offered  |  |
| and J&K for the last 4 years.   | to provide training to any Power Utilities for IV calculation and assured that CEA would help in all   |  |
| It was also suggested that this issue<br>may be discussed in SLPTCC<br>meetings.                  | possible way, following which Bihar State Power<br>Transmission Co. Ltd. has sought training and CEA has<br>invited their officials (enclosed <b>as Annexure-III &amp; IV)</b> . |  |
| CEA agreed to communicate once<br>again with state Power utilities for<br>seeking PTCC clearance. | (2).BSPTCL has informed by letter dated 13/05/19 that nomination of members for attending the training is under process.   |  |

| (3).DE EZ: - Till yet no offering is received from Bihar |
|--|
| state electricity board and Assam power development      |
| corporation limited It is also learnt from Assam         |
| Telecom circle, that lot of power lines in Assam were    |
| constructed and energized by APDCL, without PTCC         |
| clearance. In this regard letters has been written dt    |
| 20/12/18 & 26/04/19 to the Chief Engineer PCD O/o        |
| CEA ND   |
| (4).DE NZ: The proposal of PTCC cases from Haryana       |
| SEB is now being submitted but Himachal and J&K SEB      |
| are still not submitting the proposals. This issue was   |
| raised during last SLPTCC meeting of both states and     |
| they assured to submit the case in future.               |
| Members may deliberate.                                  |

# B.6 Non-submission of proposal / telecommunication details from Defense

| D.o Hon-submission of proposal/ telecommunication d                    | etans nom 2 cremse                  |
|--|-------------------------------------|
| In the 106 <sup>th</sup> meeting, Defense representative informed that | <b>BSNL:</b> - No information about |
| seven zones have been identified. Each zone will have a                | Nodal Officers from Defence has     |
| nodal officer. He also informed that Defence has                       | been received <b>so</b> far.        |
| undertaken a project of "Network for Spectrum" being                   |                                     |
| implemented by BSNL. This project would realign the                    |                                     |
| existing communication system in Defence sector. Once                  | Defense man famile later            |
| this project is completed Nodal officer will have the data             | Defense may furnish latest          |
| of communication system in their respective zone. He                   | status.                             |
| assured that once this project is completed then PTCC                  |                                     |
| cases would be disposed of at nodal level without being                |                                     |
| requires to go to ground level for marking of Defence                  |                                     |
| telecom details. He informed that delay in reply from                  |                                     |
| Defence is attributed to frequent movement of personnel.               | (Action: Defense)                   |
| Once the realignment project is completed then this issue              |                                     |
| would be solved as Nodal officers would have all the                   |                                     |
| information regarding the communication systems.                       |                                     |
| Power utilities have expressed difficulty in contacting                |                                     |
| Defence department regarding PTCC cases. Defense                       |                                     |
| representative informed that email id and official phone               |                                     |
| no. of the nodal officer would be given to all for contacting          |                                     |
| after formation of zones. He assured that in a months' time            |                                     |
| information on Zones would be furnished                                |                                     |
| Subsequently CEA followed up with Defense. Defense has                 |                                     |
| replied vide letter dated 14/8/18 according to which                   |                                     |
| "project NFS is being monitored centrally and all                      |                                     |
| queries be addressed to this office as hitherto fore."                 |                                     |
| In the last meeting, representative from Defense side had              |                                     |
| not attended; hence no discussion in this regard was                   |                                     |
| carried out.   |                                     |

# **B.7** Scrutiny report issued by CEA:

| In the last meeting, it was discussed that in order to |                           |
|--|---------------------------|
| avoid delay in processing of PTCC cases, Power         | (Action: Power Utilities) |
| Utilities shall respond to scrutiny reports of CEA and |                           |
| BSNL. It has been observed that Power Utilities are    | Members may deliberate.   |
| still not responding to CEA scrutiny report.           |                           |

### **B.8** Pending PTCC proposals:

| In the last meeting, DE SZ informed that month-wise | In the last meeting 160 CLPTCC cases     |
|---|--|
| details of PTCC cases in South Zone for which BSNL  | were reported pending, Out of 160        |
| Telecom details are pending are being sent by DGM   | cases, 71 cases pending at BSNL side     |
| A/T, Chennai to the concerned territorial circles   | due to non submission of TD. Out of 71   |
| (Chairman, SLPTCC) for follow-up. CE, CEA           | cases, TD of 54 cases already submitted. |
| suggested that the same practice may be followed by | Meanwhile 62 RAC has also been           |
| other zones also.                                   | issued. Every Zonal DE PTCC is being     |
|   | monitored the cases regulary for which   |
|   | Telecom details are pending. They have   |
|   | maintained a communication through       |
|   | phone, correspondence or face to face    |
|   | interaction. Pending cases due to TD is  |
|   | discussed in SLPTCC meeting.             |
|   | ITEM MAY BE CLOSED.                      |

### **B.9** PTCC approval of HVDC Earth Electrode

Based on the decisions taken in 104<sup>th</sup> CLPTCC meeting a Sub-Committee comprising members from BSNL CEA and PGCIL under the chairmanship of PGM BSNL EZ was formed. The sub-committee held its first meeting on 13.04.2018 based on which, PGCIL submitted PTCC proposal for 33 km long 132 kV HVDC Earth Electrode line from Alipurduar to Mathabhanga. CEA would compute induced voltage.

Further it was decided to include members from CPRI and PRDC in the sub-committee. The second meeting of sub-committee, including one member each from CPRI and PRDC, was held on 25.10.2018. In the discussions, CPRI suggested that transient DC fault current frequency of 50 Hz can be considered as the worst case which gives the maximum Induced Voltage (IV) magnitude using the formula being considered by CEA under normal cases. CPRI opined that the IV may be computed by considering 50 Hz (worst case) as was done in ± 500 kV HVDC Mundra – Mahindergarh line.

Following was decided:

(i) CPRI would seek required information for carrying out studies. CPRI may explore possibilities for doing this work free of cost, as there is as such no provision to make payment from PTCC forum.

(ii) PGCIL, SR-I informed that in case of +/-800kV Raigarh-Pugalur HVDC line, there is no earth electrode, and instead each pole has its own direct return conductor. It was decided that PGCIL, SR-I would submit complete technical details to the Sub-Committee for examination.

During the last CLPTCC meeting, it was decided that

(1) Till the CPRI study report is received, PTCC proposals for HVDC lines would be sent in the same way as PTCC proposals for

DE EZ Kolkata :-The telecom sur-vey of 132 KV Earth Electrode line at Alipurduar HVDC S/S in West Bengal was completed and sent to CEA New Delhi on 28.07.18 for IV calculation. NF Railway had also completed survey in Feb 19 and asked Power grid to collect the report from them for sending to CEA. In this regard DE (PTCC) ER Kolkata, has also intimated to CGM(Project) ER-II Kolkata vide letter dt 11/04/19.

 CPRI study report has not been received till date.
 BSNL has forwarded CPRI letter dated 16.12.2018 (Enclosed as Annexure no. V) to the Chief Engineer PCD O/o CEA New Delhi. CPRI has written:

"It was noted in the gist of meeting that CPRI will explore the possibility of carrying out simulation studies to compute the transient fault currents. As noted above and in gist of meeting, if the available PGCIL data is used for IV calculations, further study by CPRI is not required. However, if it is desired to have the fault study be conducted by CPRI, it is felt essential to have a meeting of all the concerned with our colleagues at Power System Division, CPRI Bangalore at a mutually convenient date and time at Bangalore to understand and discuss the scope, data required for modelling etc. and conclude on the matter. As far as

|                         | AC lines are being sent.             | exploring the possibility of conducting    |
|-------------------------|--------------------------------------|--|
| (2)                     | PGCIL, SR-I was instructed to        | the study free of cost is concerned,       |
|                         | submit complete technical details    | kindly note that the matter cannot be      |
|                         | of Raigarh-Pugalur HVDC line to      | decided by us and needs to be put up to    |
|                         | the sub-committee for examination    | the competent authority."                  |
|                         | at the earliest.                     | CEA suggests that an interim               |
|                         |                                      | arrangement for IV calculation in case     |
|                         |                                      | of HVDC lines shall be decided until       |
|                         |                                      | final decision is taken.                   |
|                         |                                      |  |
|                         |                                      | (2) Complete technical details of Raigarh- |
|                         |                                      | Pugalur HVDC line has not been             |
|                         |                                      | submitted by PGCIL SR-I.                   |
|                         |                                      | A letter dt 24/04/2019                     |
| Members may deliberate. | (Annexure no.VI) has been written by |  |
|                         | Shri.A.K.Sinha, chairman sub-        |  |
|                         | committee to the PGCIL, AP for early |  |
|                         |                                      | submission.                                |

## **B.10 Whether PTCC approval is needed for power Cables:**

In the last CLPTCC meeting it was decided that induction due to power cables of voltage level 33 kV and below on nearby telecom cables will be less due to double screening effect of power cable and telecom cable. Hence, it is sufficient that power utilities forward the self-certification mentioning the name of the power cable with route length, along with Railway NOC, EPR values of the new substations and topo map to the concerned zonal DE (PTCC)/SDE (PTCC) and BSNL SSAs. If no objection or report is received from the concerned BSNL SSAs within a month's time, the power utilities can charge the power cable. The date of charging of power cable may be intimated to the concerned zonal DE (PTCC)/SDE (PTCC) and BSNL SSAs by the Power Authority.

Accordingly, BSNL has issued the guidelines vide letter dated 13.03.2019 (**enclosed as Annexure-VII**). CEA has following suggestions:

| As per BSNL letter                              | CEA's suggestions                               |
|---|---|
| (1) Power Utilities shall forward Railway NOC   | The IV on Railway telecom circuits are much     |
| to concerned zonal DE (PTCC) / SDE (PTCC)       | less (about 20 %) than IV on BSNL telecom       |
| and BSNL SSAs                                   | circuits. Hence, IV calculation may be waived   |
|   | off for Railway telecom circuits as decided for |
|   | BSNL cables. CEA suggests that Railway &        |
|   | Defence NOC may be waived off for PTCC          |
|   | clearance of UG power cables of 33 kV and       |
|   | less.   |
| (2) I. The power cables of capacity 33 kV DC    | Minimum depth of laying for power cables        |
| and less will be laid at a minimum depth of 1.2 | under 33 kV is already given at clause 6.3.2,   |
| meters below the earth surface                  | page 137 of PTCC Manual (enclosed as            |
|   | Annexure-VII (A)). CEA opines that this may     |
|   | be considered in the guidelines                 |
| (2) II. The minimum separation between the      | Point no. (ii), page 171 of PTCC Manual         |
| bottom of telecom cables and power cable will   | (enclosed as Annexure-VII.B) states: "The       |
| be maintained as 0.6 meter for 33 kV Double     | value of minimum clearance for underground      |
| circuit/ 0.3 meter for 33 kV Single circuit and | power cables to be kept as 0.3 meters for 33 kV |
| less as case may be                             | and less and 0.6 meters for 33 kV and above."   |
| Members may deliberate.                         | CEA opines that separation may be taken as 0.3  |
|   | meters for 33 kV (both S/C and D/C) and         |
|   | below UG power cables                           |

### B.11 Agenda raised with permission of Chair

As per PTCC Manual when the induced voltage is between 430 V and 650 V the protection cost is borne by BSNL. When the induced voltage is more than 650 V the protection cost is borne by the lateral entrant. The charging permission is given by BSNL after protection work is completed. KPTCL informed that there have been cases more than 4 years old where BSNL was to bear the protection cost but till date charging permission is not given. Similarly there have been cases when Power Utility has deposited money demanded by BSNL for protection when voltage exceeded 650 V but still charging permission from BSNL remains pending.

After detailed discussions following was decided:

### Case-I (Induced voltage is between 430 V and 650 V and protection cost is to be borne by BSNL)

| In the last meeting, it was decided that as per the clause 7 at page | Members may deliberate |
|--|------------------------|
| no. 145 of PTCC Manual, in case of Induced Voltage ranging           |                        |
| between 430 V and 650 V, the energization of EHT power lines         |                        |
| would not be held up for want of installation of GD tubes on         |                        |
| telecom lines.   |                        |

### Case-II (Induced voltage is beyond 650 V and protection cost is to be borne by Power Utility)

| CGM BSNL Jabalpur vide letter dated 30.07.2018 had issued guidelines   | The letter dt 30/07/2018 has                           |
|--|--|
| for protection works to be carried out in case Induced Voltage is beyond   | been modified and time                                 |
| 650 V.   | limits has included in new letter dt 11/03/2019 and is |
| In the last meeting, CE CEA stated that the letter should be modified as<br>there are no time limits prescribed in the letter for issuing of RAC and | enclosed at Annexure-                                  |
| Energization approval  | VIII.  |
|  | This para may be closed.                               |
| It was brought to the notice that some railway zones do not adhere   |  |
| to PTCC time limits for furnishing telecom details and for issuing   |  |
| NOC. It was provisionally decided that in case Railway telecom   |  |
| details are not received within the time limit prescribed by PTCC  |  |
| Manual CEA/Power utilities would compute IV from the available   |  |
| railway details in the topo map and would be considered as   |  |
| deemed Railway details. If NOC is not issued by Railway as per   |  |
| time limit prescribed in PTCC manual then it will be considered as   |  |
| deemed NOC. CLPTCC observed that as these provisional  |  |
| decisions have been taken in the absence of any representative from  |  |
| Railways so it would be prudent that before implementation these   |  |
| provisional decisions are conveyed to Railway Board with the   |  |
| request to send the representative in the next CLPTCC meeting.   |  |
| CEA as follow up has written a letter to Railways on 23/7/18.  |  |
| Representative from Railway side has attended last meeting but   | Members may deliberate                                 |
| no discussion carried out.   |  |

**B.12 Long Pending PTCC case of 132KV from OPTCL Odisha:** 

| Dill Long Fending FF00 case of 1021X ( from OFF01 Outshat |   |  |  |  |
|---|---|--|--|--|
| 18 no's PTCC case of 132KV are pending due to             | DE East Zone Kolkata: Till yet no action has    |  |  |  |
| non receipt of IV calculation from OPTCL, Odisha          | yet been taken by OPTCL therefore nos. of       |  |  |  |
| since long time.  | PTCC cases of 132KV are increased from 18       |  |  |  |
| DGM EHT(C), OPTCL informed that                           | (Last meeting at Hyderabad) to 23.              |  |  |  |
| cases are pending due to non receipt of NoC               | Out of these 23 cases, 1 case is pending since  |  |  |  |
| from Railway (ECR)  | 2012, 2 cases since 2013, 2 cases since 2014, 2 |  |  |  |
|   | cases since 2015, 5 cases since 2017, 9 cases   |  |  |  |
| Action : By OPTCL & ECR                                   | since 2018 and 2 cases of current year.         |  |  |  |
|   | In this regard, DE EZ Kolkata has written       |  |  |  |
|   | letters dt 20/12/18 & 26/04/19, to Chief        |  |  |  |
|   | engineer, PCD, O/ o CEA New Delhi.              |  |  |  |

### B.13 No nodal officer for handling PTCC matters in JUSNL & Power Grid, ER- I, Patna :

| Since the last couple of years no nodal officer's       | DE EZ Kolkata: Action has already been |
|---|--|
| name for handling PTCC matters from JUSNL               | taken so item may be closed.           |
| (Jharkhand urja sanchar nigam limited) and Power        |  |
| Grid, ER I, Patna (Jurisdiction Bihar & Jharkhand)      |  |
| were informed DE PTCC(ER),Kolkata. So, the PTCC         |  |
| cases of their jurisdiction are not processed properly. |  |
| PGM (East) BSNL Kolkata intimated that matter           |  |
| will be settled with Power Grid,ER I,Patna and          |  |
| JUSNL through conversation.                             |  |

### B.14. Private power utilities may be given power to offer online :

| <ul> <li>In the last meeting, it was decided that Since Private power parties are not authorised to offer a request through the portal the following procedure may be followed:</li> <li><b>1.</b> For EHT power proposals of 33 kV DC and below 220 kV, the private parties should submit the proposal to SEBs, who in turn will scrutinize, authenticate the documents including the topo map and upload the proposal in the PTCC portal online.</li> <li><b>2.</b> For EHT power proposals of 220 kV and above, the present procedure of registering the cases as offline case by DET PTCC after getting scrutiny report from CEA, New Delhi will follow.</li> <li><b>3.</b> Creation of user id for private parties in the PTCC portal will be considered during the development of version 2 of the application. Members</li> </ul> |  |
|--|--|

### B.15 PTCC cases having induced voltages greater than 650 Volts:

In the last meeting, it was decided each case involving induced voltages greater than 650 V, where payment for protection through GD tubes is to be made by Power Utility, should be discussed in the SLPTCC meetings. **BSNL**: Such cases are discussed in SLPTCC meeting. Out of 13 cases, 9 cases have cleared and updated statuses of remaining 4 cases are enclosed at **Annexure – IX**.

# C. NEW AGENDA

### AGENDA FROM BSNL (DE SZ CHENNAI) :

# C.1. Energisation Approval issuing clause in Route Approval Certificate in case of the Induced Voltage range is less than 430 volts:

In MOM of 105th CLPTCC meeting held at Kochi, Kerala State on 10th Nov 2017, under item no. D2, it is mentioned that " It was decided that the PTCC RAC where there is no requirement of protection would be considered as Deemed EA".

Based on minutes of 105th CLPTCC meeting, on receipt of Induced Voltage values from SEB/CEA,ND in DE PTCC office, if the value of Induced Voltage is less than 430 volts, RAC is being issued from DEPTCC office with the recommendation of No GD tube protection and not mentioning of EA clause. In the recently conducted SLPTCC meeting held on 26/04/2019 at Chennai, Member Telecom SLPTCC, Tamilnadu Circle, Chennai insisted to mention about the EA clause i.e. it is to be stated in RAC that "Issuing of Energisation Approval is not required as there is no requirement of protection and hence RAC itself is considered as Deemed EA". Suitable guideline may be issued.

### Members may deliberate.

# C.2 Procedure to be followed for Private Power Utilities offering the proposals of capacity 220 KV & above:

In the MOM of 107th CLPTCC meeting held on 14/12/2018 at Hyderabad, the decision of CLPTCC forum under item no. C.4. para 2 is that "For EHT power proposals of above 220 KV, the present procedure of registering the cases as OFF line case by DEPTCC after getting the scrutiny report from CEA/New Delhi will follow". This procedure is being followed in South Zone.

In South Zone, one EHT power line proposal of 230 KV is submitted by Private Power Utility to the all concerned including RAC & EA issuing Authority. On receipt of RAC, EA issuing authority while scrutinising proposal with RAC has found that the Route length & EPR zone value mentioned in RAC differs

documents including topo map and upload the proposal in the PTCC portal online". Hence it is suggested that the same procedure may be considered for private power utility EHT cases

of 220 KV and above also through SEBs so that the dispute in Questionnaire & topo map can be avoided and all EHT power line referred by Private Power Utility are registered as online and also the additional time consumption for PTCC clearance (Time consumption for getting scrutiny report etc.) may be saved. Else suitable guidelines may be issued.

with route length mentioned Questionnaire & topomap & EPR zone value which was received directly from private party in their office. Hence they have returned the RAC to DE PTCC as they could not process further

KV and below 220 KV under item no. C.4. para 1 is "For EHT power proposals of 33 KV DC and below 220 KV, the private parties should submit the proposals to SEBs, who in turn will scrutinise, authenticate the

The procedure given in MOM of 107th CLPTCC meeting for Private power utility EHT cases of 33

### Members may deliberate.

# AGENDA FROM CEA NEW DELHI:

C.3 EPR Calculation

As per PTCC Manual, EPR shall be calculated at maximum fault current. Presently it is calculated on Single Line to Ground fault. Maximum fault current can be either three phase or single phase. CEA opines that Power utility shall calculate EPR on maximum fault current and furnish, maximum fault, single phase and three phase fault currents at substation in the PTCC Proposal.

### Members may deliberate.

### C.4 Maps not being sent by certain Railway zone

for EA as the route length and EPR zone value differs.

Certain Railway zones are sending only the annexure of block and control circuits details without a marked Topo map.

### Members may deliberate.

### **C.5 BSNL Telecom details**

a) Western region has submitted BSNL details without any annexure. CEA received only the marked topo map without annexure. (copy enclosed at Annexure-X)

b) In some cases, the name of the line given in the annexure and cover letter do not match. (copy enclosed at Annexure- XI)

### Members may deliberate

### C.6 Protection of Telecom cables which are lateral entrant to Power line

Telecom cables which are laid before the charging of Power line are protected by PTCC Route Approval Process. For new telecom cables procedure has been laid out at page no 32 of PTCC Manual. But presently no procedure is followed for new telecom cables which are laid in the proximity of already charged Power line, which endangers the personnel and telecom equipment.

### Members may deliberate.

D.

### **CLPTCC CASES**

### D.1 Non Receipt of IV calculation from CEA:

DE EZ Kolkata (BSNL) and DE SZ Chennai has sent agenda for the meeting; a copy is enclosed at Annexure- XII & XII.A

### D.2 Agenda received from MPPTCL:

Madhya Pradesh Power Transmission Company limited (MPPTCL) has sent agenda for the meeting, a copy is enclosed at Annexure- XIII. Deliberation given in the Annexure itself

### D.3 Agenda received from GETCO:

Gujarat Energy Transmission Corporation Limited (GETCO) has sent agenda for the meeting; a copy is enclosed at Annexure- XIV. Deliberation given in the Annexure itself

### **D.4** Agenda received from KSEB:

Kerala State Electricity board has sent agenda for the meeting; a copy is enclosed at Annexure-XV Deliberation given in the Annexure itself

### Members may deliberate

### D.5 Agenda received from CSPTCL:

Chhatisgarh state power Transmission Company Limited has sent agenda for the meeting; a copy is enclosed<br/>at Annexure <u>– XVI.</u>Deliberation given in the Annexure itself

### D.6 MSETCL Agenda:

| In the last meeting Maharastra State Electric   | <b>DE WZ: (1).</b> Out of 15 cases, CLPTCC cases were 3 |
|---|---|
| Transmission Company Limited was submitted      | only and SLPTCC cases were remaining 12 cases.          |
| enda about pending PTCC cases (Total 15 cases). | (2).RAC has been for 2 cases and updated status of      |
|   | remaining 1 case is enclosed at Annexure- XVII.         |
|   |   |

### D.7 Agenda of PGCIL SRTS-II :

| In the last meeting PGCIL, SRTS-II was submitted | <b>DE SZ:</b> RAC has been issued for 2 cases and only 1 case |
|--|---|
| agenda about pending PTCC cases (Total 3 cases). | is remaining. Updated status enclosed at Annexure-            |
|  | XVIII.  |

### Deliberation given in the Annexure itself

### **D.8 Agenda of PGCIL WRTS-II :**

| In the last meeting PGCIL, WRTS-II was submitted | <b>DE WZ:</b> RAC has been issued for 3 cases and only |
|--|--|
| agenda about pending PTCC cases (Total 5 cases). | 2 cases are remaining. Updated status enclosed at      |
| Deliberation given in the Annexure itself.       | Annexure- XIX.   |

### D.9 KPTCL Agenda:

#### In the last meeting Karnataka Power Transmission Corporation Limited was submitted agenda about pending PTCC cases (Total 18 cases). DE SZ: RAC has been issued for 11 cases and only 7 cases are remaining. Updated status enclosed at Annexure- XX.

### **D.10 TSTRANSCO Agenda :**

Deliberation given in the Annexure itself.

Deliberation given in the Annexure itself.

| In the last meeting Telangana State Power Transmission | <b>DE SZ :</b> RAC has been issued for 3 cases and |
|--|--|
| Company Limited (TSTRANSCO) was submitted              | updated status of remaining 12 cases is enclosed   |
| agenda about pending PTCC cases (Total 15 cases).      | at Annexure- XXI.                                  |
|  | Deliberation given in the Annexure itself.         |

### D.11 PSTCL, PATIALA Agenda :

| In  | the     | last  | meeting    | Punjab          | State  | Transmission  | <b>DE NZ:</b> RAC has been issued for 6 cases and  |
|---|---------|-------|------------|-----------------|--------|---------------|--|
| Co  | rporati | ion L | imited (PS | STCL) w         | as sub | mitted agenda | updated status of remaining 2 cases is enclosed at |
| about pending PTCC cases (Total 8 cases). |         |       | 8 cases)   | Annexure- XXII. |        |               |  |

### Deliberation given in the Annexure itself.

### **D.12 RRVPNL**, Jaipur Agenda:

| In the last meeting Rajsthan Rajya Vidyut Prasaran | <b>DE NZ:</b> RAC has been issued for 5 cases and  |
|--|--|
| Nigam Limited (RRVPNL) was submitted agenda about  | updated status of remaining 1 cases is enclosed at |
| pending PTCC cases (Total 6 cases).                | Annexure- XXIII.                                   |
|  |  |

**Deliberation given in the Annexure** 

### Annexure- I

# Revised Standing agenda for SLPTCC meeting as per discussion in 107<sup>th</sup> CLPTCC meeting

# Half Yearly Report regarding Energization of Power Transmission lines.

(Name of Power Utility.... )

(This proforma will have to be submitted by Power utilities on 30th September & 31st March of every year.)

| 1. Details of HT/EHT power lines Energized without PTCC clearance in the state as on |                           |   |  |  |  |  |
|--|---------------------------|---|--|--|--|--|
| SI.No  | Name of the<br>Power Line | Length of the power line Date of Energization |  |  |  |  |
|  |                           |   |  |  |  |  |

|       | 2. Details of HT/EHT power lines referred for PTCC clearance and awaiting for Route Approval Certificate in the state as on |                                |  |                |  |  |  |  |
|-------|---|--------------------------------|--|----------------|--|--|--|--|
| SI.No | Name of the<br>Power Line   | Length of<br>the power<br>line | Unique Registration<br>number & Request<br>number allotted in the<br>PTCC Web portal | Remarks if any |  |  |  |  |
|       |   |                                |  |                |  |  |  |  |

| 3 . Details of HT/EHT power lines Energised with PTCC Route Approval Certificate(RAC),but<br>without Energization approval<br>in the state for financial year as on |                                |                           |  |   |  |  |
|---|--------------------------------|---------------------------|--|---|--|--|
| SI.No Name of<br>the<br>Power<br>Line   | Length of<br>the power<br>line | RAC particulars with date | whether RAC is<br>issued with<br>Deemed<br>Energization<br>certificate | Whether<br>Energisation<br>approval obtained<br>from BSNL Territorial<br>Circle . If obtained,<br>Approval particulars<br>with date |  |  |

Signature : Name & Designation of Power Utility:

### **Annexure-II**

ASSAM POWER DISTRIBUTION COMPANY LTD CIN: U40109AS2003SGC007242 O/O THE CHIEF GENERAL MANAGER (PP&D), APDCL 6<sup>th</sup> Floor, Bijulee Bhawan, Paltanbazar, Guwahati-781001

No. APDCL/ R-APDRP/ BSNL-PTCC/ 2018/ 3156

Date: 12. 12.18

The Principal General Manager (East) QA & Inspection Circle QA Bhawan EP-GP Block, Sector-V, Salt Lake, Kolkata-91

Sub: Regarding PTCC clearance and nomination of DISCOM member thereof.

Ref: 1) Your letter no. QA & Insp/Kol/PGM/Tech Corr/Genl/2018-19/57 Dtd at Kolkata the 11th December, 2018.

Sir,

To

With referce to the above, the undersigned would like to nominate the following officer as a member to PTCC from APDCL:

1. Sri Pranjit Handique, AGM, R-APDRP Cell, APDCL (Contact No: 94353 25552).

We are going to acquire the required PTCC Clearance Certificate from your end for the lines which are going to be commissioned by APDCL in future.

We will be much obliged for your kind advice.

This has the approval of MD, APDCL.

Yours faithfully,

(J Borthakur) - 18 (J Borthakur) - 18 Chief General Manager (PP&D), APDCL

Memo No. APDCL/ R-APDRP/ BSNL-PTCC/ 2018/ 3155 (a)

Date: 12.12.19

Copy To:

- 1. PS to the MD, APDCL, Bijulee Bhawan, Guwahati for kind information of MD, APDCL.
- 2. The Chief Engineer (LD&T), CEA, New Delhi for kind information.
- The NO. R-APDRP, APDCL, Bijulee Bhawan, Guwahati for information and necessary action.
- 4. Sri Pranjit Handique, AGM, R-APDRP, APDCL for information and necessary action.

Chief General Manager (PP&D), APDCL



Bihar State Power Transmission Comapny Limited, Patna

(A subsidiary company of Bjhar State Power (Holding) company Limited,Patna) CIN-U40102BR2012SGC018889 [Save Energy for Benefit of Self & Nation]

Head Office : 4<sup>th</sup> Floor, Vidyut Bhawan Bailey Road , Patna - 800001 Website: www.bsptel.in Email ld: telecom.bsptel@gmail.com

Letter No. 05 Tele/PTCC/05/2018

Date 27 102

From,

G.K.Choubey Chief Engineer (System Operation) BSPTCL, Patna

To,

 The Chief Engineer, (PCD) & Co-chairman CEA, New Delhi

Sub: - Proposal for conducting a training course on Power telecom co-ordination. Sir,

With reference to the above, it is to say that BSPTCL officials (Telecom wing) are interested in attending a training course and workshop on PTCC for understanding the theoretical and practical aspects of co-ordination. Considering the fact that training will impart guidelines on PTCC clearance procedure and method of induced voltage calculation in the affected telecommunication section, we request you to kindly arrange a training program for BSPTCL.

Please acknowledge and confirm at the earliest so that nominee details will be furnished to you.

Yours faithfully 22

(G.K.choubey) Chief Engineer(System Operation)

Scanned by CamScanner

### **Annexure-IV**

26/04/2019

Gmail - Regarding proposal for conducting a training course on Power telecom co-ordination Aurea - TV

Gi.ail

Chief Engineer LDNT <celdntcea@gmail.com>

### Regarding proposal for conducting a training course on Power telecom coordination

Chief Engineer LDNT <celdntcea@gmail.com> To: Telecom Dept <telecom.bsptcl@gmail.com>

Tue, Mar 26, 2019 at 3:31 PM

Sir

Vide reference Tele/PTCC/06/2018/105 dated 27.02.2019, your letter regarding PTCC procedural training to BSPTCL officials has been received in CEA. In this regard, it is to inform that the training duration will be of 3 days (10:00 AM to 04:30 PM) and there will be no charges for the same. However, no fooding/lodging facility shall be provided by CEA.

You are therefore requested to provide the list of officials and tentative date for the training.

Regards

Prateek Srivastava

Assistant Director

Central Electricity Authority

Ph. 8017006309

[Quoted text hidden]

ding study on PTCC clearance of 132 KV earth electrode ... https://mail.google.com/mail/u/1?ik=c57cc78373&view=pt&search=a

# Gmail

DET PTCC EASTERN REGION <detptccer@gmail.com>

### Regarding study on PTCC clearance of 132 KV earth electrode line for Alipurduar HVDC station.

Pradeep Nirgude <pmnirgude@cpri.in>

Sun, Dec 16, 2018 at 12:06 PM

To: detptccer@gmail.com Cc: "A.K Sinha" <gmeastbsnl@gmail.com>, celdntcea@gmail.com, "AGM PTCC, JABALPUR" <agmsw@rediffmail.com>, meera k s AD\_PS <meera@cpri.in>, dg <dgcpri@cpri.in>

Dear sir

Please refer to the gist of discussions dated 25th October, 2018. It was opined by me that the transient fault current data submitted by PGCIL suggest that the fault current maximum peak current reaches in about 5ms, which is almost a guarter cycle of 20 ms (50Hz) AC waveform and thus, transient DC fault current frequency of 50Hz can be considered as the worst case that gives the maximum Induced voltage (IV) magnitude using the same formula given in PTCC manual. It was also opined that the Induced Volatge ( IV) may be computed by considering 50Hz (worst case) as done in ± 500 kV HVDC Mundra - Mahindergarh line (Annex-IV-B). Hence, existing PGCIL fault study data may be used and calculate IV as done previously using the mutual coupling, soil data, power line and communication line profiles etc using formula given in PTCC manual. It may also please be noted that CPRI has not done such calculations previously.

It was noted in the gist of meeting that CPRI will explore the possibility of carrying out simulation studies to compute the transient fault currents. As noted above and in gist of meeting, if the available PGCIL data is used for IV calculations, further study by CPRI is not required. However, if it is desired to have the fault study be conducted by CPRI, it is felt essential to have a meeting of all the concerned with our colleagues at Power System Division, CPRI, Bangalore at a mutually convenient date and time at Bangalore to understand and discuss the scope, data required for modelling etc. and conclude on the matter. As far as exploring the possibility of conducting the study free of cost is concerned, kindly note that the matter can not be decided by us and needs to be put up to the competent authority.

In case of a decision to have a fault simulation study conducted by CPRI, It is requested that PTCC, Chair may call for a meeting at CPRI, Bangalore with Power System Division colleagues ( Contact: Smt. K. Meera, Additional Director and HOD, PSD, CPRI, Bangalore- Email:meera@cpri.in) along with all other stake holders to work out the scope, discuss the possibility of carrying out the proposed study by Power System Division, CPRI, Bangalore, time and costs involved etc. However, the convenient mutually agreed date and time for will be communicated by Power System Division after obtaining the approval from the competent authority for such a meeting.

With best regards

Dr. Pradeep Nirgude Additional Director and Unit Head UHV Research Laboratory Central Power Research Institute Hyderabad - 500098, INDIA 9440114115 [Quoted text hidden]

3 attachments

1 of 2

4/24/2019 4:38 F

O/o D.E.(PTCC), Eastern Zone, Inspection & QA Circle, QA Bhawan,EP-GP Block, Sector V, Salt Lake, Kolkata-700091 Email-detptccer@gmail.com Mob: 9433400096, Land no.033-23573724



भारत संचार निगम लिमिटेड (अला मानवर मा उच्चन) BHARAT SANCHAR NIGAM LIMITED

QA&INSP/PTCC/KOL/TECH CORR/2018-19/74

Dated, at Kolkata, the 24.04.2019

To Sri A.C. Sankaraih, AGM(Engineeing),PGCIL, 765/400 KV Kurnool S/S, Andhrapradesh.

Sub:- Discussions on the 2<sup>nd</sup> meeting of subcommittee reg. HVDC cases held on 25<sup>th</sup> October'2018 at CEA, NewDelhi.

Ref. - Gist of discussion of the 2<sup>nd</sup> meeting of the subcommittee held on 25<sup>th</sup> October 2018 at CEA, NewDelhi letter no.CEA/PCD/PTCC/106 FOLLOW-UP/2363 dated 05.11.2018.

Sir,

With ref. to sub. above, regarding decision taken in the meeting held on 25.10.22018 at the conference room of CEA, NewDelhi to examine the induction affects of HVDC Transmission lines at nearby telecom circuits . PL refer the M.O.M. dated 05.11.2018.

In the meeting, PGCIL had informed that in case of +/- 800kV Raigarh-Pugalur HVDC line, there is no earth electrode, and instead each pole has its own direct return conductor. It was decided that PGCIL, SR-I would submit complete technical details to the Sub-Committee for examination.

You are requested to do the needful regarding submission of complete technical details to the Chairman/ Co-Chairman of the Sub-Committee for examination.

The letter is issued with the approval of the chairman of the committee.

Munt 24/4/15

Divisional Engineer (PTCC) /Eastern Region, QA & Insp. Circle, BSNL, Kolkata.

Copy for information to :-

- 1) The C.G.M., QA &Insp.Circle, Jabalpur.
- 2) The Chief Engineer(Co-Chairman), PCD Division, CEA, NewDelhi.

Annex-Vi (Cg 1/2.) कार्यालय मुख्य महाप्रबंधक युणवत्ता आश्वासन एवं निरीक्षण परिमंडल जवलपुर Technical Section, O/o The Chief General Manager, QA & Inspection circle, 3<sup>RD</sup> Floor, Sanchar Vikas Bhawan, Residency road, Jabalpur-482001. Tel: 0761-2628525, E-mail ID : agmsw@rediffmail.com No. CGM/QA & I/LP-2015/107<sup>TH</sup> CLPTCC MEETING/41, Dated at Jabalpur, the 13/03/2019

### All CGM BSNL Telecom circle,

### All Power authority,

To

Subject: PTCC approval of Power cables of 33KV DC (Double circuit) and below – Guidelines for processing such proposals.

Ref No: Minutes of 107th CLPTCC meeting, held at Hyderabad on 14/12/2018.

Kindly refer to the Minutes of 107th CLPTCC meeting, held at Hyderabad on 14/12/2018. The decision under item no B.12 (Whether PTCC approval is needed for power cables) is reproduced below:

CLPTCC decided that "Power cables are having double shielding. Considering this fact and capacity of the power cable, for all 33KV (Double circuit) and below capacity, Underground power cable proposals, it is sufficient that the Power utilities will forward the self certificate mentioning the name of power cable with route length, along with Railway NoC, EPR values of the new substation and topo map to the concerned Zonal DE (PTCC)/SDE (PTCC) and BSNL SSAs. If no objection or report received from the concerned BSNL SSAs within a month's time, the power utilities can charge the power cable. The date of charging of power cable may be intimated to concerned Zonal DE (PTCC)/SDE (PTCC) and BSNL SSAs by the Power authority".

Keeping in view of above decision, the following guidelines should be followed during processing the PTCC approval of Power cables of 33KV DC (Double circuit) and less capacity:

- Concerned Zonal DE (PTCC)/SDE (PTCC) and BSNL SSAs are to be intimated about the laying of any conversion/proposed UG power cable of capacity 33KV DC
- (Double circuit) and below along with the name of power cable, route length, Railway NoC, EPR values of the new substations and topomap so that telecom authorities can depute their representatives during digging and laying of power cables.
- (2) Also a self certificate as given below should be submitted by the concerned Power authority :
  - The Power cables of capacity 33KV DC and less will be laid at a minimum depth of 1.2 meters below the earth surface.

पंगीकृत एवं निगम कार्यालय: भारत संघार मयन, हरीशचंद्र माथुर लेल,जनपद, नई दिल्ली-110001: निगम पहचान क्रमांक-(CIN):U74899DL2000GOI107739 ; www.bsnl.co.in 1 -

AnnexT

The minimum separation between the bottom of telecom cables and power cable will be maintained as 0.6 meter for 33KV Double circuit/ 0.3 meter for 33KV SC (Single circuit) and less as case may be.

Power cable will be painted in RED or a mark of spark in "red" will be made available on sheath of the cable for identification similar to the marking of the telephone handset emblem on outer sheath of telecom cable.

IV. For identification of UG power cable, route markers will be provided.

Non existence of any BSNL assets within the EPR zone of the proposed Substation 'ill be ensured before energisation of the power cable in coordination with BSNL Authorities.

In case of occurance of any damages to BSNL Personal or assets, after due energisation of the power cable, power authorities are liable to the charged for the compensation towards such damages to BSNL assets.

This is issued with approval of competent authority.

Asstt.General.Manager (Tech Mobile No. 9425803008

Copy to :

II.

III.

V.

VI.

(1) All PGMs / GM , QA & Inspection circle for information pl ,

- (2) Chief Engineer, PCD Division & Co-chairman of 107<sup>th</sup> CLPTCC meeting, Central Electricity Authority, New Delhi for information pl.
- (3) Director, PCD Division & Secretary (Power side) CLPTCC, Central Electricity Authority, New Delhi for information & with request to circulate this letter to all power utilities, and

(4) All Zonal DE (PTCC), BSNL QA &Inspection circle for information & for circulation to all BSNL telecom circle and all State power company (Transmission & DISCOM) and Power Grid corporation, under their jurisdiction.

पंत्रीकृत एगं नियम कार्यालय: भारत संचार मदन, हरीशचंद्र मापुर लेन,जनपय, नई दिल्ली-110001: लियम पहचान क्रमांक-(CIN):U74899DL2000GOI107739 ; www.bsnl.co.in

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## Annexure- VII.A Page 1 of 2



# APPENDIX-VIII TO CHAPTER-1

### (Refer Para 6.2.6)

Recommendations Based On the Minutes of the Meeting Held between Delhi Electric Supply Undertaking (DESU) and Department Of Telecommunications Held on 23<sup>rd</sup> March 1987

# 1. (i) Para 6.3.2, Page 16 of IS: 1255/1983

Due to various practical difficulties, particularly the aspect of pushing up the cost of laying of cables in case of increased depths, depths as proposed by Telecommunication Department, are not accepted. The existing depths as provided on Page 16 of IS: 1255 may stay.

# (ii) For Road crossing of all Cables.

The cable shall be laid through the adequate size of pipes crossing the road.

Along the roadside concrete covers with marking on all cables of 11 kV and above shall be provided. (The present practice is that for 11 kV cables bricks are provided to cover the cable, which is considered not an efficient and durable arrangement).

### 2. (i) Para 6.3.3 – Clearance

In Delhi it may be difficult to obtain proposed clearance of 0.6 meters between Power Cable and Telecommunication Cable due to pressure on space allocated for routes to provide various underground services, hence it may not be possible to achieve. However, in other places in India wherever it could be achieved should be provided. Accordingly, it was agreed that Para on Clearances should be reworded as under:

Power Cable to Preferably 0.6 meters but not less than 0.3 communication cable meters at any point.

For identification of the underground cable provision for route markers should be made suitably to read as under

Route Markers - Suitable route markers/indicators indicating disposition of the cable be provided.

Note: Para 6.3.2 and 6.3.3 of IS: 1255/1983 is reproduced below for ready reference.

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# Annexure- VII.A Page 2 of 2

|                 |  | -                     | W/ SHOW MARCING   | $\sim 0$ '            | - / |
|-----------------|--|-----------------------|---|-----------------------|-----|
| 6.3.2           | Depth  |                       | Central   | Electricity Authority |     |
| The d<br>follow | esired minimum depth of laying fro<br>s:                               | om groui              | nd surface to the to  | op of cable is as     |     |
| 92 (A           | High voltage cables, 3.3 kV to 11<br>High voltage cables, 22 kV, 33 kV | kV ratio              | ng : 0.90 m<br>: 1.05 m   |                       |     |
|                 | Low voltage and control cables<br>Cables at road crossings             | - acting              | : 0.75 m  | $\alpha = p$          |     |
|                 | Cables at railway level crossings<br>from bottom of sleepers to the to | (measure<br>op of pip | :1.00 m<br>ed<br>e) :1.00 m                                       |                       |     |
| 6.3.3           | Clearance  | N 92                  |   |                       |     |
| The de          | sired minimum clearances are as fo                                     | llows:                |   | 100                   |     |
|                 | Power Cable to power cables  | :                     | Clearance not<br>however larger<br>better would be c<br>capacity. | the clearance         |     |
|                 | Power cables to control cables   | :                     | 0.20 m  |                       |     |
|                 | Power cable to communication cat                                       | ole :                 | 0.30 m  |                       |     |
| Inductiv        | Power cable to gas/water main  | 85                    | 0.30 m  | S. 2                  |     |
| should b        | e influence on sensitive control c<br>e checked.                       | able on               | account of nearby   | power cables          |     |
|                 | 2<br>1   |                       |   | a <sup>14</sup>       |     |
| 1               |  |                       | 3   |                       |     |
|                 |  |                       |   |                       |     |
|                 |  |                       |   |                       |     |

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|  |    |             | Annex-VII                 |
|--|----|-------------|---------------------------|
|  | 62 | 2           | (Pg 1/2)                  |
|  |    | STATISTICS. | ral Electricity Authority |

# **APPENDIX-XVIII TO CHAPTER-1**,

(Refer Para 6.12.1)

### Guidelines for Laying Underground Power Cables Greater Than 33 kV in Proximity with Telecom Cables

### Para 2.11 of Minutes of 82<sup>nd</sup> Central PTCC Meeting held at Lucknow regarding power cables of more than 33 kV.

The guidelines for laying of underground power cables greater than 33 kV in proximity with the telecommunication cables framed by the Central PTCC has been accepted by the Central Electricity Board in its 39<sup>th</sup> Meeting held in December 2002. The same are reproduced below for information and reference.

### SL.No.16

|     | Agenda Item No.                     | : | 3.39.2002   |
|-----|-------------------------------------|---|---|
|     | Name and address of the<br>Proposer | : | Shri G. Kesava Rao<br>Chief Engineer (LD & T) Division, CEA |
|     | Existing Rule No.                   | : | 87-relating to PTCC   |
| and | •                                   |   |   |

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2

Sl. No. 22

Agenda Item No.

Name and address of the Proposer

Shri P.K. Khindri Chief General Manager Department of Telecommunications Training & Development Circle, Jabalpur

Existing Rule No.

87- A (New Rule)

The above two proposals were clubbed for discussion. The proposers explained the reasons for the amendments and stated that the existing specification of the Bureau of Indian Standards covers cables only up to 33 kV rating. The PTCC (All India) was constituted in 1949 with joint participation of the Central Electricity Authority, Ministry of Communication, Ministry of Railways, Ministry of Defense, BSNL & SEB's and meets regularly at intervals of six months. It has constituted a sub-committee in which CEA is also a member. The sub-committee had approached the Bureau of Indian Standards for inclusion of "PTCC Guidelines" in the existing specification of BIS. However the BIS has not accepted.

9.39.2002

Appendix to Chapter-1

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(Pa 2

Shri Mukherjee, BIS, Shri Ram Swarup, Director, Central Electricity Authority, Shri Panigrahi, DDG, Dept. of Telecommunications, Shri Subramanian, CEI to Government of Tamil Nadu, Shri Jain, Director(Technical), HVPNL, Shri Durairaj, Chief Engineer (Planning), TNEB, Shri Vaishnav, CEI to Government of Gujarat, and Shri Aggarwal, Chief Engineer(EI), CEA, participated in the detailed discussions and gave their view points. Shri Jain, Director (Technical), HVPNL has stated that clearance of 0.3m up to 33 kV rating shall be retained as per existing BIS. He also opined that 0.6 m clearance between power cables greater than 33 kV and telecom cables may be adopted and proposed amendment 87(b) can be covered under rule 87A. Subsequent to the discussions the following modifications to the proposed amendments are accepted;

- (i) Suitable coverage to underground power cables in the form of changed heading in the form of Rule 87A to be made.
- (ii) The value of minimum clearance for underground power cables to be kept as 0.3 meters for 33 kV and less and 0.6 meters for 33 kV and above.
- (iii) Power cables greater than 33 kV to be laid at a minimum depth of 1.2 meters.

PTCC Manual 2010

कार्यालय मुख्य महाप्रदेधक

गुणवत्ता आश्वासन एवं निरीक्षण परिमंडल

जबलपुर

Technical Section O/o The Chief General Manager, QA& Inspection circle, 3rd Floor ,Sanchar vikas bhawan, Residency road, Jabalpur-482001 Off No- 0761-2628525 E-mail Id : agmsw@rediffmail.com No. TD/LP-2014/2018-19/60,

To

All DE (PTCC), QA & Inspection Circle भारत संचार निगम लिमिटेड (भारा सरकार का रप्रहन) BHARAT SANCHAR NIGAM LIMITED

BSNL 3G )))) BSNL LIVE

Dated at Jabalpur the, 11/03/2019

Anners

Subject: Guidelines for issuing PTCC RAC, when IV is more than 650 Volts. Ref: This office earlier letter no.TD/LP-2014/2017-18, Dated at Jabalpur, the 30/07/2018.

it is observed that with the ongoing practice of Issuing PTCC RAC, the Power Authorities are energising the power line without getting the energization approval from the competent authority of BSNL, even when there is protection recommended in the Route Approval Certificate issued by the concerned DE(PTCC), when the voltage likely to be induced on the BSNL Telecom Lines/cables due to the proposed power line is greater than 650 volts. Such energization of power line without proper protection to Telecom assets is a violation from PTCC code of practice and is hazardous to Telecom assets & personnel and causes disruption in the service of BSNL and huge loss to BSNL. So it is decided that the following procedure is to be followed hence forth while issuing Route Approval certificate by the concerned DE(PTCC), for all cases where IV is more than 650 volts.

 The concerned IV calcu...ting authority i.e. CEA, New Delhi or the SEBs, as the case may be, may forward the Low Frequency (LF) Induction Comments intimating the voltage likely to be induced on the existing BSNL Telecom lines/cable due to any proposed power line.

2. DE(PTCC) concerned may scrutinize the LF comments so received and Issue Route approval certificate for the power line, only in cases where the voltage likely to be induced on the existing BSNL Telecom lines/cable due to any proposed power line is less than or equal to 650 volts, on receipt of NOCs from the concerned Railway authorities, Telecom Maintenance Region of BSNL (If IV for some telecom lines/cables is more than 430 V and up to 650 V) and Defence.

3. In case the voltage likely to be induced on the existing BSNL Telecom lines/cable due to any proposed power line is more than 650 volts (for the protection cost to be borne by Power utility), DE (PTCC) shall intimate to the concerned SSAs of BSNL informing the details of the Telecom lines/cables likely to be affected due to the proposed power line, along with the type of protection to be carried out on the Telecom lines/cables before energization of the power line.

4. BSNL SSAs shall immediately raise a demand note within the time limits prescribed in the PTCC Manual, towards the cost of expenditure for the protection work to be carried out on the Telecom lines/cables as per the recommendation of DE(PTCC) and send it to the concerned

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### Annexure- VIII Page 2 of 2

Annex IX (P8 2/2)

Power authorities, with a copy endorsed to DE(PTCC) and the BSNL authority competent in sue Energization approval for the power line.

The concerned Power authorities shall pay the amount as per the demand note raised by BSNL authorities within the time limits prescribed in the PTCCManual and intimate to the concerned BSNL SSA.

6. BSNL authorities<sup>1</sup> on receipt of payment from the Power authorities shall execute the protection work as recommended by DE(PTCC) vide para (3) above, within the time limits prescribed in the PTCC Manual. The intimation regarding completion of protection work carried out by BSNL SSAs shall be intimated to the concerned DE(PTCC), who in turn shall issue Route Approval certificate incorporating or enclosing the completion report received from BSNL SSAs,NOCs from the concerned Railway authorities, Telecom Maintenance Region of BSNL and Defence.

 On receipt of Route Approval certificate from DE (PTCC) concerned, Energization approval shall be issued by the concerned competent authority of BSNL.

 The line shall not be charged until receipt of energization approval from the concerned competent authority of BSNL. The concerned BSNL SSAs shall keep watch, and inform the concerned DE (PTCC) if flouted.

9. The date of energization of the power line shall be intimated to all concerned.

10. The time limits for various steps involved in PTCC clearance are given below.

| a) | For quoting the charges and furnishing estimate by BSNL SSAs   |    | 4 weeks.  |
|----|--|----|-----------|
| b) | Arrangement for payment by power utilities   |    | 4 Weeks.  |
| c) | Execution of protective works by BSNL and intimating to DE (PTCC)  |    | 10 Weeks. |
|    | Issue of Route Approval Certificate by DE(PTCC) after receipt of   |    | 1 Week    |
|    | Completion report on GD Tube protection work from Field BSNL SSA   | s. | 11        |
| e) | Issue of Energisation Approval by the head of the Telecom circle after receipt of Route Approval Certificate by DE (PTCC). |    | - 2 Weeks |

All the DE PTCC is requested to bring above in notice of all Territorial Telecom circle and Electricity authorities under their jurisdiction.

This letter supersedes this office earlier Ir. no.TD/LP-2014/2017-18, Dated at Jabalpur, the 30/07/2018, regarding "guidelines for issuing PTCC RAC, when IV is more than 650 Volts.

This is issued with approval of competent authority.

Asstt.Genral.Manager (Tech) Mobile No: 9425803008

#### Copy to,

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(1) All PGMs/GM, QA & Inspection Circle, for kind information pl.

(2) The Chief Engineer PCD) O/o CEA, New Delhi for kind information PI, and

(3) The Director, PCD & Secretary (Power) CLPTCC O/o CEA New Delhi for Information and with request to circulate this letter among all power utilities...

# Annexure- IX

|     |                  | Status of PTCC c  | ases with in                | aucea volta                | age more than o | <u>50 V.</u>   |
|-----|------------------|---|-----------------------------|----------------------------|-----------------|--|
| Sr. | CEA              | Name of Power line  | Name of                     | Date on                    | Date on         | Remarks  |
| no  | Case             |   | Power                       | which                      | which           |  |
|     | No.              |   | Utility                     | Demand                     | amount          |  |
|     |                  |   |                             | note                       | deposited by    |  |
|     |                  |   |                             | issued                     | Power Utility   |  |
| 1.  | RAJ-<br>590      | 400KV D/C super<br>critical Suratgarh-Babai<br>Transmission line.   | RRVPN<br>L, Jaipur.         | 29/01/19                   | 25/04/19        | North Zone: Provisional<br>RAC issued on 25.06.18,<br>prior to C.O guidelines dtd<br>30-07-2018. Completion<br>report for protection work<br>is awaited.   |
| 2.  | MRA<br>-<br>1126 | 765KV D/C<br>Rajnandgaon-Warora<br>Transmission line.   | Raipur-<br>Rajnandg<br>aon- | Issued                     | 19/12/18        | West Zone: Completion<br>report for protection work<br>is awaited.   |
|     |                  |   | Warora<br>TX LTD.           |                            |                 |  |
| 3.  | TNG<br>-40       | 220KV D/C line from<br>Kalwakurthy to<br>proposed Solar power<br>plant M/S Azure power<br>India Ltd under NTPC<br>400MW solar power<br>project in Telangana<br>state. | TSTRAN<br>SCO               | Not<br>raised till<br>now. |                 | South Zone: RAC issued<br>on 02-07-2018 prior to C.O<br>guidelines dtd 30-07-2018.<br>Mahaboobnagar SSA not<br>issued D/N  |
| 4.  | TN-<br>667       | 230/33KV Chandragiri<br>Windfarm S/S to<br>230/400KV Tirunelvelli<br>new GIS pooling station<br>TX line.  | SUZLO<br>N                  | 23.01.19                   | 27.02.19        | South Zone: RAC issued<br>on 20.6.18 prior to C.O<br>guidelines dtd 30-7-2018.<br>Revised RAC issued on 19-<br>9-18, due to change in<br>nomenclature of the<br>line.Protection work is in<br>progress and will be<br>completed within May<br>2019 informed by Tuticorin<br>SSA. |

# Status of PTCC cases with Induced Voltage more than 650V.

ANNEX-XII. MRA-1133

O/o DET (PTCC), Inspection circle, 3<sup>rd</sup> Floor, D- Wing, BSNL Admin Bldg. Juhu Tara Road, Santacruz (West) MUMBAI-400 054. Emaild-detptccmbi@gmail.com

Tele no.022-26611530



भारत ਟ ਵ BHARAT SANCHAR NIGAM LIMITED (A Govt. of India Enterprise)

# BSNL 36 )))) BSNL LIVE

NO. IC/MBI/PTCC/MRA-2386 /14

Dated at Mumbai, the 05.02.2019

To, The Chief Engineer CEA, New Delhi - 16

Sub: Forwarding of Telecom details for PTCC route approval for 220 KV LILO on Paras- Balapur M/C Line for 220 KV Malkapur S/S.

Ref:- MSECTL/ CO/ PS /S-I /PTCC/B-549 /No. 8620 Date 02.08.2017.

Please find enclosed h/w Topo Map duly marked for the Telecom Details/ checklist in respect of above mentioned PTCC proposal vetted with signature.

- Whereas Telecom details regarding above mentioned proposed power line has been received from BSNL field/ MSETCL Mumbai office.
- Railway telecom detail forwarded to your office by Central Railway vide letter No. N. 153/PTCC/220 KV/MAH-672 dtd-24.08.2017.
- It is requested to convey your I.V. calculation to Railway authority under intimation to this office with EPR detail.

(train

मेखरूट) अभियंता भीशसिंसी, मुंबई-५४. Divisional Engineer PTCC, Mumbai-54.

Encl:- Route Maps with Telecom details marked

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Annexure- XI Page 1 of 2

ANNEX O/o DET(PTCC), QA & Inspection circle, 3 · Floor, D-Wing , BSNL Admin Bidg. Juhu Tara Road, Santacruz (West) भारत संचार निगम MUMBAI-400 054. পারে সময়া বা বাজ Emaild-detptcembi@gmall.com BHARAT SANCHAR NIGAM LIMITED Tele no.022-26611530 (A Goy), of India Enterprise BSNL BSNLLIVE Easter man your throughts 2010 No. IC/MBI/PTCC/MP-552 Dated at Mumbai, the 16.02.2019 To; The Chief Engineer. Central Electricity Authority, New Delhi-16. Sub.: Forwarding of BSNL Telecom details for PTCC proposal of LILO of 24 Corcuit of 220KV DCSS line from Nagda (400KV) to Neemuch (220KV) at proposed 220KV S/s Daloda [RL- 8:264 KM]. Ref.: Chief Engineer (Procurement), MPPTCL, Jabalpur office letter No. 04-01/PTCC/2423/TR-1/2402; Sir, One copy of Telecom Details along with Route Map as received from Telecom Field Authority (TOM Mandsaur) is sent herewith for further necessary action at your end. You are requested to convey your comments regarding L.F. induction on paralleling lines/ Cables under worst fault condition on proposed power line to this office. Encl.: As above HEGODEGATE पीटीसीसी परिदेश-५४. Copy to:-**Divisional Engineer** (1) The Chief Engineer (Procurement), MIPPTCL, Jabalpur. PTCC, Mumbai-54. (2) The SDE (PTCC), Bhopal.

|                        | m.                           | * <   |                                |      |                    |                  | Anneso<br>(Pg 1      |
|------------------------|------------------------------|---|--------------------------------|------|--------------------|------------------|----------------------|
|                        | OfficeCase No.:              |   | 1                              | Ma   | p Scale: 1:50,     | 000              | 1                    |
|                        |                              | ase No.: IC/MBI/PTCC/MP-55/2                | _                              | Ro   | ute Length: 3.9    | 28 Kms           |                      |
| promition and a second | ty Office Case N             | lo.:  |                                | Ave  | erage SR Valu      | e:               | Ohm cms              |
|                        | of Power Line                | Diversion of 220KV DCDS<br>220KV S/s Daloda | Ratlam -                       | Dalo | da line from       | Tower No.        | 234 to               |
| S. No.                 | Name of Tele                 | com Line/ Cable                             | Length<br>Paralleli<br>in Kms. | ism  | Mutual<br>Coupling | Fault<br>Current | Induce<br>Voltage in |
|                        | MANDSAUF                     | R SSA                                       | in Kms.                        |      | in Ohms            | in Amps          | Volts                |
|                        | SDOT Mand                    | saur  | -                              | -    |                    |                  |                      |
| (1)                    | Dalauda Exch                 | to Pragati Chouraha - 800 Pair              | ÷                              | -    |                    | 1                |                      |
| (2)                    | Pragati Chours               | aha to Dhamnod - 50 Pair                    |                                |      |                    |                  |                      |
| (3)                    | Pragati Choural              | ta to Jain Mandir Pillar - 400 Pair         |                                |      |                    |                  |                      |
| (4)                    | Jain Mandir P                | illar to MPEB Office - 20 Pair              |                                |      |                    |                  |                      |
| (5)                    | Rly Station Ch               | ouraha to Rlt Station - 100 Pair            | -                              |      |                    |                  |                      |
| (6)                    | Dalauda Exch                 | to Post Office - 200 Pair                   | 1.1                            | -    |                    |                  |                      |
| (7)                    | Post Office Pil              | lar to Mandi - 50 Pair                      |                                |      |                    |                  |                      |
| (8)                    | Post Office Pil              | lar to Police Chouki - 20 Pair              |                                | -    |                    |                  | 2                    |
| (9)                    | Dalauda Exch                 | to Dall Mills - 20 Pair                     |                                | -    |                    |                  |                      |
| (10)                   | Dhamnar to G                 | uliyana - 50 Pair                           |                                |      | 1                  |                  |                      |
| (11)                   | Dhamnar to Hatunia - 50 Pair |   |                                |      |                    |                  |                      |
| (12)                   |                              | usudiya - 50 Pair                           |                                |      |                    |                  |                      |
| (13)                   | Nimbod to Del                | uri to Mijora - 50 Pair                     |                                |      |                    |                  | 4.4                  |
| (14)                   | Nimbod to Kha                | ijuriya - 50 Pair                           |                                | -    |                    |                  |                      |
| 15)                    | Nimbod Exch t                | to Nimbod Local - 50 Pair                   |                                | -    |                    |                  |                      |
| 16)                    | Semliya Hira to              | Patera - 50 Pair                            |                                |      |                    |                  |                      |
| 17)                    | Semliya Hira to              | Rakoda - 20 Pair                            |                                | -    |                    |                  |                      |
| 18)                    | Amlabad to Sij               | puriya - 50 Pair                            | 14 05                          | -    |                    |                  | -                    |
| 19)                    | Amlabad to Ra                | jakhedi - 50 Pair                           |                                |      |                    |                  | 1.                   |
| 20)                    | Rajakhedi to Ri              | chha Bachha - 20 Pair                       | 1                              | -    |                    |                  |                      |
| 21)                    | Sirsod Exch to               | Sirsod Village - 100 Pair                   | -                              | -    | 1.14               |                  |                      |
| 22)                    | Richha Lalmuh                | a to Dalauda Sagra - 50 Pair                | 17 MIL                         | -    |                    |                  |                      |
| 23)                    | Amlabad to Gu                | ridiya Lalmuhwa - 50 Pair                   |                                |      |                    |                  | 4                    |
| 24)                    | Pandliya to Lah              | muha – 20 Pair                              |                                | -    |                    |                  |                      |

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| CLPTCC cases of Eastern re | egion are pending | from CEA , New Delhi : |
|----------------------------|-------------------|------------------------|
|                            |                   | , ,                    |

| SI. | Circle | Route name   | Pending    | BSNL REMARK                        | CEA REMARK             |
|-----|--------|--|------------|------------------------------------|------------------------|
| no. |        |  | since      |                                    |                        |
| 01  | Assam  | 400 KV DC(Quad) SILCHAR – MISA T/L (Offered<br>by NER-II,TR.Ltd, Hojai,Assam   | 08.11.2018 | IV report not received<br>from CEA |                        |
| 02  | JKD    | 765 D/C (Hexa zebra) RANCHI – MEDNIPUR<br>(Offered by Power Grid)  | 24.12.2018 | IV report not received from CEA    |                        |
| 03  | JKD    | 220 KV DC Ulijhari to Gua T/L (offered by JUSNL)   | 18.05.2018 | IV report not received<br>from CEA | Praposal not received. |
| 04  | Odisha | 220 KV DC transline from 400/220KV GSS at<br>Benapanjari of PGCL to 220/33 KV GSS at Puri<br>(offered by OPTCL)  | 20.01.2017 | IV report not received<br>from CEA | Railway pending.       |
| 05  | Odisha | 220 KV DC T/L BHANJANAGAR to newly<br>constructed 220/132/33 KV Grid S/S at ASKA   | 03.04.2019 | IV report not received<br>from CEA |                        |
| 06  | WB     | 765 KV DC RANCHI – MEDNIPUR in<br>WestBengal (offered by PowerGrid)  | 05.01.2019 | IV report not received<br>from CEA |                        |
| 07  | WB     | 400 KV DC CHANDITALA- KHARAGPUR LILO at MEDNIPUR in West Bengal (offered by PGCL)  | 24.12.2018 | IV report not received<br>from CEA |                        |
| 08  | WB     | 220 KV NewMelli –Legship (Offered by Energy<br>&Power Dept. Govt. of Sikkim)   | 03.05.2017 | IV report not received<br>from CEA | Defence pending        |
| 10  | WB     | 400 KV DC(quad)Jigmelling – Alipurduar T/L –WB portion.(offered by PGCL)   | 22.05.2018 | IV report not received<br>from CEA |                        |
| 11  | WB     | LILO line at new PPSP 400 KV GIS of DC LILO<br>line of 400KV PPSP-Arambag(Offered by<br>WBSETCL)   | 18.09.2017 | IV report not received<br>from CEA | Praposal not received. |
| 12  | WB     | 400 KV DC(quad)Jigmelling – Alipurduar T/L –<br>Assam portion.(offered by PGCL)  | 05.04.2018 | IV report not received<br>from CEA | Under progress         |
| 13  | WB     | 132 KV Earth Electrode line at Alipurduar HVDC<br>S/S (Offeredby PGCL)   | 28.07.2018 | IV report not received<br>from CEA |                        |
| 14  | WB     | 220KV DC RANGPO- SAMARDONG in Sikkim<br>(Offered by PowerGrid)   | 05.12.2018 | IV report not received<br>from CEA |                        |
| 15  | WB     | 220 KV DC SAMARDONG – DIKCHUPOOL in<br>Sikkim (Offered by PowerGrid)   | 05.12.2018 | IV report not received<br>from CEA |                        |
| 16  | WB     | 400 KV DC(Twin Moose) Beherampur –<br>Bheramara (India portion)T/L-II (Offered by<br>PowerGrid) BSNL NOC sent to CEA on<br>30.01.2019 by DE/PTCC(ER) through email | 30.01.2019 | IV report not received<br>from CEA |                        |

# Annexure- XII.A

# CLPTCC cases of Southern region are pending from CEA New Delhi:

| Sr. | <b>BSNL NO</b> | ROUTE_NAME                                  | BSNL TD  | Railway TD/NoC Sent               |
|-----|----------------|---|----------|-----------------------------------|
| no  |                |   | SENT     |                                   |
| 1   | AND-742        | LILO of 220 KV DC line from VTS/Tallipally  | BSNL IV  | TD sent on 05.07.2011 by          |
|     |                | (Nellore) to the propoSED Rentachintala 220 | recd on  | SC Rly and by DE (PTCC),          |
|     |                | KV SS                                       | 05-04-   | Chennai on 19.04.2013. <b>CEA</b> |
|     |                |   | 2010.    | has to send IV for Rly ccts.      |
| 2   | AND-977        | 400 KV DC LILO line from 400 KV Kadapa -    | 13/04/16 | 19/02/2016 ( SC Rly NOC)          |
|     |                | Kolar line to 400 KV NP Kunta SS            |          |                                   |

| 3  | AND-710  | 220 KV LILO line from VTS/Narketpalli 220<br>KV line to Chilakallu 220 KV SS  | 05/08/15 | 22/04/2009 ( SC rly details)  |
|----|----------|---|----------|---|
| 4  | SAP-1114 | Hyderabad(Maheswaram) to Nizamabad  | 23.06.17 | 19.05.2016(SC Rly)  |
| 5  | SAP-2041 | From 220kV Ongole-Nellore line LILO point to proposed 220/132kV SS IFFCO  | 19.04.18 | 16.10.2017(SC Rly)  |
| 6  | SAP-2108 | 220 KV DC LILO line from loc No.339 of 220<br>KV DC line Podili-Nellore to prop. 220/132<br>KV SS at Atmakur  | 16.08.18 | 25.02.2019(SC Rly)  |
| 7  | SAP-2175 | 220 KV DC line from400/220 KV Kalikiri SSto<br>the proposed 220KV Kalikiri SS in Chittoor<br>Dist   | 22.09.18 | 14.08.2018(SC Rly)  |
| 8  | SAP-2359 | 220KV DC line from 400/220 KV<br>Rachagunneri SS to prop .220/132/33 KV SS<br>Naidupeta MP SEZ  | 22.04.19 | 27.03.2017 (SC Rly )  |
| 9  | TN-1708  | 230 KV SC line on DC towers from the<br>proposed Velaappaneri 23033 KV SS to the<br>existing TANTRANSCO Kayathar400/<br>230/110 KV SS (being established by M/s.<br>Suzlon Energy Itd under (10/1) of EA 2003.              | 19/04/17 | 23.02.2015 ( RLY NoC )  |
| 10 | STN-1664 | Laying of 1x1200sq.mm, Alu.XLPE Cable<br>from Ambattur IIIrd Main road SS to 230KV<br>Thiruverkadu GIS SS.  | 21.11.17 | 06.09.2017.(S Rly)  |
| 11 | STN-1786 | 400KV DC line with Quad Moose ACSR from<br>Rasipalayam 400KV SS to Palavady 400KV SS  | 12.06.18 | 30.10.2017.(S Rly)  |
| 12 | STN-1861 | 400KV DC line with Quad Moose ACSR from<br>Rasipalayam 400KV SS to Anaikadavu 400KV<br>SS   | 17.05.18 | NOC recd vide<br>dtd.20.09.2017 & proposal<br>sent date 30/08/2017) (S<br>Rly)      |
| 13 | STN-1863 | LILO of 230KV K.R.Thoppur-Ingur line at the proposed Thingalur 230KV SS.  | 12.04.18 | NOC recd.(vide Ir.<br>dtd.20.09.2017 & proposal<br>sent date 19/08/2017) (S<br>Rly) |
| 14 | TG-22    | 765 KV DC line from Dichipalli GIS to Wardha<br>GIS   | 13/10/16 | 27-03-2017 (SC RLY)   |
| 15 | AND-831  | i)220 KV DC/SC line from Regumanigudda<br>220 KV SS to proposed 220 KV SS<br>Jonnaladuda (stage I to II) ii)220 KV DC/SC<br>line from Regumanigudda 220 KV SS to<br>proposed 220 KV SS Gudipalligattu (stage I<br>to I      | 09/05/17 | RLY NOC RECD ON 19-03-<br>2012  |
| 16 | TG-11    | Erection of 220 KV LILO Line from 220 KV<br>Second Circuit of existing Durshed-Siddipet<br>line to the prop Mallaram 220/66 KV<br>Switching station in Medak dist   | 27/11/17 | 31.07.2015 ( RLY NoC )  |
| 17 | TG-13    | Erection of 220 KV DC Line from 400 KV<br>Veltoor SS to prop 220 kv Switching station<br>at Thimmajipeta in Mahaboobnagar District  | 27/08/17 |   |
| 18 | TG-26    | 400 KV DC line from Dichipalli to Nizamabad   | 20/07/16 | 19-05-2016 ( RLY TD ).  |
| 19 | STS-1686 | Erection of 220KV DC/SC line from 220KV<br>Minpur substation to M/s.Renew Saur<br>Shakthi Pvt Ltd solar power plant   | 11.07.17 | Not sent  |
| 20 | STS-2290 | Stringing of 2nd circuit on 220 kv line of M/S<br>Renew Spolar Power-I from Loc No.1 to<br>27(D+0) (i.e) from Veltoor Substation to<br>Loc.NO 27 and 220 KV DC/SC line from Loc.<br>No 27 (D+0) to M/S Renew Solar Power-II | 11.01.19 | 10.01.2018 (SC Rly)   |

| 21 | STS-1312 | 220 kV LILO to 400 kV Suryapet SS from<br>Chillakallu-Narketpally line  | 03.01.17             | Not sent            |  |
|----|----------|---|----------------------|---------------------|--|
| 22 | STS-2086 | Erection of TMDC line from 400kV Tukkapur<br>SS to 400kV Chandulapur SS   | 03.04.19             | 30.04.2018 (SC Rly) |  |
| 23 | STS-1837 | 220 KV DC line from existing 400/220 KV SS<br>Dichpally to proposed 143 MW Solar Power<br>to be set up by M/S Renew Solar Energy<br>Private Limited near Kankal(V) in Nizamabad<br>Dist.                                | 21.02.18             | Not sent            |  |
| 24 | STS-1260 | Dist.Erection of 220KV LILO to 400/220/33KV03.01.1Suryapet SS from Loc.No.168 (B+0) circuit-2of Khammam-Miryalaguda DC line inNalgonda district-Revised proposals03.01.1  |                      | Not sent            |  |
| 25 | STS-1275 | 220KV LILO to 400 kV Suryapet at Loc.187 of<br>Khammam-Miryalaguda  | 03.01.17             | Not sent            |  |
| 26 | STS-2144 | Erection of 220 KV DC line from proposed<br>220/11 KV Rampur SS to proposed 220/11<br>KV Rajeshwararaopet SS in Karimnagar<br>District  | 27.12.18             | Not sent            |  |
| 27 | STS-2148 | Erection of 220 KV DC line from proposed<br>400/220 KV Ramadgu SS to proposed<br>220/11 KV Rampur SS in Karimnagar District   | 27.12.18             | 28.08.2018(SC Rly)  |  |
| 28 | SKL-1925 | 220 KV DC line through Multicircuit Multi<br>Voltage (220 and 110 KV) towers from<br>proposed 220 KV SS Kothamangalam to a<br>location Karukadom to connect the existing<br>Moolamattom (Idukki ) SS                    | 18.04.201<br>8       | 14.09.2017(S Rly)   |  |
| 29 | SKT-2191 | Proposed 400KV Double LILO line from<br>existing 400KV Nelamangala-Hoody DC line<br>to proposed 400/220KV SS at Devanahalli<br>Hardware Park in Bangalore Rural District.   | 27.09.201<br>8       | 06.12.2018(SW Rly)  |  |
| 30 | SKT-2305 | Proposed 220KV DC LILO line on MC Towers<br>from existing Belagavi-Chikkodi 220KV DC<br>line to the proposed 220/110/11KV SS of<br>M/s AEQUS SEZ Pvt Limited at Hattargi<br>Village in Hukkeri Taluk,Belagavi District. | 29.04.201<br>9       | Not sent            |  |
| 31 | SKT-1249 | 220/66kV SS at Ayyanahalli(Under-<br>Construction) to 220/11kV SS BMM Ispat<br>Limited (HKT Mining Pvt Limited)   | BMM Ispat (No assets |                     |  |
| 32 | SKT-2114 | 400kV D/C Pavagada Devanahalli<br>Transmission Line   | 3.12.2018            | 26.7.2018(SW Rly)   |  |
| 33 | SKT-1739 | 400 KV D/C (Twin) Hiriyur-Mysore<br>Transmission Line   | 10.8.2018            | 10.10.2017(SW Rly)  |  |
| 34 | SKT-2243 | Proposed 220KV DC line on MC Towers from<br>existing 220/66KV SS at Devanahalli Hard<br>Ware Park to proposed 400/220KV SS at<br>Devanahalli Hard ware Park in Devanahalli<br>Taluk,Bengaluru Rural District.           | 15.2.2019            | 11.12.2018(SW Rly)  |  |

# MADHYA PRADESH POWER TRANSMISSIOM COMPANY LIMITED (MPPTCL):

|       | IYA PRADESH POWER TRANSMISSION   |           |           |   |
|-------|--|-----------|-----------|---|
| SR    | Name of Power Line   | Date of   | Mumbai    | Remark by DE PTCC   |
| NO    |  | Reference | case mark | Mumbai  |
| A.1.  | 400KV DCDS line from 400KV S/s<br>Ashtato 400KV S/s Ujjain   | 05.04.18  | MP-542    | RD/NoC from WR and IV from CEA awaited.   |
| A.2.  | 400KV DCDS line from Shri Singaji<br>(TPS-II) 400KV S/s to Pithampur 400KV<br>S/s  | 12.06.18  | MP-555    | NOC from WR waited since 21.02.19.  |
| A.3.  | 400KV DCDS line from 765/400KV S/s<br>Indore (PGCIL) to proposed 400KV S/s<br>Ujjain (MPPTCL)  | 13.08.18  | MP-563    | RD/NOC awaited from WR<br>since 30.8.18. IV awaited<br>from CEA since 31.1.19.  |
| A.4.  | 400KV DCDS line from 400KV S/s<br>Pithampur to proposed 400KV S/s<br>Badnawar  | 01.10.18  | MP-574    | RD/NOC from WR waited<br>since 01.11.2018. IV from<br>CEA awaited sinc17.01.19. |
| A.5.  | LILO of one circuit of 400KV Satna<br>(PGCIL) - Bina (PGCIL) DCSS line at<br>proposed 400KV S/s Sagar  | 14.11.18  | MP-598    | TD from BSNL awaited  |
| A.6.  | 400KV DCDS line from Nagda (400KV)<br>to proposed 400KV S/s Mandsaur<br>(Sitamau) under phase-I project of Green<br>Energy Corridor Scheme of MNRE, Gol. | 13.02.19  | MP-600    | TD from BSNL and<br>RD/NOC from WR awaited<br>since 15.05.19.                   |
| A.7.  | LILO of 400KV DCDS Nagda - Rajgarh<br>line at proposed 400KV S/s Badnawar.   | 26.02.19  | MP-609    | TD from BSNL & RD/NoC from WR awaited 7.3.19.                                   |
| B.1.  | 220 kV DCSS Shujalpur-Narsingarh line<br>fromexisting 220 kV S/s Shujalpur to 132<br>kV S/sNarsingarh  | 20.02.16  | MP-441    | NOC awaited from WR since 26.11.18.   |
| B.2.  | LILO of 220KV Malanpur to Mehgaon<br>DCDS line at proposed 400/220KV S/s<br>CWRTL Morena (Rithora).  | 29.11.17  | MP-512    | NOC awaited from NCR since 27.11.18.  |
| B.3.  | 220-KV DCDS line from 220KV S/s<br>Sabalgarh t6o proposed 400/220KV S/s<br>Morena CWRTL (Rithora)  | 22.01.18  | MP-525    | NOC from NCR awaited since 24.01.19.  |
| B.4.  | LILO of 2nd Circuit of 220KV<br>Birsinghpur-Amarkantak line at 220KV<br>S/s Shahdol.   | 19.01.18  | MP-521    | NOC from SECR awaited since 25.04.19.   |
| B.5.  | 220KV DCDS line from 400KV S/s<br>Khandwa (PGCIL) to proposed 220KV<br>S/s Chhanera.   | 05.02.18  | MP-529    | NOC from WCR/SCR/WR awaited since 05.12.18                                      |
| B.6.  | LILO of 2nd Circuit of 220KV Bansagar-I to Satna line at at 220KV S/s Kotar.   | 09.02.18  | MP-530    | IV from CEA awaited since 25.07.18  |
| B.7.  | LILO of both Circuit of 220KV Badnagar-<br>Ratlam DCDS line at at proposed 400KV<br>S/s Badnagar.  | 23.02.18  | MP-538    | IV from CEA awaited since 10.07.18.   |
| B.8.  | 220KV DCDS line from 400KV S/s<br>Julwania to proposed 220KV S/s Kukshi<br>(132KV being upgraded to 220KV).  | 27.02.18  | MP-539    | TD from BSNL awaited  |
| B.9.  | LILO of both Circuit of 220KV<br>Badod/Bhanpura/Kota/Modak DCDS line<br>at 220KV S/s Suwasra.  | 6.03.18   | MP-535    | RAC issued on 08.05.19.   |
| B.10  | Diversion of 220KV DCDS Ratlam-<br>Daloda line from Tr. No. 234 to 220KV<br>S/s Daloda   | 31.05.18  | MP-554    | RD/NOC from WR and IV<br>from CEA awaited.                                      |
| B.11  | LILO of 220KV line from Nagda<br>(400KV)to Neemuch (220KV) at 220KV<br>S/s Daloda  | 28.05.18  | MP-552    | NOC from WR awaited since 22.04.19.   |
| B.12. | 220KV DCDS line from Betul (220KV<br>S/s) to proposed (220KV S/s) Gudgaon.   | 19.07.18  | MP-567    | TD from BSNL awaited  |
| B.13. | 220KV DCDS line from Sabalgarh<br>(220KV S/s) to proposed (220KV S/s)<br>Sheopur.  | 23.07.18  | MP-562    | TD from BSNL awaited.   |
| B.14. | LILO of 220KV DCDS line from Indore-II<br>(Jetpura S/s) to proposed 765/400KV S/s<br>Indore (PGCIL)  | 20.08.18  | MP-565    | IV from CEA awaited since 30.10.18.   |

| B.15. | 2nd Circuiting of 220KV DCSS line from                          | 13.09.18 | MP-569   | RD/NOC from NCR awaited                    |
|-------|---|----------|----------|--|
| B.10. | 220KV S/s Satna to 220KV S/s                                    | 15.09.10 | IVIP-509 | since 29.10.18. IV from                    |
|       | Chhatarpur  |          |          | CEA awaited 23.03.19.                      |
| B.16. | 220KV DCDS line from proposed 40/220                            | 08.10.18 | MP-575   | NOC from WR awaited                        |
| -     | KV S/s Badnagar to proposed 220KV                               | 00.10.10 | 1411 373 | since 27.03.19.                            |
|       | S/s Kanwan under phase-I project of                             |          |          |  |
|       | Green Energy Scheme of MNRE Gol                                 |          |          |  |
| B.17. | 220KV DCDS line from Dhar to proposed                           | 09.10.18 | MP-576   | RD/NOC from WR and IV                      |
|       | 220KV S/s Kanwan under phase-I                                  | 05.10.10 | 111 370  | from CEA awaited since                     |
|       | project of Green Energy Scheme of                               |          |          | 08.11.18 & 19.02.19.                       |
|       | MNRE Gol  |          |          |  |
| B.18. | LILO of 220KV Jabalpur-Amarkantak                               | 06.11.18 | MP-588   | RD/NOC from SECR and                       |
|       | DCDS line for proposed 220/132KV S/s                            |          |          | IV from CEA awaited since                  |
|       | Gorabazar   |          |          | 17.11.18 & 19.01.19.                       |
| B.19. | 220KV DCDS line from prpposed 220KV                             | 20.11.18 | MP-587   | RD/NOC from WR awaited                     |
|       | S/s Sailana to 220KV S/s Ratlam (Nagra                          |          |          | since 04.12.18. IV from                    |
|       | Switching Station) under Phase-I Project                        |          |          | CEA awaited since                          |
|       | of Green Enmergy Scheme of MNRE                                 |          |          | 05.04.19                                   |
|       | Gol   |          |          |  |
| B.20. | LILO of 220KV Ratlam - Daloda DCDS                              | 17.11.18 | MP-586   | RD/NOC from WR awaited                     |
|       | line at Jaora 132KV S/s (Being upgraded                         |          |          | since 04.12.18. IV from                    |
|       | to 220KV S/s) under Phase-I Project of                          |          |          | CEA awaited since                          |
|       | Green Enmergy Scheme of MNRE Gol                                |          |          | 06.04.19                                   |
| B.21. | 220KV DCDS line from Rewa (UMPS)                                | 02.02.19 | MP-595   | TD from BSNL and                           |
|       | 400 KV Grid S/s to be created by PGCIL                          |          |          | RD/NOC from WCR                            |
|       | at Gurh to 220KV S/s Sidhi.                                     |          |          | awaited since 27.02.19.                    |
| B.22. | 220KV DCDS line from Rewa (UMPS)                                | 04.02.19 | MP-      | TD from BSNL and                           |
|       | 400 KV Grid S/s to be created by PGCIL                          |          |          | RD/NOC from WCR                            |
|       | at Gurh to Rewa 220KV S/s (Silpra)                              |          |          | awaited since 27.02.19.                    |
| B.23. | LILO of 220KV DCDS Nagda (400KV) -                              | 11.02.19 | MP-597   | TD from BSNL and                           |
|       | Neemuch (220) line from Loc. No. 228 to                         |          |          | RD/NOC from WR awaited                     |
|       | proposed 400KV S/s Mandsaur                                     |          |          | since 28.02.19.                            |
|       | (Sitamau) under phase-I project of Green                        |          |          |  |
| D 04  | Energy Corridor Scheme of MNRE, Gol                             |          |          |  |
| B.24. | LILO of 2nd Circuit of 220KV DCDS                               | 11.02.19 | MP-599   | IV from CEA awaited since                  |
|       | Narsinghpur - Itarsi line at 220KV S/s                          |          |          | 08.05.19.                                  |
| D 05  | Piparia.  |          |          |  |
| B.25. | LILO of 220KV DCDS Nagda (400KV) -                              | 16.02.19 | MP-610   | TD from BSNL and                           |
|       | Neemuch (220) line from Loc. No. 211 to                         |          |          | RD/NOC from WR awaited                     |
|       | proposed 400KV S/s Mandsaur                                     |          |          | since 28.02.19.                            |
|       | (Sitamau) under phase-I project of Green                        |          |          |  |
| B.26. | Energy Corridor Scheme of MNRE, Gol                             | 40.02.40 |          | TD from PSNU and                           |
| D.20. | 220KV DCDS line from Neemuch                                    | 19.02.19 | MP-602   | TD from BSNL and<br>RD/NOC from WR awaited |
|       | (220KV) to Ratangarh (220KV) under                              |          |          | since 02.03.19.                            |
|       | phase-I project of of Green Energy                              |          |          | SINCE 02.03.19.                            |
| D 07  | Scheme of MNRE, Gol<br>220KV DCDS line from Nipaniya (220KV) to | 22.02.46 |          | TD from DSNU and                           |
| B.27  | proposed 400KV S/s Mandsaur (Sitamau)                           | 22.02.19 | MP-606   | TD from BSNL and                           |
|       | under phase-I project of Green Energy                           |          |          | RD/NOC from WR awaited                     |
|       | Corridor Scheme of MNRE, Gol.                                   |          |          | since 06.03.19.                            |
| I     |   |          |          | Annexure- XI                               |

# GETCO, GUJRAT

| SL<br>NO | DETAILS OF POWER LINE                                   | BSNL<br>File no | CEA<br>CASE | REMARKS  |
|----------|---|-----------------|-------------|--|
| 01.      | 220KV D/C Bhilad- PGCIL (Ambheti)*                      | 1626            | GUJ-<br>607 | IV AWAITED FROM CEA.TD<br>&TOPOMAP SHEET SEND TO<br>CEA Dtd:06.01.19     |
| 02.      | 220KV D/C Lilo to Kukma from Anjar- Panandhro ccts no 2 | 1797            | GUJ-<br>601 | IV AWAITED FROM CEA  |
| 03.      | 220KV D/C Sankhari- Jangral line                        | 1852            | GUJ-<br>703 | IV AWAITED FROM CEA.TD<br>&TOPOMAP SHEET RESEND TO<br>CEA Dtd: 06.01.19. |
| 04       | 220KV D/C Tharod -Deodar line                           | 1868            | GUJ-<br>702 | IV AWAITED FROM CEA.RESEND<br>TD & TOPOSHEET TO CEA ON<br>Dtd:06.01.2019 |

| 05 | 220 KV M/C & D/C tower line from Wind Farm of Inox reneable Ltd (IWISL)at S/S Sukhpar to 400 KV Amreli S/S.                              | 2225 | GUJ-<br>696 | IV waited from CEA.   |  |
|----|--|------|-------------|---|--|
| 06 | 220 KV D/C + 220 KV M/C tower line with AL-59<br>Conductor from 220 KV OPG Project Bhadeshwar - 400KV<br>Varsana (Tappar)                | 2268 | GUJ-<br>667 | NOC awaited from WR   |  |
| 07 | 400 KV LILO line from 1st CCT of 400 KV D/C Kosamba-<br>Choraniya line at 400 KV Sanand II S/S (GIDC) with ACSR<br>Twin Moose Conductor. | 2462 | GUJ-<br>753 | BSNL TD sent to CEA on 21/05/18.                                  |  |
| 08 | 220 KV D/C Gavasad - Bhayali Line  | 2547 | GUJ-<br>754 | IV waited from CEA  |  |
| 09 | 220 KV LILO to Kawant S/s from 220 KV Vyankatpura - Achhaliya Line No.1  | 2549 | GUJ-<br>757 | IV waited from CEA.   |  |
| 10 | 220 KV LILO LINE at220 KV Rajula S/S from 220 KV GPPC-Dhokadava line.  | 2640 | GUJ-<br>734 | TD from BSNL Received and send to CEA Shortly.                    |  |
| 11 | 400 KV LILO to Vav GIS from existing 400 KV Zanor -<br>Navsari Line.   | 2729 | GUJ-<br>770 | IV AWAITED FROM CEA   |  |
| 12 | 220KV LILO Vondh from 220KV Tappar-Hadala line   | 2421 | GUJ-<br>723 | IV AWAITED FROM CEA   |  |
| 13 | 220 KV LILO at 400 KV Bhachunda S/S from 220 KV Akrimota TPS-Nakhatrana line.  | 2471 | GUJ-<br>735 | IV AWAITED FROM CEA   |  |
| 14 | 400 KV D/C Bhachunda- Varsana line.  | 2472 | GUJ-<br>722 | IV AWAITED FROM CEA   |  |
| 15 | 400 KV D/C Mudra-Zerda Line No.1   | 2473 | GUJ-<br>739 | Bhuj SSA Portion TD received.<br>Dessa SSA portion TD<br>pending. |  |
| 16 | 220 KV LILO of both circuit to proposed 220 KV Valenja S/s from 220 KV D/C KIM-GSEG-Mora Line.   | 2552 | GUJ-<br>744 | IV AWAITED FROM CEA   |  |
| 17 | 400 KV LILO to 400 KV Veloda S/S from 400 KV<br>Vadavi- Zerda Line   | 2457 | GUJ-<br>741 | BSNL TD Sent on Dated: 21.5.18.IV awaited                         |  |
| 18 | 220 KV D/C Radhanpur-sankhari(Veloda) line on D/C tower with D/C AL-59 Conductor   | 2494 | GUJ-<br>761 | BSNL TD SENT 21.5.18.IV<br>waited.                                |  |
| 19 | 400 KV D/C Mudra-Zerda line -2 to LILO at 400  | 2495 | GUJ-        | BSNL TD SEND 27.6.18.IV   |  |
|    | KV Charanka S/S Line-2 on D/C & M/C tower with Twin Moose Conductor  |      | 756         | waited from CEA.  |  |
| 20 | 400 KV D/C Wanakbori TPS – Soja Line with AL-59 Conductor  | 2352 | GUJ-<br>720 | IV awaited I from CEA.  |  |
| 21 | 220 KV D/C Vyankatpura - Waghodiya line  | 2548 | GUJ-<br>752 | IV awaited I from CEA.  |  |
| 22 | 220 KV D/C Jamnagar – hadala with line AL-59<br>Conductor.   | 2292 | GUJ-<br>704 | IV AWAITED FROM CEA   |  |
| 23 | 400 KV D/c LILO at Kalawad S/S from 400 KV<br>Vadinar - Hadala line on Twin Moose<br>Conductor.  | 2512 | GUJ-<br>738 | TD sent to CEA,on Dated 20.02.19 IV<br>Awaited.                   |  |
| 24 | 220 KV D/C LILO at 400 KV Kalawad S/S from 220 KV Nyara-Tebha line with AL-59 Conductor.   | 2460 | GUJ-<br>731 | TD sent to CEA,on Dated 20.02.19 IV Awaited.                      |  |
| 25 | 220 KV LILO of both Circuit of 220 KV D/C<br>Nyara - Tebhda line at 220 KV Motigop s/s with<br>AL-59 Conductor on M/C tower.             | 2571 | GUJ-<br>742 | TD sent to CEA,on Dated 20.02.19 IV<br>Awaited.                   |  |
| 26 | 220 KV D/C Motipaneli - sardargadh line  | 2535 | GUJ-<br>758 | IV waited.  |  |
| 27 | 220 KV D/C Jambuva - waghodiya(765 KV PGCIL) line  | 2591 | GUJ-<br>760 | IV awaited I from CEA.  |  |
| 28 | 220 KV Line from 220 KV Shri Maruti Wind Park<br>India Ltd. S/s to 220 KV Sadla S/s with AL-59<br>Conductor.                             | 2635 | GUJ-<br>733 | IV awaited I from CEA.  |  |
| 29 | 220 KV LILO line from 220 KV Choraniya -<br>Salejada line  | 2633 | GUJ-<br>730 | IV awaited I from CEA.  |  |

| 30 | 400 KV LILO to Vav GIS from 400 KV Ukai - Kosamba line.   | 2724  | GUJ-<br>765 | IV AWAITED FROM CEA                             |  |  |
|----|---|---|-------------|---|--|--|
| 31 | 220 KV D/C Choraniya - Salejda line with AL-59 conductor  | 2728  | GUJ-<br>771 | IV awaited I from CEA.                          |  |  |
| 32 | 220 KV S/C line from Mokha to M/s Chromeni Steel Pvt.<br>Ltd. On AL-59 Conductor.   | 2730  | GUJ-<br>772 | TD sent to CEA 06.01.2019                       |  |  |
| 33 | 220 KC D/C Botad - Choraniya line with AL-59 Conductor.   | 2731  | GUJ-<br>769 | IV awaited I from CEA.                          |  |  |
| 34 | Kasor-Botad and 220Kv S/C Karamsad(Now Dhuvaran220KV)-Vartej line LILO at 400KV Pachham   | 2661  | GUJ-<br>764 | IV awaited I from CEA.                          |  |  |
| 35 | 400 KV LILO at Dehgam from 400 KV Wanakbori- Soja Line  | 2488  | GUJ-<br>737 | TD sent to CEA,on Dated 20.02.19 IV Awaited.    |  |  |
| 36 | 400 KV D/C Soja- Zerda line   | 2466  | GUJ-<br>732 | BSNL TD Received. Send to CEA shortly.          |  |  |
| 37 | 220 KV LILO at one circuit of 220 KV D/C<br>Gandhinagar - Chhatral line at 400 KV Vadavi<br>S/S.  | 2564  | GUJ-<br>762 | TD sent to CEA,on Dated 20.02.19 IV<br>Awaited. |  |  |
| 38 | 400 KV Vadavi- Halvad Line on AL-59 Conductor   | 2453  | GUJ-<br>727 | IV awaited from CEA                             |  |  |
| 39 | 220 KV Line from from 400 KV Kasor S/S to 220 KV DFCC Heranj Railway S/S.   | 2416  | GUJ-<br>725 | IV waited from CEA.                             |  |  |
| 40 | 220Kv DC line from 400kv Vadavi ss to<br>proposed 220kvDFCC Sanand Railway ss with<br>ACSR zebra conductor,   | 2705  | GUJ-<br>746 | TD sent to CEA,on Dated 20.02.19 IV Awaited.    |  |  |
| 41 | 220Kv LILO line of sc. Of 220kv dc Karamsad-<br>Ranasan line at Barejadi ss with ACSR Zebra<br>conductor  | 2706  | GUJ-<br>747 | BSNL TD Received. Send to CEA shortly.          |  |  |
| 42 | 400 KV D/C line from 400 KV Kosamba to 400 KV Choraniya S/S LiLO at 400 KV Pachham S/S Village Fedra.   | 2719  | GUJ-<br>763 | TD sent to CEA.21.05.18.IV<br>awaited from CEA  |  |  |
| 43 | 400 KV D/C line from Wanakbori TPS Unit-8 to<br>existing switchyard at wanakbori TPS(Inter link<br>between Switchyard) with Twin AL-59<br>conductor.  | 2550  | GUJ-<br>751 | TD sent to CEA,on Dated 20.02.19 IV Awaited.    |  |  |
| 44 | 220KV D/C Tower with OPGW Cable for evaluation of 250<br>MW wind power generation from M/S- Opera Wind Pvt-<br>Ltd-pooling station at village- Patan, Ta- Jamjodhpur, to<br>220KV Moti Paneli sub-station | 2745  | GUJ-<br>773 | TD sent to CEA on 06.01.2019.                   |  |  |
| 45 | 220KV Bhilad-Sarigam line   | 2720  | GUJ-<br>766 | IV waited from CEA.                             |  |  |
| 46 | 220 KV LILO to 220 KV Wankaner S/s from 220<br>KV Hadala - Sartanpar Line   | V Wankaner S/s from 220 2514 GUJ- TD sent to CEA,on Dated 20.02.19 IV |             | TD sent to CEA,on Dated 20.02.19 IV<br>Awaited. |  |  |
| 47 | 400 KV D/C Amreli-Vadinar line with ACSR TWIN MOOSE Conductor.  | 2606  | GUJ-<br>745 | BSNL TD Received. Send to CEA                   |  |  |
| 48 | 220 KV LILO at 220 KV Wankaner S/s from 220<br>KV S/C Lalpur - Sartanpur line.  |   |             |   |  |  |
| 49 | 220 KV LILO of both circuit to proposed 220 KV Amod S/s from 220 KV D/C Mobha-Mangrol Line.   | 2551  | GUJ-<br>743 | IV waited from CEA.                             |  |  |
| 50 | 220 KV D/C Hadala - Maruti Wind Park India Pvt. Ltd. Line<br>on D/C Tower with AL-59 Conductor line.  | 2765  |             | NoC Pending from MoD.<br>( Defence).            |  |  |
| 51 | 220KV LILO to Virpur S/S from existing 220KV Ukai -<br>Achhaliya line No.2  |   |             | New case. BSNL has not registered.              |  |  |
| 52 | 400 KV D/C Hadala - Shapar line.  |   |             | New case. BSNL has not registered.              |  |  |
| 53 | 220KV LILO to Kudiyana from 220KV D/C GSEB Kosamba & lahchhapore - Kosamba line.  |   |             | New case. BSNL has not registered.              |  |  |

| 54 | 220KV LILO to Virpur S/S from existing 220KV Ukai -<br>Achhaliya line No.3 | New case. BSNL has not registered. |
|----|--|------------------------------------|
| 55 | 220KV DC Virpur - Ambheta line.  | New case. BSNL has not registered. |
| 56 | 220KV D/C Bhilad Dehli TSS (DFCCIL), U/G Power cable line.                 | New case. BSNL has not registered. |

# Annexure- XV

# **KERALA STATE ELECTRICITY BOARD :**

| Sr. | Case         | Name of Power line  | Present status  |
|-----|--------------|---|---|
| No  | NO.          |   |   |
| 1.  | KER -<br>329 | 220/110 kV line from Brahmapuram to<br>Thuthyoor and 220 kV Cable from<br>Thuthyoor to Kaloor   | Provisional RAC issued on 28-03-2019<br>since NOC defence is Pending.   |
| 2.  | KER -<br>330 | 220 kV D/C line through multi circuit<br>Multi Voltage (220 kV and 110 kV)<br>towers from proposed 220 kV substation<br>Kothamangalam to a location<br>Karukadam to connect the existing<br>Moolamattom (Idukki) substation | KSEB submitted the proposal with<br>revised nomenclature of the line on<br>07-11-2017. Case was registered on<br>23-11-2017 and BSNL TD sent to<br>CEA/New Delhi on 18-04-2018 for<br>IV computation. Also both BSNL and<br>KSEB have been addressed on 19-04-<br>2018, to ascertain the distance of the<br>existing BSNL cables of<br>Kothamangalam Exge from the<br>Kothamangalam SS as the EPR zone<br>of Kothamangalam SS furnished by<br>KSEB is 1.238 Km for 650 volts range<br>(SKL 1925)<br>CEA comments awaited. Also since<br>some BSNL cables of<br>Kothamangalam SSA fall within the<br>EPR zone of the<br>Kothamangalam SS |
| 3.  | KER -<br>326 | Construction of 220 kV DC line from 400<br>kV PGCIL Pallikkara substation to<br>proposed 220 kV substation Aluva  | Same status.(SKL-2082)- BSNL TD<br>awaited from ERNAKULAM SSA.<br>Discussed in the last SLPTCC<br>Meeting.  |
| 4.  |              | Up-gradation of 220kv Madakkathara-<br>Areekode 220kv SC line to 440/220 kv<br>MCMV line and Up-gradation of 110kv<br>Kizhissery- Tapnallalam DC line to<br>220/110 kv MCMV line.   | Same status. Since two proposals<br>were combined in one request, KSEB<br>was requested on 17-04-2018 to<br>submit separate proposal for each<br>case with correct nomenclature.  |
| 5.  |              | Construction of 400KV DC line from 400<br>KV substation Madakkathara to<br>Areecode substation .  | Same status .This has reference to<br>request no 104211 under Sl.no (4).<br>KSEB submitted two separate<br>proposals. Cases not yet registered<br>due to discrepancies in the proposal.<br>KSEB addressed on 14-11-2018.  |
| 6.  |              | Construction of 220KV DC line from<br>new HVDC substation Madakkathara to<br>Nallalam substation via Malaparamba<br>substation.   | Same status.This has reference to<br>request no 104211 under Sl.no (4).<br>KSEB submitted two separate<br>proposals. Cases not yet registered<br>due to discrepancies in the proposal.<br>KSEB addressed on 14-11-2018.   |

| 7. | Up-gradation of Pallivasal-Aluva 66KV<br>DC line to 220/110 KV multi circuit<br>multi voltage line with one circuit LILO<br>at Kothamangalam substation. | Same status. Original request raised by<br>KSEB on 12-04-2018. Queries called from<br>KSEB by DE(PTCC) on 28-04-2018. KSEB<br>submitted revised documents on 05-11-<br>2018. Case not yet registered due to<br>discrepancies in the proposal. KSEB<br>addressed on 14-11-2018. |
|----|--|--|
|----|--|--|

# Annexure - XVI

### CHHATISGARH STATE POWER TRANSMISSION COMPANY LIMITED (CSPTCL)

| SR | CEA     | BSNL    | NAME OF Transmission Line                     | UPDATED STATUS              |
|----|---------|---------|---|-----------------------------|
| NO | Case no | CASE NO |   |                             |
| A1 | CHH71   | CG-130  | LILO of 400KV Raita (Raipur) - Jagdalpur line | IV from CEA awaited since   |
|    |         |         | at proposed 400/220KV S/s Kurud (Dhamtari)    | 11.04.19                    |
|    |         |         | at Village-Thua.                              |                             |
| B1 | CHH23   | CG-51   | 220KV D/C line from Chhuri- Mopka             | RAC ISSUED ON 22.5.19       |
| B2 |         | CG-91   | 220KV DCSS line from 220KV Siltara            | IV awaited from CEA since   |
|    |         |         | (Raipur) - M/s Corporate Ispat Pvt.Ltd.       | 28.03.18.                   |
| B3 |         | CG-103  | 220KV DCDS line from 400 / 220KV              | RD/NOC from ECoR awaited    |
|    |         |         | Jagdalpur (Parchanpal) s/s – NMDC Steel       | since 02.01.17. IV from CEA |
|    |         |         | Plant at Nagarnar .                           | awaited since 28.03.18.     |
| B4 |         | CG-112  | 220KV DCDS line from Barsoor - Jagdalpur.     | IV from CEA awaited since   |
|    |         |         |   | 28.03.18.                   |
| B5 |         | CG-114  | LILO OF 220 KV Gurur - Barsoor Line to        | RD/NOC from SECR awaited    |
|    |         |         | Proposed 220 KV S/s Narayanpur                | since 11.09.17. IV from CEA |
|    |         |         | , , ,   | awaited since 13.07.18.     |
| B6 |         | CG-117  | 220 KV DCDS line from 220/132 KV Mungeli      | RAC ISSUED ON 27.5.19       |
|    |         |         | to proposed 220/132 KV Gendpur(Kawarda)       |                             |
|    |         |         | S/S   |                             |

# Annexure - XVII

### MAHARASTRA STATE ELECTRICAL TRANSMISSION COMPANY LIMITED (MSETCL) :

| SR | CASE | NAME OF Transmission Line  | UPDATED STATUS      |
|----|------|--|---------------------|
| NO | NO   |  |                     |
| 1  | 2386 | 220KV D/C LILO line on Paras- Balapur line for 220KV Malkapur s/s. | IV waited from CEA. |

# **ANNEXUR-XVIII**

### POWER GRID CORPORATION OF INDIA LIMITED, SOUTHERN REGION-II(PGCIL, SRTS-II)

| SR | CASE | NAME OF POWER LINE     | UPDATED STATUS                                   |
|----|------|------------------------|--|
| NO | NO   |                        |  |
| 1  | KNK- | 400 KV DC Hiraiyur-    | SKT-1739. Same status Pending at CEA/ND. (BSNL   |
|    | 879  | Mysore Line(Ultra Mega | TD sent to CEA 10/08/2018. Rly TD sent to CEA on |
|    |      | Solar Park Phase-2)    | 10/10/2017. Both IV pending at CEA/ND)           |

## ANNEXUR-XIX

### POWER GRID CORPORATION OF INDIA LIMITED ,WESTERN REGION-II(PGCIL, WRTS-II)

| SR | CASE        | NAME OF POWER LINE   | UPDATED STATUS                    |
|----|-------------|--|-----------------------------------|
| NO | NO          |  |                                   |
| 1  | GUJ-        | 400kV D/C Mundra-Bhuj (Triple) S/S   | IV Received. GD tube installation |
|    | 728         |  | completion report waited.         |
| 2  | GUJ-<br>749 | LILO of 220 kV Vapi Khadoli transmission line<br>at Vagchipa substation associated with the<br>UT of dadar of Nagar Haveli | IV awaited from CEA               |

## Karnatak Power Ttransmissiom Company Limited

| SI<br>No | Case No                  | Name of Power line  | UPDATED STSTUS   |
|----------|--------------------------|---|--|
| 1        | F2468/S<br>KT-1370       | Proposed 220 KV LILO line from existing 220 KV<br>Somanahalli-Yarandanahalli SC line to proposed<br>220/66 KV Jigani SS in Bangalore District.  | IV comments received from CEA/ND on<br>06/12/2018. Recommendation of GD<br>tube protection letter issued to BGTD<br>from DE PTCC office on 10/12/2018.<br>Completion report awaited from BGTD. |
| 2        | F2743/S<br>KT-<br>2069   | Proposed 20No's of 220KV DC Line from existing<br>220/66/11KV KPTCL SS at Puttenahalli (D.G.Plant)<br>Yelahanka to proposed KPCL 220KV Gas Power<br>Plant at Puttenahalli in Yelahanka Bangalore<br>Urban Distric                                   | IV Values received from CEA/ND on 28/03/2019. SW Rly. NOC pending.   |
| 3        | F-<br>2747/SK<br>T-2084  | Proposed 220 KV DC LILO line on M/C towers<br>from existing 220KV DC RTPS-Sedam line to<br>proposed 220/66/11 KV Ram Samudra SS in<br>Yadgir Taluk & District.  | Same status i.e.IV Values awaited from<br>CEA.BSNL TD sent to CEA on<br>19/06/2018. Rly & Defence NOC recd.  |
| 4        | F1934/K<br>NK/<br>AR-555 | Regularisation of exiting 66KV DC line from<br>existing 220/66KV Peenya station to existing<br>220/66 KV Hebbal SS in B'lore (U) district.  | New Proposal received. BSNL IV recd.<br>RC from SW Rly pending.  |
| 5        | F2424/S<br>KT-1249       | Proposed 220 KV SC line on DC towers from the<br>existing 220/66 KV SS at Ayyanahalli (under<br>Construction) to the existing 220/11 KV SS at<br>BMM Ispat Limited (HKT Mining Pvt Limited) in<br>Hospet taluk, Bellary District.                   | No telecom assets exists<br>intimation has already been sent<br>to CEA on 23/01/2019. Rly TD sent<br>to CEA on 08/09/2016. IV from<br>CEA/ND pending.  |
| 6.       | F2765/S<br>KT-2141       | Proposed 220KV DC line from proposed (Under<br>Construction) 400 KV SS at Jagalur (Hiremallanahole)<br>to the existing 220KV SS at Thallak in Chitradurga<br>District.  | On receipt of IV comments from<br>CEA/ND recommendation of GD tube<br>protection informed to Davanagere<br>SSA. Completion report awaited.   |
| 7.       | F2751/SK<br>T-2090       | Proposed 400 KV Double LILO line from existing 400<br>KV D/C UPCL Plant, PGCIL ,Shanthigrama line to<br>proposed 400/220 KV Station at Hebbanahalli village<br>(DC-4) for Yettinahole Integrated Drinking Water<br>Supply Scheme in Hassan Disrict. | IV recd. From CEA/ND & RC<br>from South Western Rly recd.<br>On 29/04/2019.RAC is Under<br>process   |

| S.<br>No | UniqueReg<br>.No    | ROUTE_NAME  | UPDATED STATUS   |
|----------|---------------------|---|--|
| 1        | STS180520<br>182117 | 220KV DC line (22 Km) from<br>proposed 400KV SS Asupaka to<br>proposed 220/132KV SS<br>Aswaraopeta in Khammam District  | BSNL TD received from Khammam<br>SSA on 25.04.2019 is under<br>scrutiny for sending to CEA/New<br>Delhi  |
| 2        | STS190520<br>182124 | Erection of 220kV DC line (82.956<br>KM) from 400/220kV SS Dichpally<br>to proposed up-gradation of<br>220/132kV SS Banswada in<br>Nizamabad District on Turnkey<br>basis                                     | Same status. BSNL TD awaited<br>from Nizamabad SSA. Discussed<br>in the SLPTCC meeting. Also DGM<br>QA & INSP CIRCLE, Chennai has<br>addressed letter to Member<br>(Telecom), SLPTCC, Hyderabad on<br>23-08-18 and 24-10-18 for<br>immediate submission of BSNL TD.<br>Same status                           |
| 3        | STS260720<br>182176 | Erection of 220KV DC Line (4.976<br>km) with multi circuit towers from<br>the proposed 400/220KV Sub-<br>station Nirmal to the existing 220 /<br>132KV Nirmal Sub-station in<br>Adilabad District             | Same status.BSNL TD awaited from<br>Adilabad SSA. SC Rly NOC<br>submitted on 29.08.2018.<br>Discussed in the SLPTCC meeting.<br>Also DGM QA & INSP CIRCLE,<br>Chennai has addressed letter to<br>Member (Telecom), SLPTCC,<br>Hyderabad on 23-08-18 and 24-10-<br>18 for immediate submission of<br>BSNL TD. |
| 4        | STS240820<br>182187 | Erection of 220 kV Single Moose DC<br>line (44.50 km) from proposed 400<br>/ 220 kV SS Julurupadu<br>(Bommanapally) to proposed<br>220/132/33 kV SS Pedagopati in<br>Khammam District                         | Same status.BSNL TD awaited<br>from Khammam SSA. SC Rly NOC<br>submitted on 10.09.2018.<br>Discussed in the SLPTCC meeting.<br>Also DGM QA & INSP CIRCLE,<br>Chennai has addressed letter to<br>Member (Telecom), SLPTCC,<br>Hyderabad on 24-10-18 for<br>immediate submission of BSNL                       |
| 5        | STS081020<br>182212 | 220kV DC line (67.70 KM) from the<br>proposed 400/220kV SS Nirmal to<br>upgraded 220/132/33kV SS Renjal<br>in Nizamabad District.   | Same status.BSNL TD awaited from<br>Nizamabad SSA. SC Rly TD<br>submitted on 28.08.18. DGM QA &<br>INSP CIRCLE, Chennai has<br>addressed letter to Member<br>(Telecom), SLPTCC, Hyderabad on<br>24-10-18 for immediate<br>submission of BSNL   |
| 6        | STS270420<br>182098 | Erection of 220KV DC line on<br>Narrow based MC towers from<br>400/220/132KV Kethireddypally<br>SS to 132/33KV Kanakamamidi SS<br>in Ranga Reddy District   | Same status .CEA comments<br>awaited. TSTRANSCO may send<br>copy of Defence NOC to CEA.  |
| 7        | STS170520<br>182116 | Erection of LILOs of 220KV<br>Shamshabad – Yeddumailaram &<br>Shadnagar – Shankerpally lines on<br>Narrow based Multi Circuit towers<br>to the 400/220/132KV<br>Kethireddypally SS in Ranga Reddy<br>District | Same status. BSNL TD awaited<br>from Hyderabad SSA. SC RlyNOC<br>submitted on 30.04.18. Discussed<br>in the SLPTCC meeting . Also DGM<br>QA & INSP CIRCLE, Chennai has<br>addressed letter to Member<br>(Telecom), SLPTCC, Hyderabad on<br>23-08-18 and 24-10-18 for<br>immediate submission of BSNL TD.     |

# Telengana state Power Transmission company Limited (TSTRANSCO) :

| 8  | STS230820<br>161260 | Erection of 220KV LILO to<br>400/220/33KV Suryapet SS from<br>Loc.No.168 (B+0) circuit-2 of<br>Khammam-Miryalaguda DC line in<br>Nalgonda district-Revised proposals | Same status .CEA comments<br>awaited. No BSNL TD informed to<br>CEA on 03.01.2017. SC Rly details<br>to be sent to CEA by SC Rly                |
|----|---------------------|--|---|
| 9  | STS230920<br>161275 | 220KV LILO to 400 kV Suryapet at<br>Loc.187 of Khammam-Miryalaguda   | Same status .CEA comments<br>awaited. No BSNL TD informed to<br>CEA on 03.01.2017.  |
| 10 | STS131020<br>161312 | 220 kV LILO to 400 kV Suryapet SS<br>from Chillakallu-Narketpally line   | Same status .Comments awaited<br>from CEA. SC Rly NOC copy not<br>received. TSTRANSCO may send<br>copy of SC Rly NOC and Defence<br>NOC to CEA  |
| 11 | STS030520<br>171662 | Erection of 220 KV DC/SC line from<br>existing 400/220KV Veltoor<br>substation to proposed Solar Power<br>Plant which is being setup by M/s.<br>SE Solar Ltd         | CEA comments received on 23.04.2019. NOC from SC Rlys awaited.  |
| 12 | STS070620<br>171686 | Erection of 220KV DC/SC line from<br>220KV Minpur substation to<br>M/s.Renew Saur Shalthi Pvt Ltd<br>solar power plant   | Same status .Comments awaited<br>from CEA. SC Rly NOC copy not<br>received. TSTRANSCO may send<br>copy of SC Rly NOC and Defence<br>NOC to CEA. |

# ANNEXURE-XXII

# PUNJAB STATE TRANSMISSION CORPORATION LIMITED (PSTCL):

| Sr.No | NAME OF TRANSMISSION LINE   | UPDATED STATUS  |
|-------|---|---|
| 1.    | 220KV line Talwandi saboo – Maiser Khana (Railway deposit works). | BSNL TD received from<br>field unit and will be send<br>to CEA shortly. |
| 2.    | 220KV line from Sandhour to Kup Kalan.                            | BSNL TD received from<br>field unit and will be send<br>to CEA shortly. |

### ANNEXURE-XXIII

### RAJSTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED (RRVPNL)

| S  | NAME OF POWER LINE                | UPDATED STATUS            |
|----|-----------------------------------|---------------------------|
| R  |                                   |                           |
| no |                                   |                           |
| 1  | 220kV D/C Basni-NPH, Jodhpur line | IV values received, but   |
|    |                                   | NoC from Railway awaited. |