Phone No: 080-22243926 Fax No: 080-22110134



Website: <a href="www.kptcl.karnataka.gov.in">www.kptcl.karnataka.gov.in</a>
E-mail ID: <a href="mailto:gmtkptcl@gmail.com">gmtkptcl@gmail.com</a>

## KARNATAKA POWER TRANSMISSION CORPORATION LIMITED

Corporate Identity Number (CIN): U40109KA1999SGC0255221

No: B19/3604/92-93

E-Office No:62261

Encl: SoP

Corporate Office,

Kaveri Bhavan, Bengaluru – 560 009,

Dated:

2 7 SEP 2023

## **CIRCULAR**

**Sub:** Procedure for shifting of Transmission Lines involving works by other Infrastructure Developers.

**Ref:** 1. T.O Circular dated: 19.05.2006 & 13.11.2013.

- 2. Letter dated: 10.03.2023 of the Director, PSETD, CEA, Ministry of Power, Govt of India.
- 3. Note approved by the Managing Director, KPTCL on 08.09.2023

KPTCL vide Circulars cited under reference (1) had strictly instructed that all proposals of line shifting/heightening/any modification to the KPTCL Transmission Lines on DCW basis or Self-execution basis be forwarded to Corporate Office for approval and had also issued procedure to be followed in approval of such proposals.

Now, the Director, PSETD, CEA, Ministry of Power, Govt of India has issued the approved document relating to "Procedure for shifting of Transmission Lines involving works by other Infrastructure Developers" for compliance of all the stakeholders in addition to the existing regulatory provisions of the Central Electricity Authority (CEA) and other Authorities to ensure smooth co-ordination between infrastructure developing agencies and transmission licensees while developing infrastructure projects.

In this regard, the copy of the approved document relating to "Procedure for shifting of Transmission Lines involving works by other Infrastructure Developers" for compliance of all the stakeholders issued by the Director, PSETD, CEA, Ministry of Power, Govt of India is here with enclosed. It is directed to take necessary measures to adopt the same while processing applications for shifting of Transmission Lines on the request of such Infrastructure Developers.

General Manager (Tech)

**KPTCL** 

OF 38/01/23

## Copy to:

All the Chief Engineers, Elec, KPTCL.

The Superintending Engineer (Technical), KPTCL, Benagaluru.

All the Superintending Engineers, Works/Maintenance/ Works & Maintenance, KPTCL.

The Executive Engineers (Technical), KPTCL, Benagaluru.

All the Executive Engineers, Elec, Major Works/TL&SS Divisions, KPTCL.

## Copy for information to:

The Superintending Engineer (Elec), IT to upload on the KPTCL website.

1/26656/2023







### भारत सरकार / Government of India

विद्युत मंत्रालय / Ministry of Power

केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority विद्युत प्रणाली अभियांत्रिकी एवं प्रौद्योगिकी विकास प्रभाग

Power System Engineering & Technology Development Division

दिनांक /Date:10.03.2023

To,

As per the Attached List

विषय: Procedure for shifting of Transmission Lines involving works by other Infrastructure Developers-regarding

महोदय/महोदया,

Several infrastructure projects of National Highways Authority of India (NHAI), Indian Railways, Airports Authorities, Border Roads Organization (BRO), Irrigation Departments, etc. are going on in various parts of the Country and many times, construction/development projects like roads, railways, airports, mines, flood banks/dam etc. come across existing/under construction transmission lines in their route alignment, leading to the need for shifting of such lines for construction of these projects. However, due to lack of coordination between the Infrastructure Developers and the transmission line Owner, the safety of the transmission lines was sometime compromised during the construction and also construction of these infrastructure projects were delayed substantially.

To ensure smooth coordination between the infrastructure developing agencies and transmission licensees while developing infrastructure projects Ministry of Power vide its letter No. 34-3/18/2022-TRANS(MoP) dated 18th May, 2022 requested Central Electricity Authority (CEA) to prepare a consolidated Standard Operating Procedure for shifting of Transmission lines while developing infrastructure projects. Accordingly, CEA prepared a consolidated Standard Operating Procedure for shifting of Transmission lines after deliberations/discussion with

सेवा भवन, आर. के. पुरम-I, नई दिल्ली-110066 टेलीफैक्स: 011-26732304 क्षेत: <u>ce-psetd@nic.in</u> वेबसाइट:<u>www.cea.nic.in</u> Sewa Bhawan, R.K Puram-I, New Delhi-110066 Telefax: 011-26732304 Email: <u>ce-psetd@nic.in</u> Website: <u>www.cea.nic.in</u>

1/26656/2023

various stakeholders, in various meetings and submitted to Ministry vide CEA's letter no. CEA-PS-1477/4/2022-PSETD Division dated 11.11.2022. Ministry of Power Vide its letter no. 34-3/18/2022-TRANS(MoP) dated 03.03.2023 conveyed approval of the Hon'ble Minister of Power and NRE for "Procedure for Shifting of Transmission Lines involving in work by other Infrastructure Developers".

A copy of the approved document is attached herewith for compliance of all the stakeholders in addition to the existing regulatory provisions of Central Electricity Authority (CEA) and other Authorities such as Environment & Forest, Defence, Airport, NHAI, BRO, etc., to ensure smooth coordination between the infrastructure developing agencies and transmission licensees while developing infrastructure projects.

भवदीय,

10/03/2023

(भंवर सिंह मीना/ Bhanwar Singh Meena)

निदेशक/ Director

#### Copy to:

- 1. Joint Secretary (Trans), Ministry of Power, Shram Shakti Bhawan, New Delhi (Email: afzal\_mdp@nic.in; transdesk-mop@nic.in)
- 2. PPS to Member (PS), CEA (Email: memberpscea@nic.in)
- 3. Chief Engineer, PSPM division (Email: ceapspm@gmail.com)
- 4. Chief Engineer, CEI division (Email: cea.eidivision@gmail.com )

F. No. 34-3/18/2022-TRANS (MoP) भारत सरकार / Government of India विद्युत मंत्रालय / Ministry of Power (पारेषण प्रभाग / Transmission Division)

> श्रम शक्ति भवन, रफी मार्ग, नई दिल्ली- 110001 Shram Shakti Bhawan, Rafi Marg, New Delhi-110001

> > दिनांक: 03.03.2023

To,

Chairperson Central Electricity Authority Sewa Bhawan, R.K. Puram New Delhi – 110 066

Subject: Procedure for Shifting of Transmission Lines involve in work by other Infrastructure Developers – regarding

Sir.

I am directed to refer to CEA's letter No. CEA-PS-14-77/4/2022-PSETD Division dated 11.11.2022, therein, sharing the Standard Operating Procedure (SOP) for shifting of Transmission lines by various infrastructure developers, and to say that SOP as approved by the Hon'ble Minister of Power and NRE is enclosed..

- 2. It is, therefore, requested to circulate the said SOP to all the States/UTs Government and all the concerned Ministries / Department.
- 3. This issues with approval of the Competent Authority.

Yours Sincerely,

Enclosure: As stated.

(बिहारी लॉल)

अवर सचिव, भारत सरकार, टेलीफैक्स: 2332 5242

ई-मेल: transdesk-mop@nic.in

# Standard Operating Procedure for shifting of Transmission line for other infrastructure projects

Several infrastructure projects of National Highways Authority of India (NHAI), Indian Railways, Airports Authorities, Border Roads Organization (BRO), Irrigation Departments, etc. are going on in various parts of the Country and many times, construction/development projects like roads, mines, flood banks/dam etc. airports. come across existing/under construction transmission lines in their route alignment, leading to the need for shifting of such lines for construction of these projects. However, due to lack of coordination between the Infrastructure Developers and the transmission line Owner, the safety of the transmission lines was being often compromised during the construction and also construction of these infrastructure projects were delayed substantially. Therefore, in addition to the existing regulatory provisions of Central Electricity Authority (CEA) and other Authorities such as Environment & Forest, Defence, Airport, NHAI, BRO, etc., the following Standard Operating Procedure (SOP) for shifting of Transmission lines needs to be observed while developing infrastructure projects.

### STANDARD OPERATING PROCEDURE:

- Subsequent to the erection of a transmission line (overhead line or 1. underground cable), if any entity, including but not limited to BRO, NHAI, Irrigation Indian Railways. Airports Authority, Departments, etc.(hereinafter called Infrastructure Developer), proposes to carry out construction of road, railway track, airport, dam, flood bank, etc. or addition/alteration of existing infrastructure or similar type of work, whether permanent or temporary, which may affect the safety, reliability, availability, and clearances of the existing transmission lines or which may require shifting of whole or part of the transmission lines, such Infrastructure Developer or it's contractor employed to carry out such construction/addition/alteration, shall give intimation in writing to the Owner of the affected transmission line and to the Member (Power System), CEA and shall furnish therewith a detailed proposal including coordinates, scale drawing of the proposed work, finished level of Road/Rail, KMZ/KML file of the route etc.
- 2. Except for Projects of National Importance, all other requests for the diversion of transmission lines for other infrastructure projects shall be considered by the Owner of the transmission line, only if such diversion proposal for infrastructure projects serves wider public interest and is

recommended by the concerned State Government or the concerned Central Ministries. After getting the recommendations of the State Government or the concerned Central Ministry, such diversion proposal for ISTS lines, excluding Projects of National Importance, shall be taken up after approval by the Ministry of Power. For the Projects of National Importance, no such approval is required. Individual request for diversion shall not be considered.

- 3. On receipt of an intimation for the shifting of transmission line, the Owner of the transmission line shall examine the proposal for compliance of existing regulations and any other law for the time being in force, technical feasibility of the proposal, Right of Way (RoW) compliance and requirement of shifting or alteration of the transmission line and compensation required as per regulation, if any. The Owner shall carry out a joint survey with Infrastructure Developer to assess the ground conditions and collect relevant information. The Owner shall intimate its views/queries to the Infrastructure Developer, if any or its concurrence on the proposal within 30 days from the date of receipt of the proposal.
- 4. The Infrastructure Developer shall furnish clarifications to the queries, if any, to the Owner of the affected transmission line within 15 days of receipt of queries/views. Any further communication, if any, among the parties in this regard shall be replied within 07 days from the receipt of the correspondence.
- 5. Both the parties will mutually decide whether the Owner of the transmission linewill carry out shifting/alteration of the transmission line or this responsibility will be taken up by the Infrastructure Developer.
- 6. If shifting or alteration work is executed by the Infrastructure Developer:
  - (a) He shall submit the design documents and drawings relevant for the construction of transmission line to the Owner of the transmission line. The Owner shall examine/raise queries, if any, and provide its final approval of drawings within 3 Weeks from the date of receipt of documents. If required, the existing design documents and drawings available with the Owner may be provided to the Infrastructure Developer. No work of shifting of transmission line shall be executed before getting the final approval of drawings/documents by the Owner.

- (b) All relevant cost incurred for shifting/alteration shall be borne by the Infrastructure Developer.
- (c) The Infrastructure Developer shall be responsible for RoW compensation, forest clearances, wild life clearance etc.
- (d) Both the parties may sign a Memorandum of Understanding (MoU) which will include mutually agreed terms and conditions.
- (e) The Infrastructure Developer shallpay supervision charges, as specified in this SOP, to the Owner before commencement of work of shifting/altering the line.
- (f) The Infrastructure Developer shall intimate the requirement of shutdown of existing transmission line for work of shifting or altering to the Owner of the transmission line for further necessary action in this regard. The shifting or alteration work shall be initiated only after the approval of RPC/SLDC.
- 7. If shifting or alteration work is executed by the Owner of the transmission line, the following provisions shall be followed:
  - (a) The Owner shall work out the cost implication of the shifting/alteration of the transmission line on the basis of the cost of material used after crediting the depreciated cost of the existing material which is being replaced and the wages of labour employed in effecting the shifting/alteration and intimate the same along with the time required for shifting/altering the transmission line to the Infrastructure Developer, within 30 days. The estimate may also include all statutory charges, supervision charges, amount for compensation of RoW/Forest Clearance/Wild life Clearance etc., as applicable.
  - (b) The Infrastructure Developer, shall deposit the amount of the estimated cost to the Owner, within 30 days of the receipt of the cost estimate.
  - (c) If there is any dispute regarding the cost of alteration of the transmission line estimated by the Owner or the responsibility to pay such cost, the dispute may be referred to the Member (Power System), CEA which shall after hearing both parties decide upon the issue.
  - (d) Both the parties may sign an MoU which will include mutually agreed terms and conditions.
  - (e) The work of shifting/alteration shall be awarded through a tender, by the Owner and the price discovered through the tender and other charges as mentioned above shall be reimbursed by the Infrastructure Developer. In case the shifting project is of small size and/or the project is of urgent nature, and the Owner awards the

work on Rate Contract or cost plus basis, the reimbursement of cost of works, in such case, shall be as per actuals.

8. The Infrastructure Developer shall make a payment of supervision charges at the following rates to the Owner of the transmission line:

Infrastructure Project	Shifting works by Infrastructure developers	Shifting works by the Owner
Projects Under BharatmalaPariyojana	2.5%	Not Applicable
Other Infrastructure Projects	2.5%	15%

[Note:Supervision charges may be calculated as the percentage of estimated cost of material (after crediting the depreciated cost of the existing material) & wages (exclusive of GST) and then GST may be separately applied on the supervision charges.]

- 9. The shifting/alteration work shall normally be completed within 10 months from the date of first request of the infrastructure developer. In case the shifting project is of small size or the project is of urgent nature, a shorter time frame may be mutually decided between the Owner & the infrastructure developer.
- 10. The design, testing, construction and erection/laying of transmission line shall be in accordance with Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, Central Electricity Authority (Measures Relating to Safety and ElectricSupply) Regulations and relevant Standards. In addition, the applicable Regulations/Guidelines/Procedures of other Authorities such as NHAI, BRO, Airport, Defense, Forest, etc., shall be followed.
- 11. It shall be ensured that the reliability and safety of the transmission line is not compromised during or after the diversion work.
- 12. No cutting of soil within ten meters from the tower structure of 110 kV and above voltagelevel shall be permitted without the written permission of the Owner of tower structure. For towers located on hill slope, extra precautions shall be taken to ensure that any cutting/excavation on that hill does not compromise the safety and integrity of the tower structure and if it is expected that the stability of hill may be compromised due to cutting/excavation work, even for distance beyond 10 m, the written

permission of the Owner of tower structure shall be taken before commencing any such activity.

- 13. Before commencement of work upon road, rail, airport, flood bank, dam etc., Infrastaructure Developer shall ensure that the provisions of Regulations 58, 60, 61 and 76 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010(as amended up to date) are not contravened either during or after the aforesaid construction.
- 14. The request for requirement of shutdown of existing transmission line for work of shifting or altering shall be submitted to the respective Regional Power Committee (RPC) or State Load Dispatch Center (SLDC), as applicable, well in advance by the Owner of the transmission line.
- 15. As per Ministry of Power's OM No. 34-311812022-Trans dated 03.08.2022, the RPC Secretariat shall provide deemed availability certificate for the shutdown period availed by transmission licensee (both RTM and TBCB) for shifting of their ISTS lines for all National Infrastructure Projects of NHAI, Railways, BRO etc., provided transmission customers are not affected by the shutdown of the line.All such applications for deemed availability shall be considered irrespective of date of application. However, deemed availability for past shifting of lines, where the diversion work has already been completed, shall not be considered
- 16. For the cases where deemed availability certificate for the shutdown period is not issued to transmission licensee for the shutdown period or part thereof, then in such cases, charges towards loss of availability due to such shutdowns shall be borne by Infrastructure Developer.

# 17. Requirement for Overhead Transmission Lines Crossing of Road/highways:

- (a) At all road crossings, except National Highways, the towers/poles shall be fitted with normal suspension or tension insulator strings depending on the type of towers. However, for all National Highways crossings, tension type towers/poles with tension insulator stringsshall be used.
- (b) A minimum of two sets of long rod insulators or two sets of disc insulator strings per phase per circuit shall be used.
- (c) The crossing span shall not be more than 250 meters, unless higher span is permitted by NHAI.

(d) No joints in conductors or earth wire(s) shall be permitted, in crossing span.

(e) Theoverhead line crossing shall normally be at right angle as far as possible.