

**In the Appellate Tribunal for Electricity,  
New Delhi  
(Appellate Jurisdiction)**

**Appeal No. 80 of 2015 & IA No.127 of 2015**

**Dated: 3<sup>rd</sup> October, 2016**

**Present: Hon'ble Mrs. Justice Ranjana P. Desai, Chairperson  
Hon'ble Mr. I.J. Kapoor, Technical Member**

**In the matter of**

**1. Ind Synergy Ltd  
Gokulpuram, Kachna Road,  
Khamardih, Raipur,  
Chhattisgarh**

**....Appellant**

**Versus**

**1. Chhattisgarh State Electricity Commission,  
Irrigation Colony, Shanti Nagar,  
Raipur - 492001  
Chhattisgarh**

**....Respondent No.1**

**2. Chhattisgarh State Power Transmission  
Company Limited  
Vidyut Sewa Bhawan, Daganiya,  
Raipur - 492013  
Chhattisgarh**

**....Respondent No.2**

**Counsel for the Appellant: Mr. S Vallinayagam  
Mr. Kunal Sabharwal  
Mr. Ashish Anand Bernard**

**Counsel for the Respondent(s): Mr. C K Rai  
Mr. Paramhans for R-1**

**Ms. Suparna Srivastava  
Mr. D K Dave  
Mr. Neelmani Pant  
Ms. Nishtha Sikroria for R-2**

## JUDGMENT

### PER HON'BLE MR. I. J. KAPOOR, TECHNICAL MEMBER

1. The present Appeal is being filed under Section 111 of the Electricity Act, 2003 against the Impugned Order dated 18.11.2014 passed by the Chhattisgarh State Electricity Regulatory Commission (hereinafter referred to as the “**State Commission**”) in Petition No. 43 of 2014 (M) filed by M/s Ind Synergy (hereinafter referred to as the “**Appellant**”) on the issue related to the insistence of the Chhattisgarh State Power Transmission Company Limited (hereinafter referred to as “**Respondent No.2**”) to install the Power Line Communication Carrier (“**PLCC**”) equipment after more than 4 years of the completion of the construction of the 132 KV bay and its refusal to submit the completion report till the installation of the PLCC equipment.
2. The Appellant, M/s Ind Synergy (**Generating Company**) is engaged in production of steel and is a power generation company/Captive Power Plant (“**CPP**”) located in the State of Chhattisgarh.
3. The Respondent No 1 is the Electricity Regulatory Commission for the State of Chhattisgarh exercising jurisdiction and discharging functions in terms of the Electricity Act 2003. The Respondent No. 2 is the Transmission Licensee in the State of Chhattisgarh.
4. Aggrieved by the Order dated 18.11.2014 passed by the State Commission, the Appellant has preferred the present appeal on following grounds:

- a) The Impugned Order is bad in law and is liable to be set aside.
- b) The State Commission has completely misconstrued the facts of the case and provisions of the Chhattisgarh State Electricity Grid Code 2011 ( "**State Grid Code, 2011**") and also the Central Electricity Authority Regulations, (Technical Standards for Construction of Electrical Plant), 2010 ("**CEA Regulations 2010**") and has erroneously dismissed the petition of the Appellant.

**5. Facts of the present Appeal:**

- a) The Appellant is involved in the production and manufacturing of steel. The manufacturing unit of the Appellant is located in District Raigarh in the State of Chhattisgarh. For the purpose of meeting its power requirements, the Appellant had established a captive power plant of 24 MW capacity.
- b) On Application of the Appellant, Respondent No. 2 had sanctioned working estimates for providing connectivity to Captive Power Plant at the Raigarh by constructing 132 KV bay under deposit scheme. An estimate of the Rs. 1,75,86,100/- was provided by Respondent No. 2 to the Appellant vide letter dated 19.01.2010.
- c) The entire amount was deposited by the Appellant in advance before the commencement of the work for the construction of the 132 KV Bay. The construction was to be completed and a completion report was to be submitted within three months from the date of the

completion of work. The completion report is important for the parties to make adjustments with the amount deposited as per the sanctioned estimate and for reconciliation of the accounts.

- d) State Load Despatch Centre (SLDC) Chhattisgarh vide letter dated 05.03.2010 approved the installation of Remote Terminal Unit (RTU) Panel for establishing communication media with SLDC which was installed by the Appellant at its own cost.
- e) The Appellant repeatedly asked Respondent No. 2 to provide a completion report. Further the Appellant communicated to Respondent No. 2 that it has found that the cost of the items mentioned in the estimate are on the higher side from the then prevailing market rates. The Appellant claimed a refund of Rs. 91.92 lacs from the Respondent No. 2.
- f) The Respondent No.2 vide letter dated 30.04.2014 communicated to the Appellant that the work had the provision for the installation of communication equipment. The Appellant has refused the installation of the communication equipment and therefore the work could not be completed. Till the time the equipment (PLCC) is not installed, the completion report cannot be submitted.
- g) The Appellant filed a petition before the State Commission being Petition No. 18 of 2014 for refund of the excess amount. The Appellant also informed the Respondent No. 2 that PLCC equipment is not required as the Appellant has installed the RTU unit and the same is working well with the SLDC and is transferring real time data.

Hence now, there is no need to install the PLCC equipment and therefore the amount thereof can be refunded.

- h) The State Commission vide Order dated 06.06.2014 dismissed the Petition No. 18 of 2014 filed by the Appellant on the ground that the same has been filed under an incorrect head of Miscellaneous Petition and gave liberty to Appellant to file a fresh petition.
- i) The Respondent No. 2 on 05.08.2014 issued a letter wherein it relied on clause 4.4(23) of the State Grid Code Regulations, 2011 to impress that PLCC equipment is required to be installed and stated that the completion report shall be made after the installation of PLCC.
- j) The Appellant on 09.09.2014 filed a fresh petition being Petition No. 43 of 2014 (M) specifically claiming that the Respondent No. 2 be restrained from installing the PLCC equipment since they are not required.
- k) The State Commission on 18.11.2014 issued the Impugned Order and dismissed the Petition of the Appellant.
- l) Aggrieved by the Impugned Order, the Appellant has preferred the present Appeal.

## **6. QUESTIONS OF LAW**

As per Appellant, following questions of law arise in the present Appeal:

- a) **Whether in the facts and circumstance of the case the Impugned Order is bad in law and liable to be set aside?**
  - b) **Whether general clauses 4.4 (15) and 4.4 (23) of the State Grid Code, 2011 have to be read in conjunction with clause 4.5.2 which deals with Telemetry requirements?**
  - c) **Whether the RTU panel and the optical line taken on lease from BSNL ensures the transfer of speech and also data to the SLDC comply with the clause 43(4)(e) of the CEA Regulations and clause 4.5.2 of the State Grid Code, 2011?**
7. We have heard at length the learned counsel for the Appellant and learned counsel for the Respondents and considered the arguments put forth by the rival parties and their respective written submissions on various issues identified in the present Appeal. Gist of the same is discussed hereunder.
8. On the specific issues raised in the present Appeal, the learned counsel for the Appellant has made the following submissions for our consideration;
- a) The State Commission has completely misconstrued the facts of the case and provisions of the State Grid Code, 2011 and also the CEA Regulations 2010 and has erroneously dismissed the petition of the Appellant. As per the State Commission's own reasoning the extant State Grid Code, 2011 have to be read along-with the CEA Regulations 2010 and as per the CEA Regulations it is clearly provided that the function of speech and data can either be provided

through PLCC or based on Optical Ground Wire (OPGW) or any other technology. As per clause 43 (4) (e) of the CEA Regulations, 2010 it is not mandatory to install only PLCC.

- b) The Appellant made several request to Respondent No. 2 for being exempted from the installation of the PLCC. It was brought to the information of the Respondent No.2 that more than 4 years have elapsed since the PLCC equipment was not installed by the Respondent No.2 and that RTU panel installed is working well along with the BSNL Lease line.
- c) The RTU panel ensures the transfer of real time data to the SLDC and the optical line taken on lease from BSNL ensures the transfer of speech and also data to the SLDC. The Appellant by using the BSNL Lease Line was complying with the OPGW technology and regulatory requirement for the transfer of speech and data to the SLDC.
- d) As per clause 4.4(15) (General Conditions for Connectivity) of the State Grid Code, 2011 it is mentioned that the Intra State User shall provide telemetering, SCADA and other relevant data to facilitate grid operation. Further in clause 4.4(23) of the Grid Code, 2011, it is provided that the Intrastate user shall ensure proper telemetering by express communication. These general clauses 4.4(15) and 4.4(23) have to be read in conjunction with clause 4.5.2 which deals with Telemetry requirements and specifically states reliable speech and data communication shall be provided to SLDC to provide necessary communication and data exchange.

- e) As per regulations 8.6.22 of the State Grid Code, 2011, it is clearly provided that PLCC is not the only equipment that may be installed and various options have been given to the parties for speech and data communication such as GSM, OFC, PLCC, Microwave etc.
  - f) There was consent given by the Respondent No. 2 to parties to install other equipments instead of the PLCC. One of the industry namely M/s Nakoda Ispat has been exempted from installation of the PLCC equipment as it was permitted to provide speech communication through wireless. This was also permitted for another industry namely, M/s SKS Ispat.
  - g) The Appellant in Petition No. 43 of 2014 (M) restricted itself to the prayer of restraining the Respondent No. 2 from installing the PLCC equipment because as per the Respondent No. 2 letter dated 05.08.2014 impressing upon the Appellant that the PLCC equipment ought to be installed.
- 9.** The learned counsel for the State Commission has made following submissions on the issues raised in the Appeal for our consideration;
- a) The State Commission has considered various Regulations applicable to the facts and circumstances of the present case while passing the Impugned Order and submitted as under.
  - b) As per the State Grid Code 2011, intra state users have to provide express communication system. It also states that a reliable and efficient speech and data communication system is to be provided.

- c) CEA Regulations 2010 make it clear that the generating company and the transmission licensee shall co-ordinate with each other and ensure the compatibility of PLCC equipments at their respective ends. Optionally, the above functionality may be achieved using wide band communication based on optical ground wire (OPGW) or any other technology.
- d) As per the provisions of CEA Regulations 2010, the generating company intending to avail connectivity with the network of transmission licensee for express voice communication will have the option of using PLCC or wide band communication based on optical ground wire (OPGW) or any other technology.
- e) The PLCC network (low bandwidth), Wireless (Microwave radio & VSAT- High & moderate bandwidth respectively) and OPGW (Very high bandwidth) network fulfils the express communication requirement. However the Appellant has provided mobile phone for this purpose which does not come under the purview of Express Communication.
- f) In respect of M/s Prakash Industries Ltd. and M/s SKS Ispat Ltd., the applicants were exempted from installing PLCC equipments for express speech communication on their request that they will provide wireless set at both ends and accordingly working estimate were revised and necessary formalities were got completed. In the instant case of M/s Ind Synergy Ltd., the issue is quite different because at the time of sanction of working estimate and issuing demand note, no such request was received by the transmission licensee from the

Appellant and it is only after observing necessary formalities, connectivity was given.

- g) The Appellant has completed necessary formalities without giving any other option on mode of communication as provided in the State Grid Code 2011 and CEA Regulations, 2010. The work of installation of PLCC equipments has been completed by CSPTCL at grid substation meant for the Appellant. The transmission licensee has procured PLCC equipments for installation at the Appellant's premises & respective EHV grid substation end. Therefore the State Commission has reached to the conclusion that the contention of the Appellant that the transmission licensee/CSPTCL should not install PLCC equipments and refund the amount towards PLCC equipments to the Appellant, cannot be accepted.
- h) The contention of the Appellant that since it has already provided telemetering equipment at his own cost for which RTU panel with associated BSNL lease line at both ends for transfer of real time data communication have been installed, hence there is no requirement of PLCC, cannot be accepted for the reason that RTU panel with associated BSNL line is used for data transfer only to SLDC and not for express speech communication as per the requirement of State Grid Code. PLCC equipment is required for express speech communication as per the provisions of the applicable Regulations.
- 10.** The learned counsel for the Respondent No 2 has made following submissions on the issues raised in the Appeal for our consideration

- a) The Power Line Carrier Communication or PLCC is a system mainly used for telecommunication, tele-protection and tele-monitoring between electrical sub-stations through power lines at high voltages. This system has been in wide use since 1950 in which transmission lines are used as communication medium in transmission network for transmission of information. The major benefit is the union of two applications in a single system which is particularly useful for monitoring electrical equipment and advanced energy management techniques. PLCC thus establishes communication between two EHV substations apart from transmission lines connecting them and is used for following dedicated requirements:
- i. dedicated/express/hotline communication between EHV sub-stations to provide inter-tripping arrangement between two EHV sub-stations in case of faults occurring on line or substation equipment; and
  - ii. To provide on-line real time data to State Load Despatch Centre (SLDC) through a peripheral unit known as RTU (remote terminal unit) connected to SCADA system of SLDC through PLCC.
- b) The audio frequency band allocation of carrier equipment is such that part of it is utilized for speech (hot line communication) and balance part is used for data communication or protection of lines. If the speed of the data is 1200 Baud (bits per seconds), then the whole carrier equipment can be utilized for data communication only and speech cannot be accommodated within it. The lease lines are being provided by service providers like BSNL for bringing the RTU data at the generator directly to the SLDC, thus making available direct connectivity between generator and SLDC for data communication only.

- c) All the EHV sub-stations of Respondent No.2 are equipped with PLCC for speech communication as well as to provide on-line real time data of EHV sub-stations to SLDC through the peripheral unit-RTU, connected to SCADA system of SLDC. After the coming into force of the Electricity Act, 2003, many Independent Power Producers (IPPs) and Captive Power Producers (CPPs) have installed their generating plants and have availed connectivity with the Regional/State transmission grid to transfer power generated from their plants and also to avail grid support.

For any generator, whether CPP or IPP, that has gained connectivity with the grid or transmission network, the following requirements are mandatory:

- i. Transfer of on-line real time data of generator to SLDC,
  - ii. Reliable express speech communication between generator and grid sub-station, and
  - iii. Transfer of energy meter reading etc. of interface point to all concerned responsible for energy accounting and billing, etc.
- d) The real time data of generator connected with the grid is necessary to be available with SLDC to facilitate efficient system operation under normal/abnormal system condition. This includes observing the quantum of power (active as well as reactive power) being injected by or drawn from the grid by the generator.
- e) A generator connected to the grid must have the facility to exchange / convey the system data to SLDC and to comply instructions of SLDC as and when required. Verbal communication between the

generator and the grid sub-station is an essential requirement of the day to day working as part of system operation for which a dedicated communication network is required between the generator and the grid sub-station from where generator is having grid connectivity.

- f) Express communication means dedicated/hotline point to point communication needed for reliable and efficient speech and data communication between two sub-stations to facilitate necessary communication and data exchange, and supervision/control of the State Grid by the SLDC, under normal and abnormal conditions. Suffice it to say, by the very nature of transmission system operation, exchange of on-line data real time basis and speech communication as between the generator and grid speech is necessary and for which provision has been made in the State Grid Code.
- g) The remote terminal unit (RTU) on which much reliance has been placed by the Appellant, is used for transfer of online real time data communication to SLDC with the help of dedicated PLCC network or BSNL lease line. Some CPP/IPPs are utilizing the RTU services of the Respondent No.2 and some are using their own RTU with BSNL lease line for transferring online data communication to SLDC. The Appellant is stated to be using its own RTU commissioned at its generating EHV substation with BSNL dedicated lease line for providing generator end data directly to SLDC at Danganiya, Raipur. This data link for transferring generator data which is established between the Appellant and SLDC, Raipur, is being used solely for transfer of data and not for any voice communication.

- h) The Appellant is wrong in contending that since it has installed an RTU which is working well with the SLDC and is transferring real-time data, there is no requirement for installing PLCC equipment. Importantly, on an enquiry for functionality of this link as claimed by the Appellant in this Appeal, it has been revealed by the SLDC that RTU for the 132kV connectivity of the Appellant is not reporting data to SLDC SCADA for more than one year now.
- i) The State Grid Code 2011 provides in clause 1.4(1) that its provisions are to be read alongwith the Regulations issued by the Central Electricity Authority as specified therein. CEA Regulations 2010 under Part A: Substation and Switchyards (66kV & above) of Chapter IV (Technical Standards for construction of Substations and Switchyards) provide as under:

*"(d) Control Room:*

*Sub-station or switchyard control room shall be provided to house the control and relay panels, PLCC equipments, telemetry equipments and recording equipments, AC and DC distribution boards, DC batteries etc. Air-conditioning shall preferably be provided in the building as a functional requirement. In case of sub-station or switchyard with automation system with distributed architecture, intelligent electronic devices (IEDs) including protective relays, PLCC panels may be provided in air conditioned kiosks located in the switchyard.*

*(e) Power Line Carrier Communication:*

*Power Line Carrier Communication (PLCC)- Power line carrier communication (PLCC) equipment complete for speech transmission, line protection, and data channels shall be provided on each transmission line of voltage rating 132 kV and higher voltage transmission line and the line compensating equipment shall have one hundred percent back up communication channels. Each 765 kV or 400 kV or 220 kV line shall be provided with two protection channels in addition to one speech plus data channel for each direction. In case of 220 kV or 132 kV lines, the speech and data*

*channel can also be used for protection; the generating company and transmission licensee shall coordinate with each other and ensure the compatibility of PLCC equipment at their respective ends. Optionally, the above functionality may be achieved using wide band communication based on optical ground wire (OPGW) or any other technology."*

Thus, installation of PLCC or OPGW equipment is mandatory under CEA Regulations 2010 for data and speech transmission as also line protection on each transmission line of voltage rating 132 kV and above.

- j) PLCC network (low bandwidth), wireless (microwave radio and VSAT (high and moderate bandwidth) and OPGW (very high bandwidth) network, all are dedicated communication mediums and with their terminal equipments fulfil the express communication requirement. The Appellant has provided mobile phone for this purpose which does not come under the category of express/dedicated communication. The express/dedicated communication means 100% communication availability under normal/abnormal conditions whereas the communication through mobile network is dependent on several factors including network traffic. Further, the Appellant has repeatedly contended that it has installed RTU facility using BSNL lease line to serve the purpose of voice and data communication; however, the same is not appropriate as the lease line can be utilized only for data communication to SLDC from generating end and voice communication is excluded.
- k) The directives of the CEA in clause 68 of the 2010 Regulations state that,

*"68. Telecommunication System:*

- 1. A dedicated and reliable telecommunication system i.e. radio, mobile telephone, satellite or a combination of these shall be provided, beside usual public communication and local public address (PA) system.*
- 2. The radio communication network shall be in the very high frequency (VHF)/ultra-high frequency (UHF) frequencies."*

That being so, mobile phone as a speech media for 132KV grid connectivity is not acceptable as this media is applicable for 33KV and below class connectivity as per the above Regulations of the CEA. The Appellant has installed RTU panel and is transferring the data to SLDC through lease BSNL line, however RTU is not reporting data to SLDC since more than one year.

- l) As on date, the Appellant is not complying with the provisions of clause 4.4.15 (regarding real time on-line data transfer to SLDC) and clause 4.4.23 (regarding express communication-speech) of the Grid Code and for which the installation of PLCC equipment is not only necessary, but is also mandatory.
- m) During period of erstwhile Chhattisgarh State Electricity Board from the year 2004 to 2006, at the time of permission for connectivity with the State grid, some IPPs/CPPs had requested for deletion of PLCC equipments from sanctioned estimates on the assurance that they would provide wireless set at both ends for speech communication. Considering that both on-line data transfer and voice communication was being ensured by these IPPs/CPPs, their request was accepted and accordingly, PLCC equipments were deleted from their sanctioned estimates. M/s Nakoda Ispat Limited, Siltara, and M/s

SKS Ispat & Power Limited are such cases of exemption during the past.

- n) The installation of PLCC equipment requires civil work such as foundation of structures, erection of equipments at switchyard and testing commissioning work. Work of installation of PLCC equipment has already been completed at the end of Respondent No.2 on the 132KV bay at grid sub-station meant for the Appellant. However, the Appellant is refusing for installation of PLCC equipment at its end which is in violation of the provisions of the Grid Code for the reasons set out above. As for express communication, installation of PLCC equipment at both the ends is required and in the absence of which at the generator end, PLCC communication cannot be established.
- 11.** After having a careful examination of all the issues brought before us for our consideration, our observations are as follows:-
- a) The issue pertains to the insistence of the CSPTCL / Respondent No.2 for installation of Power Line Communication Carrier (PLCC) equipments on 132 KV Bay for providing connectivity to the unit of the Appellant at Raigarh.
- b) As per Appellant under the applicable regulations, it is not mandatory to install only the PLCC equipment and the Appellant has installed other equipments. Hence completion report may be issued by Respondent No. 2 and excess amount of Rs. 92 Lakhs be refunded.

c) The parties have made reliance on the various provisions of State Grid Code 2011 and CEA Regulations 2010. The relevant clauses of State Grid Code 2011 and CEA Regulations 2010 are as follows:

(i) **State Grid Code 2011:** Regarding telemetering and express communication system, the requirement of Intrastate users has been identified in following clauses for safe and efficient grid operation:

**“a) Clause 4.4(23)**

*The intrastate user shall ensure proper telemetering, accessibility by express communication, so that grid inter-connectivity data is made available to all concerned.*

**b) Clause 4.4(15)**

*The Intrastate user shall provide telemetering, SCADA and transfer of other relevant data from the points of interconnection of concerned Intra-state user(s) to SLDC, to facilitate the grid operation.*

**c) Clause 4.5.2**

*Reliable and efficient speech and data communication systems shall be provided to the SLDC to facilitate necessary communication and data exchange, and supervision/control of the State Grid by the State Load Despatch Centre, under normal and abnormal conditions.*

**d) Clause 8.6.22**

***Data concentration and network integration:***

*The local network of all meters installed in a sub-station shall be formed using modem/multiplexer/data concentrator/LAN hub switch. This local network shall be integrated with communication network using appropriate standard protocol.*

*Communication network may be based on Radio frequency, Microwave, Public Switched Telephone Network (PSTN), Power Line Carrier Communication (PLCC), Very Small Aperture Terminal (VSAT) network, Optical Fibre Cable (OFC), GSM, Low Power Radio Frequency or any other means of telemetry.”*

- (ii) **CEA Regulations 2010:** Under Regulation - “Salient Technical Particulars and Requirements of Sub-stations and Switchyards”, sub regulation (4) “Protection and control” Para (e) specifies the PLCC requirement as follows:

**“Regulation 43(4)(e)**

*“Power Line Carrier Communication (PLCC) : Power line carrier Communication (PLCC) equipment complete for speech transmission, line protection, and data channels shall be provided on each transmission line of voltage rating 132kV and higher. The protection system for 400kV and higher voltage transmission line and the line compensating equipment shall have one hundred percent back up communication channels. Each 765kV or 400kV or 220kV line shall be provided with two protection channels in addition to one speech plus data channel for each direction. In case of 220kV or 132kV lines, the speech and data channel can also be used for protection wherever possible. The generating company and the transmission licensee shall coordinate with each other and ensure the compatibility of PLCC equipment at their respective ends. Optionally, the above functionality may be achieved using wide band communication based on optical ground wire (OPGW) or any other technology.”*

- d) The State Commission in the Impugned Order while deciding the matter raised by the Appellant has considered the above provisions of the State Grid Code as well as CEA Regulations in addition to the submissions made by rival parties. The State Commission in Para 27 and 28 of the Impugned Order has observed that :

“27. As mentioned above, as per the Grid Code, intra state users have to provide express communication system. It also states that a reliable and efficient speech and data communication system is to be provided. Central Electricity Authority (Technical Standards for Construction of Electrical plants and Electrical lines) Regulations, 2010 in respect of PLCC states as under:

"The generating company and the licensee shall co-ordinate with each other and ensure the compatibility of PLCC equipments at their respective ends. Optionally, the above functionality may be achieved using wide band communication based on optical ground wire (OPGW) or any other technology."

28. From the above provisions made in the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, it is abundantly clear that the generating company intending to avail connectivity with the network of transmission licensee for express voice communication will have the option either through PLCC or wide bend communication based on optical ground wire (OPGW) or any other technology.

As elaborated in foregoing paras in respect of M/s Prakash Industries Ltd. and M/s SKS Ispat Ltd., the applicants were exempted from installing PLCC equipments for express speech communication on their request that they will provide wireless set at both ends and accordingly working estimates were revised and necessary formalities were got completed. In the instant case of M/s Ind Synergy Ltd. and M/s Chhattisgarh Steel & Power Ltd., the issue is quite different because at the time of sanction of working estimate and issuing demand note, no such request was received by the transmission licensee from the respective applicants, after observing necessarily formalities, connectivity was given. Now to comply with the relevant provisions of the Grid Code as well as the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, the transmission licensee has procured PLCC equipments for installation at the petitioner's premises. However, the petitioners knowing that the transmission licensee is intending to install PLCC equipments at their installation, they have approached this

Commission to issue necessary instructions to transmission licensee to refrain from installation of PLCC equipments and return the amount deposited by them in lieu of installation of PLCC equipments without any alternative proposal for speech communication as provided in the relevant regulations.

From the above discussion, it is very clear that the petitioners have completed necessarily formalities without giving any other option on mode of communication as provided in the Grid Code and Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations,2010. Therefore, **we have reached to the conclusion that at this stage the petitioners request to issue instruction to the transmission licensee not to install PLCC equipments and refund the amount towards PLCC equipments to the petitioners cannot be accepted.**”

The State Commission has rightly ascertained that the Appellant’s request seeking not to install PLCC equipment is not tenable in light of the stipulations made in the State Grid Code Regulations read in conjunction with the applicable CEA Regulations as discussed above.

- e) There are certain cases of exemption given by the Transmission Licensee on the requirement of PLCC Equipments as brought to our notice by the Appellant. The rationale for such exemption has been explained by the Respondents. The State Commission in the Impugned Order has also considered it and concluded that *“it is very clear that the petitioners have completed necessarily formalities without giving any other option on mode of communication as provided in the Grid Code and Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations,2010. Therefore, we have reached to the conclusion that at this stage the petitioners request to issue instruction to the*

*transmission licensee not to install PLCC equipments and refund the amount towards PLCC equipments to the petitioners cannot be accepted”.*

Had the Appellant given a proposal that in lieu of installing PLCC equipments, it would provide alternate express speech and data communication in line with the prevailing regulations at the time of preparation of work estimate and its sanction, then the Respondents would have considered the same appropriately. In the instant case, there was no alternative acceptable communication system was proposed by the Appellant.

- f) Considering the above facts, the first issue raised by the Appellant in this Appeal i.e. **Whether in the facts and circumstance of the case the Impugned Order is bad in law and liable to be set aside?, we will be constraint to decide the issue against the Appellant.**
- g) On the second issue for our consideration i.e. **whether general clauses 4.4(15) and 4.4(23) of the State Grid Code, 2011 have to be read in conjunction with clause 4.5.2 which deals with Telemetry requirements?, we decide as follows:**
- i) We are in agreement that the various clauses of the State Grid Code have to be read in conjunction. The requirement of clause 4.5.2 is to provide reliable and efficient speech and data communication systems to SLDC.
  - ii) To ensure safe and secure operation of the grid is the prime objective while providing connectivity to the grid for any user. As per Clause 4.5.5 of the State Grid Code 2011, the state transmission utility or transmission licensee as the case may be shall install voice and data communication facilities for and at the

cost of the intra-State user. The Clause 4.5.5 of the State Grid Code 2011 is reproduced as below:

“4.5.5: Telemetry is required for 1 MW and above intra-State users seeking connection to intra-State transmission system or network of distribution licensee and also availing open access. These intra-State user shall provide necessary facilities for voice and data communication and transfer of online operational data such as voltage frequency, load flow etc. The state transmission utility or transmission licensee as the case may be shall install such infrastructure facilities for and at the cost of the intra-State user.”

- iii) Considering above and the fact brought to our notice by Respondent No.2 that the lower reliability of Appellant’s RTU system during past one year as well as the findings of the State Commission in Para 28 of the Impugned Order, we decide this issue against the Appellant.
- h) On the third issue for our consideration i.e. Whether the RTU panel and the optical line taken on lease from BSNL ensures the transfer of speech and also data to the SLDC comply with the clause 43(4)(e) of the CEA Regulations and clause 4.5.2 of the State Grid Code, 2011?, we decide as follows,**
- i) Clause 4.5.2 of State Grid Code 2011 specifies the requirement of reliable and efficient speech and data communication systems to SLDC to facilitate necessary communication and data exchange, and supervision/control of the State Grid by the State Load Despatch Centre, under normal and abnormal conditions. The Clause 43(4)(e)

of the CEA Regulations also specifies the requirement of speech transmission, line protection, and data channels by PLCC, OPGW or any other technology.

- j) These facts have also been suitably considered by the State Commission while deciding the matter as evident from Para 28 of the Impugned Order.
- k) Considering the above, we do not find any infirmity in the view taken by the State Commission in this regard. Accordingly this issue is also decided against the Appellant.

**ORDER**

We are of the considered opinion that the issues raised in the present Appeal have no merits and Appeal and I.A. are hereby dismissed.

The Impugned Order dated 18.11.2014 passed by the State Commission is hereby upheld.

No order as to costs.

Pronounced in the Open Court on this **3<sup>rd</sup> October, 2016.**

**(I.J. Kapoor)**  
**Technical Member**

**(Mrs. Justice Ranjana P. Desai)**  
**Chairperson**

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**REPORTABLE/NON-REPORTABLE**  
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