

**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR**

Petition No. 1955 of 2021
Along with
IA No. 20 of 2021 in Petition No. 1955 of 2021

In the matter of:

Petition under Section 45, 46, 86 and other applicable provisions of the Electricity Act, 2003 read with the GERC (Electricity Supply Code and Related Matters) Regulations Notification No. 4 of 2015 for approval of levy of additional charges from applicant towards installation of Dry Type Transformer Bus-bar Trunking system and metering system for providing service line instead of conventional service cable for propose high rise complex which resulting in incremental losses and issue of point of supply.

AND

In the matter of:

Application for amendment of the Petition and Impleadment of parties.

Petitioner/Applicant : Dakshin Gujarat Vij Company Limited
Represented by : Adv. Mr. Anand Ganesan and Mr. B. K. Patel, ACE (C&R), Mr. R. M. Chaudhary, EE (O&M) and Mr. M. M. Mahto, JE

V/s.

Respondent No. 1 : Surat Diamond Bourse
Represented by : Adv. Mr. Tushar Desai alongwith Adv. Mr. Riddhish Doshi and Mr. Mahesh Gadhvi, Mr. Amit Barot & Mr. Jitesh Jariwala

Respondent No. 2 : Madhya Gujarat Vij Company Limited
Represented by : Mr. J. R. Shah

Respondent No. 3 : Uttar Gujarat Vij Company Limited
Represented by : Mr. K. B. Chaudhari, DE

Respondent No. 4 : Paschim Gujarat Vij Company Limited
Represented by : Mr. Y. S. Ghedia

Respondent No. 5 : Torrent Power Limited – Dist. (Ahmedabad)
Represented by : Nobody was present

Respondent No. 6 : Torrent Power Limited - Distribution (Surat)
Represented by : Nobody was present

Respondent No. 7 : Torrent Power Limited - Distribution (Dahej)
Represented by : Nobody was present

Respondent No. 8 : Torrent Power Limited – Dist. (Dholera)
Represented by : Nobody was present

Respondent No. 9 : Deendayal Port Trust
Represented by : Nobody was present

Respondent No. 10 : AspenPark Infra Vadodara Private Limited
Represented by : Nobody was present

Respondent No. 11 : Jubilant Infrastructure Limited
Represented by : Nobody was present

Respondent No. 12 : GIFT Power Company Ltd.
Represented by : Mr. Prashant Dadheech and Mr. Rakesh Inala

Respondent No. 13 : MPSEZ Utilities Limited
Represented by : Nobody was present

Respondent No. 14 : Office of the Chief Electrical Inspector
Represented by : Mr. R. B. Desai, Dy. C.E.I., Vadodara; Mr. V. R. Suthar, Electrical Inspector, Surat and Mr. V. C. Patel, Asst. Electrical Inspector, Surat

CORAM:

Mehul M Gandhi, Member

S. R. Pandey, Member

Date: 11/02/2022

ORDER

1. The Petitioner, DGVCL, a distributing licensee has filed this Petition against Respondent No. 1, M/s. Surat Diamond Bourse (SDB), and also subsequently filed an IA No. 20 of 2021 along with additional submissions dated 05.04.2021 making prayers as under:
 1. *Hon'ble Commission may please admit this present Petition with amendments.*
 2. *Hon'ble Commission may consider this case of Respondent as a specific case for adoption of new concept for the petitioner as respondent is requesting for adoption of modern type technology with latest feature and all the equipment proposed to install like Dry Type Transformer, Bus bar Trunking System along with installation of smart metering panels at each floor of Multi-storeyed building.*
 - 2A. *Hon'ble Commission may allow the Petitioner to recover additional financial burden in terms of losses from the respondent.*
 3. *Hon'ble Commission may approve the methodology derived for calculation of one-time payment against financial burden to the petitioner in terms of incremental losses of Dry Type Transformer and also allow the petitioner to recover additional financial burden from the respondent through one-time payment. It is requested to consider actual measured maximum losses of Dry Type Transformer procured by the respondent (in kW) at 75°C (at maximum current tap).*

- 3A *Direct and hold that the Respondent No. 1 would be liable and responsible for life time maintenance and safety related aspect of network developed by the Respondent as per Clause No. 36(4) of Central Electricity Regulation, 2010 as Respondent has requested for adoption of new concept of Dry Type Transformer, Sandwich type Busbar Trunking system, RMU, underground cable and LT breakers.*
- 3B *Hon'ble Commission may consider the amendment passed for the petition to not impose the supply code clause no. 4.105 and 4.106 and liabilities and responsibilities thereof as Respondent wants to adopt such new technology.*
4. *As per supply code Notification no. 4/2015 Clause No. 105(a) the point of supply is defined as 'the incoming terminal of the cut-out /MCB/ELCB installed by the consumer immediately after meter in case of LT Consumers'. Accordingly in this specific case of the respondent they have proposed the metering point at each floor of the high rise building and LT Supply will be extended through rising Busbar trunking from LT panel installed at upper basement by adopting new technology concept so petitioner request Hon'ble Commission to assign the responsibility of the Respondent for their own electrical network developed.*
- 4A *Direct and hold that there shall be no additional financial burden on the Petitioner or Distribution Company and there is no legal discrepancy arising to define the point of supply and issues related thereto and if necessary, a provision may be made in the relevant Regulations.*
5. *To grant any other relief as the Commission may consider appropriate.*
6. *Pass any other Order as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice."*

2. The facts of the Petition in short are as below:

- 2.1. The Petitioner is a Distribution Licensee of the unbundled erstwhile Gujarat Electricity Board as per the provisions of the Gujarat Electricity Industry (Reorganization and Regulation) Act, 2000 read with the Electricity Act, 2003.
- 2.2. It is submitted that Respondent No. 1, Diamond Research and Mercantile City Ltd. (A Government of Gujarat owned Company), is handling the Dream City Project at

Village Khajod under Surat City and the iconic building of anchor tenant M/s. Surat Diamond Bourse (SDB), is under progress for the purpose of diamond trading.

- 2.3. The Respondent No. 1, SDB, requires total load of about 25.5 MVA and have demanded single EHT connection at 66 KV voltage level having contract demand of 13.49 MVA for common utilities and amenities of Surat Diamond Bourse.
- 2.4. M/s. Surat Diamond Bourse has also planned to develop 9 (nine) commercial towers each having 15 floors for diamond trading offices and has requested for 4739 Nos. single phase/three phase commercial lighting connections having load demand of 11381 KW approximately.
- 2.5. M/s. Surat Diamond Bourse has planned to install Dry Type Transformer having capacity of 1000 KVA to 1600 KVA. It has also planned to install two number of such transformers for each tower at upper basement area of every tower with utilising 11 KV VCB and LT Panel instead of conventional DP Structure or plinth mounting in the open area.
- 2.6. The Petitioner has also informed Respondent No. 1, Surat Diamond Bourse, regarding the present practice adopted by the Petitioner to release power supply to the Applicant but Respondent No. 1 insisted to the Petitioner to process approval of new concept of their own Dry Type Transformer and sandwich type busbar trucking system.
- 2.7. It is submitted that the losses of the Dry Type Transformers in the specification submitted by the Respondent are higher than the present practice adopted by the Petitioner as per the permissible limit specified in IS-1180. Any installation of Dry Type Transformer by M/s. Surat Diamond Bourse will lead to financial burden to the Petitioner and ultimately to other consumers due to higher losses.
- 2.8. It is submitted that the dry type transformer is not installed by the State Distribution Licensees in normal course and they are utilising Oil Cooled Transformers of various capacity ranging from 10 KVA to 500 KVA as per the requirement in compliance with the standard specified in IS-1180 in the distribution network.

- 2.9. As the Respondent No. 1, Surat Diamond Bourse is insisting for installation of Dry Type Transformer, sandwich type busbar trunking system along with smart metering panels at each floor of multi-storied building purchased/installed by the Respondent No. 1, the incremental losses due to it, needs to be factored and approved by the Commission with consideration of the formula for it as decided by the Commission. Otherwise, it will financially affect the licensee and ultimately other consumers of the Petitioner licensee.
- 2.10. The incremental losses due to dry type transformer calculated by the Petitioner and based on it one-time payment compensation derived is at Rs. 4,86,19,123/- based on the parameters/data for FY 2018-19 and as per the present parameters/data, it works out to Rs. 5,52,81,821.16 with consideration of following value parameters.
- (a) Average cost of service for the year FY 2019-20 for High Voltage Industrial Consumer
 - (b) The bank interest has been revised from 5.40% to 4.65% as declared by Reserve Bank of India with effect from 27.03.2020.
 - (c) Compound Annual Growth Rate (CAGR) in cost to serve at HT level is revised to 1.72%.
- 2.11. Also, the maximum total losses at 50% Load / 100% Load up to 11 KV Class Oil Type Transformer for rating 250 KVA to 2500 KVA as per Amendment No. 1 of BIS 1180 and the permissible total losses at 50% Loading / 100% Loading up to 22 KV Class Dry Type Transformer for rating 100 KVA to 2500 KVA as per Table No. 7.1 of the Energy Conservation Building Code, 2017 are filed. The losses of Dry Type Distribution Transformer are higher than losses of Oil Type Transformer.
- 2.12. The illustrative example for one-time payment required for compensating incremental losses in case of utilization of dry type transformer in place of oil cooled type transformer is submitted. The onetime payment calculation shown in illustrative example is worked out by considering losses of dry type transformer as per routine test/test certificates submitted by the Respondent in which load losses are measured at principal tap No. 3 among tapings of +5% to -7.5%. The actual maximum losses of dry type transformer shall be measured at maximum current tap

i.e. principal tap No. 6 i.e. at -7.5%. However, it is requested to consider actual measured maximum losses of dry type distribution transformer procured by Respondent (in KW) at 75°C (at maximum current tap). The routine test / test certificates for Dry Type Transformers of rating 1000 KVA, 1250 KVA and 1600 KVA submitted by the Respondent are filed.

- 2.13. Thus, the calculation of one-time payment compensation amount to compensate incremental losses of Dry Type Transformers to be installed by the Respondent M/s. Surat Diamond Bourse, in place of Oil Type transformers comes to Rs. 5,52,81,182.16 as additional losses to the licensee which needs to be paid by the Respondent No. 1, M/s. Surat Diamond Bourse. Also, the Petitioner has derived the methodology to calculate incremental losses for dry type transformer compared to oil type and considering different capacity-wise test certificate of dry-type transformer submitted by the Respondent No. 1 and comparison of such additional losses is also filed by the Petitioner .
- 2.14. Referring to Section 42 of the Electricity Act, 2003, it is submitted that the Petitioner is extending their distribution network with overhead electrical line as per technical feasibility and utilize Oil Type Transformer having lower load losses compared to Dry Type Transformer as per IS 1180 and the Energy Conservation Building Code, 2017.
- 2.15. The Respondent has represented vide letter No. SDB/1, dated 19.03.2019 before the Petitioner to adopt modern type technology with latest feature and all the equipment proposed to be installed like Dry Type Transformer, Busbar Trunking System along with installation of smart metering panels at each floors of Multi-storeyed Building.
- 2.16. It is submitted that at present, the Petitioner is releasing the connections in multi-storeyed building with usage of Oil Type Transformer and installing meters at ground floor as conventional practice. The specific requirement for adoption of modern type technology with latest features requested by the Respondent No. 1 is completely new concept for the Petitioner and the Petitioner does not have such established infrastructure for operation and maintenance of the same.

2.17. The Petitioner has also provided methodology to calculate the incremental losses carried out by it with consideration of different capacity wise test certificate of the dry type transformer submitted by the Respondent No.1 as under:

“Formula for Onetime Payment (OP) required to compensate loss amount in case of utilization of dry type transformer in place of oil cooled type transformer.

1. Total annual units for incremental losses (in KWH) (AUL)=

$$\{[(\text{DRY_NL}-\text{OIL_NL}) + \{(\text{DRY_LL}-\text{OIL_LL}) \times \text{LLF3}\}] \times \text{Hr.}\}$$

2. Onetime Payment required to compensate losses amount in case of utilization of dry type transformer in place of oil cooled type transformer (in Rs.)

$$(\text{OP})=[\text{AUL} \times \text{Ec}]/(\text{R}-\text{CAGR}) \times 100.$$

Where,

DRY_NL=Measured maximum No load losses of Dry Type Distribution Transformer, procured by applicant/Developer (in KW).

DRY_LL=Measured maximum load losses of Dry Type Distribution Transformer, procured by applicant/Developer (in KW) at 75° C.

OIL_NL=Calculated maximum No load losses of Oil Cooled Distribution Transformer of identical capacity to Dry Type Transformer, for BIS Level/BEE Star Rating as being procured by DISCOMs (in KW).

OIL_LL=Calculated maximum load losses of Oil Cooled Distribution Transformer of identical capacity to Dry Type Transformer, for BIS Level/BEE Star Rating as being procured by DISCOMs (in KW).

*Hr. =No. of service hours per year of the distribution transformer = 8760 Hours
(365 days x 24 hours)*

LF = Load Factor =0.7

$$\begin{aligned} \text{LLF} &= \text{Loss Load Factor} = 0.3 \text{ LF} + 0.7 \text{ LF}^2 \\ &= (0.3 \times 0.7) + (0.7 \times 0.7 \times 0.7) = 0.553 \end{aligned}$$

R = Prevailing Rate of Interest (%) p.a. on Consumer Deposit

EC = Prevailing cost to serve (Rs./KWH) at HT level

CAGR = Compound Annual Growth Rate (%) in cost to serve at HT level.

Note: If total annual units for incremental losses (in Kwh) (AUL) arrived negative i.e. saving in losses, in such case, it should not be passed on to developer/applicant."

2.18. It is submitted that for specific requirement of adoption of modern type technology with latest features and equipment proposed to be installed by Respondent No. 1, the Petitioner requires to establish infrastructure for operation and maintenance of such system once the same is installed.

2.19. The Petitioner sought guidelines from the holding Company, GUVNL, in the subject matter, wherein GUVNL directed the Petitioner to approach the Commission to get suitable amendment/incorporation of relevant clauses of Notification on the following points:

- (1) Utilization of Dry Type Transformer subject to burden due to higher losses of Dry Type Transformer shall be borne by the Respondent
- (2) Procurement / Life time Maintenance (Life time repair / replacement) of L.T. Distribution Panel subjected to monitor and maintain foolproof safety by the Respondent with employment of full-time qualified safety officer by the Respondent.
- (3) Procurement / Life time Maintenance of Sandwich type Bus bar Trunking System subjected to monitor and maintain foolproof safety by the Respondent with employment of full-time qualified safety officer by the Respondent.
- (4) Installation of floor wise smart metering panel subjected to monitor and maintain foolproof safety by the Respondent with employment of full time qualified safety officer by the Respondent, and
- (5) Distribution of Smart Meter and related software for communication.

2.20. It is submitted that as per the aforesaid Guidelines, the Respondent No. 1, Surat Diamond Bourse, is required to give an undertaking to the Petitioner that the additional burden due to higher losses of Dry Type Transformer shall be borne by the Respondent No. 1, M/s Surat Diamond Bourse and also undertake procurement,

life time maintenance of electrical network, repair/replacement of dry type transformer, LT distribution panel, sandwich type busbar trunking system and smart meter panel, and observing safety measures along with fulfilment of above mentioned points (1 to 5) for the electrical network/infrastructure developed by the Respondent No. 1.

- 2.21. It is submitted that the Respondent No. 1, Surat Diamond Bourse, has submitted a Notarised Undertaking dated 09.10.2019 regarding installation and life time maintenance of electrical network of their infrastructure.
- 2.22. Respondent No. 1 has in the above undertaking agreed that any kind of events such as electrical breakdown/accident/fire/high voltage damages to property or human due to poor workmanship will be their responsibility. In para 9 of the said undertaking, it is stated that the Petitioner, DGVCL, will provide, operate and maintain power supply to the point of supply i.e. HT side before transformer in the premise and further power through transformer, cable, panel, rising mains excluding energy meters will be maintained by the Respondent No. 1.
- 2.23. In response to the aforesaid, the Petitioner informed the Respondent No. 1 vide letter No. DGVCL/CE(O&M)/Tech-I/19205 dated 19.12.2019, to submit the technical specification for specified requirement and to submit notarised undertaking incorporating points Nos. 1 to 5 mentioned in the said letter. However, the Respondent No. 1, SDB, has not submitted any such undertaking.
- 2.24. The Respondent has not submitted any consent for one-time payment of the incremental losses of Dry Type Transformer demanded by the Petitioner. But the Respondent has requested vide letter No. SDB/57 dated 20.01.2021 to adopt mutually agreed methodology/mechanism for allocation of incremental losses due to higher losses of Dry Type Transformer as per GUVNL Guideline letter No. GUVNL/Tech-2/DE-1/HT/2551 dated 03.12.2019.
- 2.25. It is submitted that the Petitioner has vide letter No. DGVCL/CE(O&M)/SE(O&M)/DSP/21/2602 dated 09.02.2021 again instructed the Respondent, SDB, to submit an Undertaking, as stated above, for one-time payment of financial burden against incremental losses due to Dry Type transformer and

further informed the Respondent to purchase the Dry Type transformer which are computable in losses as compared to IS-1180 of Oil type transformer, otherwise Dry type transformers may not be allowed looking to the huge financial burden to the Petitioner.

- 2.26. The Respondent No. 1 has admitted vide letter No. SDB/66 dated 25.02.2021 that burden due to higher losses with Dry Type transformer shall be borne by Respondent No. 1, M/s Surat Diamond Bourse and therefore, mutually agreed methodology/mechanism for allocation of incremental losses need to be prescribed/decided. The Respondent, SDB, agreed to have provision of metering arrangement at 11 kV HV side of Dry Type transformer to bear actual burden due to higher losses of Dry Type transformer instead of one-time payment as asked by the Petitioner. The Respondent No. 1 confided to pay the amount for incremental losses due to dry type transformer as per the Order and approved methodology by the Commission.
- 2.27. It is further stated that GUVNL has devised the methodology to calculate incremental losses of dry type transformers compared to oil type transformers and to recover one-time payment to compensate incremental losses and the same has been conveyed to the Respondent No. 1 vide letter No. GUVNL/TECH-3/DE-1/Transformer/1233 dated 19.06.2020.
- 2.28. It is stated that as per the directive of the GUVNL, (i) the Respondent No. 1 is required to give undertaking to pay amount for incremental losses, and (ii) the Respondent No. 1 shall be responsible for maintenance/procurement of the dry type transformer for life time and make a provision of spare transformer of relevant ratings for replacement in case of failure and replacement shall be done on its own, under consultation with respective Distribution Company.
- 2.29. It is also submitted that the Respondent SDB has neither submitted any undertaking nor agreed to pay one-time payment against incremental losses for dry type transformer while insisting for utilisation of Dry Type Transformer instead of Oil Type Transformer.

2.30. The reasons for requesting one-time payment from the Respondent No. 1 by the Petitioner are as under:

- (i) The Respondent is a developer of the whole project consisting of 4739 Nos. of premises for the purpose of diamond trading offices to different diamond businessmen. Therefore, different diamond businessmen will become the end users and forthcoming consumers of the Petitioner. It means in this case, the Respondent No. 1 and the end user-cum- forthcoming consumers will be different and distinct entities.
- (ii) The end user-cum- forthcoming consumers i.e. owner of the diamond trading offices may deny to pay additional lifetime financial burden to compensate the incremental losses due to installation of dry type transformer in addition to their regular energy usage bill.
- (iii) The Petitioner may not be able to recover additional financial burden towards incremental losses. If the individual forthcoming consumers of diamond trading offices deny to pay additional life time financial burden towards incremental losses then the additional financial burden towards incremental losses shall be borne by the Petitioner.

2.31. Moreover, the Respondent No.1 has insisted for installation of Energy Meters at every floor upto 15th floor for which they have proposed to install sandwich type busbar trunking system instead of cable for supply upto meter from main panel. The Petitioner, therefore, requests the Commission to allow one-time payment from the Respondent SDB so as to compensate incremental losses of Dry Type Transformer as the Respondent SDB is insisting to install Dry Type Transformer.

2.32. The Respondent No. 1 has represented on 14.08.2019 to the Petitioner to install meter on each floor of multi-storeyed building as per GERC (Electricity Supply Code and Related Matters) Regulations, 2015. Clause 6.10 of the Supply Code provides that in multi-storeyed building the meters shall be fixed on the ground floor/rising mains having proper air ventilation and adequate illumination.

2.33. The Respondent No.1 wants to use insulated flat radial shaped aluminium conductor through sandwich type busbar trunking system which will carry electric supply from LT Distribution panel located at upper basement to meters located at each floor.

Thus, instead of conventional service cable, sandwich type busbar trunking system will be used which is a unique and new concept to the Petitioner as well as other Distribution Companies of Gujarat. The sandwich type busbar trunking system arrangement is insisted by the Respondent SDB for their convenience to provide individual connection on each floor. Hence, the safety related liability will be of the Respondent No. 1. The Petitioner has no such infrastructure for operation and maintenance of such new concept and complicated infrastructure developed by the Respondent.

2.34. Referring to sub-clause (4) of Clause 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation, 2010 pertaining to provisions for supply and use of electricity in Multi-storeyed Building, it is submitted that the Respondent No. 1 has sought approval to the proposed electrical network from Electrical Inspector, Surat. The Electrical Inspector, Surat has accorded approval to the electrical network plan under provision of aforesaid Regulation, 2010 for Multi-storeyed Building vide Letter No. EI/SRT/Plan/1568, 1570, 1572, 1574, 1576, 1578, 1582, 1584 dated 05.10.2020, wherein the Electrical Inspector has stipulated various conditions to be obtained by Respondent No. 1.

2.35. It is further submitted that the Electrical Inspector, Surat accorded approval to the Respondent SDB, subject to following conditions:

“The approval does not absolve Respondent for obtaining any other permission that may be required under any other law / act / rules from the concerned Department of Central State Government or Local Authority. Permission approval is valid subject to condition that the Respondent have to clear necessary permissions required from any other department. In this approval Electrical Inspector, Surat has not approved / verified technical specifications of the material / equipment / cables / other electrical items utilized by Respondent as per prevailing BIS.”

2.35.1. The Commission may make appropriate Regulations for this new concept brought by the Respondent SDB with consideration that no additional financial burden to be borne by the distribution licensee or no discrepancies arise to define point of supply. It is the duty of the Respondent/Developer SDB to bear the cost of life time

maintenance/safety related aspect of such network as per sub-clause (4) of Clause 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation, 2010 for Multi-storeyed Buildings.

- 2.35.2. The Petitioner referred to Regulations 4.105 and 4.106 of the GERC (Electricity Supply Code and Related Matters), Regulations, 2015 notified by the Commission and submitted that unless otherwise agreed to, the point of supply shall be the incoming terminal of the cut-out installed by the consumer i.e. (a) the incoming terminal of the cut-out /MCB/ELCB installed by the consumer immediately after meter in case of LT Consumers (b) Distribution box installed on transformer centre / substation established on Consumer's premises, when meter is installed on such a transformer centre/ substation (c) Control switchgears that may be installed in the Consumer's Premises as provided subject to provision of this code in case of HT and EHT Consumers. As per Clause 4.106, at the point of commencement of supply, the consumer shall provide a main switch/circuit breaker. In addition, HT and EHT consumers shall also provide suitable protective devices as per the provisions of Clause 35 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 and amendments made therein.
- 2.35.3. The system of protection shall have to be approved by the licensee before commencement of supply. The meters, MCBs/CBs and associated equipment procured by the consumer shall be installed by the licensee at the point of supply. (Clause 4.106 of the Supply Code).
- 2.35.4. Also, referring to Clause 5.13 of the GERC Supply Code, 2015, which provides that the consumer shall provide space of requisite dimensions at the convenient location as mutually agreed between the consumer and the licensee, free of charge, for erection/installation of that part of service line that falls within its premises, transformers, switch gear, meter and all other apparatus upto the point of commencement of supply. The entire service line and other apparatus shall be deemed to be the property of the licensee and shall remain under its control.
- 2.35.5. As per the request of the Respondent, the energy meters are to be provided at each floor of the high rise tower for different amenities and the service line from LT busbar located at upper basement to each floor will be provided by the Respondent. Hence,

the question arises regarding provisions of above mentioned clauses i.e. clause 4.105 and 4.106 about consideration of point of supply and liability of service line.

- 2.35.6. The Petitioner has submitted that the Commission may consider this case of Respondent as a specific case for adoption of new concept for the Petitioner as Respondent is requesting for adoption of modern type technology with latest feature and all the equipment proposed to install like Dry Type Transformer, Bus bar Trunking System along with installation of smart metering panels at each floors of Multi-storeyed building.
- 2.35.7. The Petitioner referred to GERC (Licensees Power to Recover Expenditure Incurred in Providing Supply And Other Miscellaneous Charges) Regulations, 2005 and Order of the Commission and submitted that the Petitioner has no power to recover any charges from the applicant other than the charges specified in the aforesaid Regulations.
- 2.36. Based on the aforesaid submissions, the Petitioner prayed that the Commission may allow the present petition.
3. The Respondent No. 1, SDB, filed written statements/objections vide affidavit dated 22.06.2021 submitting that the present Petition and the additional submissions of the Petitioner are without proper legal cause of action against the Respondent and requires to be dismissed since the Petitioner has no cause of action to file the present Petition without mutually agreed statement committed by the Respondent.
 4. In its Daily Order dated 18.09.2021 the Commission issued certain directives including joining the distribution licensees of the State as party Respondents by amending the Petition.
 5. Later on, IA No. 20 of 2021 came to be filed by the Petitioner/Applicant seeking amendment in the cause title of the Petition to join the Distribution Licensees as Respondents in compliance to the directives given by the Commission vide Daily Order dated 18.09.2021. Moreover, the Applicant/Petitioner has also requested and prayed to amend the original Petition by incorporating certain facts and prayer

clauses in the main Petition. The same was allowed by the Commission vide Daily Order dated 13.10.2021.

6. The Respondent No. 1, Surat Diamond Bourse, has filed its reply contending as under:

- 6.1. That the Petition is not maintainable and tenable as per law. The Petitioner is not entitled to get any relief prayed by it. The Petitioner has made false statement and also suppressed material facts. On that ground also the Petition is required to be rejected.
- 6.2. The Petitioner is not acquainted with advanced state of art technologies and also in respect to the dry type transformers. It is true that the losses of dry type transformers is slightly higher than the specification submitted by the Petitioner than the permissible limit specified in IS-1180 (Oil Type Transformer). It is also true that if the Respondent installs the proposed Dry Type Distribution Transformer, it will lead to financial burden to the Petitioner due to incremental higher losses.
- 6.3. The Petitioner admitted that the Distribution Licensees of the State have not used dry type transformers. They are normally using oil cool transformers in the distribution network.
- 6.4. The Respondent agreed that to recover financial burden against the incremental losses of dry type transformers purchased by the Respondent, the methodology of the same needs to be mutually agreed and guided by the GUVNL.

The Respondent agreed and undertook to indemnify the realistic and actual incremental financial loss incurred by the Petitioner by installing Audit meter at HV side of dry type transformer and the calculation of losses and compensate the same one time amount of Rs. 4,86,19,123/-.

- 6.5. The Petitioner has admitted that the concept of service cable, sandwich busbar trunking system proposed by the Respondent is totally new for the Petitioner.

- 6.6. The prayer of the Petitioner to approve the formula for calculation of incremental losses of dry type transformers and also to allow the Petitioner to recover additional financial burden in terms of losses from the Respondent through one-time payment seems non-realistic and non-justifiable.
- 6.7. The question before the Commission is to decide for recovery of financial losses incurred by the Petitioner.
- 6.8. The Respondent has admitted that they are ready and willing to compensate the incremental financial losses incurred by the Petitioner.
- 6.9. The Petitioner has remedy available that in case of default of payment, the licensee may disconnect the power supply and also recover the amount from the security deposit and other charges before restoration of power supply, but inspite of that the Petitioner is trying to take advantage of monopoly business and extorting money from the Respondent which needs to be controlled. The demand of one-time payment by the Petitioner is illegal, arbitrary and also against the principles of natural justice and against the development plans for the country.
- 6.10. The amount claimed by the Petitioner is not any arrear. The demand of additional amount is not any dues on the part of the Respondent. The Petitioner is not entitled to claim blank amount without any justification. The advance payment towards recovery of losses by the Petitioner is not permissible. The additional charge towards losses is yet to be decided by the Commission. The losses may not remain constant during various months. It needs to be verified. The additional charges demanded by the Petitioner is recoverable as dues since the Distribution Licensee has right to refuse to give supply or to disconnect the power supply in the event the amount of losses has not been paid by the Respondent.
- 6.11. The Respondent undertakes to compensate all the realistic burden due to incremental losses by deriving the consumption difference between the Audit meter and sum of the all LT meter consumptions. As the defects in the system of calculating the loss is not found yet and the 100 years calculation is not proper in the present case. The Respondent agrees to pay regularly the losses to the Petitioner to compensate it for the period of consumption, but not for the life time as the

Respondent undertakes to pay the losses without fail. The demand of one time amount is not reasonable and realistic and not acceptable by the Respondent. A condition is a stipulation essential to the main purpose of the contract, breach of which gives rise to treat the contract as repudiated. The undertaking is a stipulation collateral to the main purpose of the contract, the breach of which gives rise to disconnect the electricity supply. The Commission has to determine that such an act of the Petitioner is due to capricious or oppressive act. The Commission can determine amount for which the Respondent is liable to compensate to the Petitioner for his sufferance due to misfeasance by the Respondent.

- 6.12. It is the fundamental principle of damages/losses for breach of contract that they are awarded to place the injured party in the same position in which he would have been, had he not sustained the injury of which he complains.
- 6.13. In case of any loss of energy it is open for the party to assess the loss of energy by resorting to power under Section 126(1) of the Act.
- 6.14. The Petitioner's request is to protect itself against the actual loss of energy by the Respondent which can be done by directing the Respondent to give Bank Guarantee of a reasonable amount. The Bank Guarantee can be encashed in case of default and before that the Petitioner is entitled to disconnect the electricity supply.
- 6.15. The Petitioner's submission on the value of incremental annual losses to compensate it with one-time amount of Rs. 5,52,81,182.16 is not correct. The Respondent agrees and undertakes to indemnify reasonable incremental financial loss incurred by the Petitioner by installing and use of the dry type transformers purchased by the Respondent.
- 6.16. The proposed methodology of calculation of loss is not proper. Hence, the compensation sought by the Petitioner based on it is not valid and permissible and without deciding proper methodology. Denial in accepting bank guarantee by the Petitioner without any explanation is not valid.
- 6.17. The practice adopted by Surat Dimond Bourse has already adopted by GIFT City, Gandhinagar since long. The losses of Dry Type Transformers is slightly higher than

the conventional oil type transformer and the losses supposed to be occurred at any transformer depend on several factors like loading condition, ambient temperature, size of the transformer and modulation arrangement for total connected load as well as apparent power requirement etc. The network development of the Respondent is in such a way that the entire building connected load is divided into two transformers, each with 50% loading, resulting with lesser losses than oil type transformer at 80% loading. The actual loss may be lower as the power requirement is lower on the transformers. The building of the Respondent is energy saving green building certified by the Green Building Council. The Respondent agreed to pay the actual financial burden against the incremental losses of dry type transformers purchased by the Respondent by installing the metering arrangement on 11 KV HV side dry type transformer. The Respondent has never committed to pay any amount against the incremental losses of dry type transformer as One Time Payment. The Respondent agrees to pay incremental losses subject to approval by the Commission. The Commission needs to approve the formula in the interest of justice. The formula proposed by the Petitioner consists of several errors.

- 6.18. The Loss Load Factor applied in the formula needs to be reviewed.
- 6.19. The interest rate considered by the Petitioner is 4.65% which is the interest rate of refundable security deposit. The same shall be revised as 12.67% as approved by the Commission in Tariff Order for True-up for FY 2019-20 in Case No. 1912 of 2020.
- 6.20. The installed dry type transformer by the Respondent is almost double than the actual connected load. Therefore, the losses shall be considered at 50% instead of 100%.
- 6.21. The incremental losses of dry type transformers with consideration of rate of interest approved by the Commission in the Tariff Order and distribution of Loss Load Factor works out to Rs. 1,44,07,078.90. The calculation of the Petitioner for one-time payment of Rs. 4,86,19,123/- is incorrect.
- 6.22. The Respondent has adopted use of dry type transformers, sandwich busbar trunking and smart meter panel at each floor for safety of tenant and visitors coming from other countries. The technology proposed in the project is with consideration

to provide most reliable and safe solution. The cost of dry type transformers is higher than that of oil type transformers. Utilisation of dry type transformer, sandwich busbar trunking and floor wise meters are common practice in high rise buildings in Mumbai and other metro cities and all buildings in the GIFT City.

- 6.23. The formula proposed by the Petitioner needs to be reviewed and decided by the Commission with consideration of actual facts and figures. The Respondent is ready and willing to compensate the financial losses to the Petitioner.
- 6.24. The additional charges demanded by the Petitioner in advance towards recovery of any losses are yet to be decided by the Commission. The same can be leviable on month to month basis and not in advance. No advance can be taken by way of security. For such losses, the additional charge towards loss is recoverable as dues of the licensee and in such situation the distribution licensee has right to refuse to give supply or to disconnect the power supply in the event the amount of losses have not been paid by the Respondent.
- 6.25. The Commission can determine the amount of compensation to the Petitioner for its sufferance due to misfeasance by the Respondent No. 1.
- 6.26. The Respondent No. 1 has installed entire power system at its own cost. The Petitioner has not paid or incurred any amount for installation of supply of network in the existing building. The maintenance and supervision works will be done by the Respondent No. 1 and in that process no expenses will be done by the Petitioner. The Respondent has also undertaken to provide the bank guarantee for one year loss to the Petitioner. The Petitioner is entitled to encash the bank guarantee in case of failure to pay monthly amount of damages to the Petitioner. Thus, it is a genuine way to indemnify losses, if any.
- 6.27. The system installed by the Respondent is similar to the system installed in the GIFT Power Company Ltd. as well as Torrent Power Ltd. However, they are not recovering any charge from the affected persons. It is the mandate of CEA Guidelines which the Petitioner wants to change.

- 6.28. The Respondent has followed the provision laid down in Section 42 of the Electricity Act, 2003.
- 6.29. The Petitioner has incurred an amount of Rs. 21 crore for installation of infrastructure. On that expenditure 15% supervision charges have already been paid by the Respondent to the Petitioner. The Respondent has paid Rs. 7,63,18,590/- on 03.03.2021 for the fixed charges, HT Misc. Project Cost, Security Deposit and Supervision Charges for 4739 new LT Connections against Sr No. 6363872 which was received by the Petitioner on 15.02.2021.
- 6.30. Without any capital investment, the Petitioner will receive revenue from 4769 tenants which will be approximately Rs. 25 crore to Rs. 35 crore per annum.
- 6.31. The Respondent has submitted that the responsibility and expenses for life time operation and maintenance of the electrical infrastructure shall be borne by the Respondent and as such no expenses to the Petitioner. The Respondent has further submitted that the Commission may pass appropriate Order for release of LT connection by the Petitioner.
7. This Petition has been filed by the Petitioner seeking the reliefs consisting of recovery of additional financial losses as well as amendment in Clause 4.105 and 4.106 of the GERC (Electricity Supply Code) Regulations, 2015 notified by the Commission and directing the Respondent No. 1 for carrying out maintenance and safety related works of the network laid down in the buildings as per Clause 36(4) of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended. The said issue may arise in other Distribution Licensees area also. Hence, the Commission has, vide Daily Order dated 13.10.2021, directed the Petitioner to issue Public Notice and invite comments and suggestions on it.
8. In response to the Public Notice, the Commission has received objections/suggestions from the GIFT Power Co. Ltd.
9. **Summary of the suggestions/objections of GIFT Power Company Limited:**

- 9.1. GIFT Power Co. Ltd. has objected to recovery of charges/losses on account of installation of dry type transformers and sandwich busbar etc. installed on each floor of high rise buildings developed by the developers claimed by the Petitioner to avoid financial burden on the licensee and other consumers. It is also objected that such charges are not recoverable from the developer/owners of the building, but the same are part of the losses of the licensee.
- 9.2. It is also objected that maintenance of the distribution infrastructure consists of dry type transformers, sandwich busbars etc. created by the developer of the building by the distribution licensee by such developers. GIFT Power Co. Ltd. has submitted that they have filed a Petition No. 1875 of 2020 having similar type of issues which also is pending. It is submitted that the Central Public Works Department of Ministry of Housing and Urban Affairs issued Guidelines for sub-station & Power Distribution Systems of Buildings in 2019 which consists of provisions for providing uninterrupted power system in such location of receiving sub-station, standby system, power supply in individual building etc.
- 9.3. Relying on the said guidelines GIFT PCL, i.e. Respondent No. 12 submitted that the aforesaid guidelines emphasise the importance of adopting modern practices and installation of dry type transformers with bus bar trunking system for power distribution arrangement in building to provide quality power supply. There is no disruption to the productive operation of various services operating in the building to ensure human comfort.
- 9.4. Installation of oil type transformers are away from the building will significantly increase I² R losses as it is high rise building and the metering arrangement will become cumbersome and increase distribution losses.
- 9.5. It is submitted that the receiving substation is to be located in consultation with the supply company and the architect. Generally it is within the periphery of the campus. It is also stated that to reduce voltage drop cabling cost, it is preferable that each substation feeds power up to 200 metres. These substations are independent buildings on ground floor and house supporting services like DG Sets, UPS etc. When it is a part of the main building, it should be located on ground floor. Basement is avoided due to likely flooding during heavy rains. However, in case basement is

selected, arrangements of protection if flooding and pumping out water must be provided.

- 9.6. In Petition No. 1875 of 2020 filed by the GIFT PCL, various options have been formulated for recovery of losses in energy billing cycle for consumers residing in high rise building and having contract demand of more than 100 kVA which will help in recovery of actual losses on billing cycle basis instead of one-time payment charges.
- 9.7. No additional financial burden is passed on to the Respondent as one time charges but the Commission may allow the Petitioner to recover losses in respective energy billing cycle as proposed in Petition No. 1875 of 2020 filed by GIFT PCL pending before the Commission or in any other suitable way and prohibit recovery of one-time payment charges for compensation.
10. Heard the Learned Advocates and the Representatives of the parties.
- 10.1. The Petitioner is seeking approval of Methodology for deriving One-Time Payment required for compensating incremental losses for utilisation of Dry Type Transformer in place of Oil Type Transformer and Installation of Sandwich type Bus-bar Trunking system for Providing service line instead of conventional service cable for proposed high rise complex as insisted by Respondent No. 1 which results in incremental losses and issue of Point of Supply.
- 10.2. There is no dispute between the parties on the obligation of Respondent No. 1 in relation to the losses, operation and maintenance of the transformer, to ensure that there is no expense to the Petitioner.
- 10.3. The Respondent No. 1 has also admitted in their submission dated 28.09.2021, that the loss due to use of Dry Type Transformer is higher and will lead to financial burden to the Petitioner due to higher losses.
- 10.4. The only dispute between the parties is regarding cost of such incremental losses, which is to be borne by the Respondent No. 1. The Petitioner has given a detailed presentation for the basis on which demand has been made by the Petitioner for the

incremental losses to be compensated by Respondent No. 1 for the life time of the transformers.

- 10.5. It is submitted by the Petitioner that the proposed one-time payment is also necessary in view of the fact that the Respondent No. 1 is only a developer. Therefore, it is in the interest of the Petitioner and also other consumers that the developers pay the incremental losses as a one-time measure, as proposed in the Petition.
- 10.6. It is submitted that the Respondent No. 1 have represented in their reply dated 28.09.2021 that LLF (Loss Load Factor) applied in formula needs to be reviewed and the interest rate shall be revised, which is not correct. It is submitted that the LLF formula taken in calculation is as per GUVNL Circular and the Interest rate taken (4.65%) is as per Tariff Order and 12.67% is rate of interest on Government loan.
- 10.7. The Petitioner has also relied upon Clause 4.5.11 of the Gujarat Electricity Distribution Code, Notification 6 of 2004, which is as under:

“The following parameters of equipments and system designs shall be standardised to facilitate easy replacement and reduction of inventories of spares in stores:

- (a) Capacities of power transformers,*
- (b) Capacities and designs of distribution transformers,*
- (c) 22 kV/11kV substation layouts,*
- (d) Pole mounted substations,*
- (e) Sizes of bus bars,*
- (f) Capacities and ratings of circuit breakers and instrument transformers,*
- (g) Earthing,*
- (h) Lightning arresters,*
- (i) Control panels,*
- (j) Station batteries,*
- (k) Fire extinguishers.*
- (l) Maintenance tools*
- (m) Safety equipments*
- (n) Energy meters*
- (o) Wires and cables*

(p) Clamps and connectors”

10.8. It is submitted that according to above, all subsidiary Companies of GUVNL (DGVCL, MGVCL, UGVCL & PGVCL) are utilising Energy efficient Oil Cooled transformer of maximum capacity up to 500 kVA for catering power supply in their respective jurisdiction and same is maintained in their inventories.

10.9. Further, the dry type transformers are not procured or stocked by the Petitioner and the said transformers are not maintained in stores by the Petitioner. The Petitioner is also not acquainted in operation and maintenance of such transformers. It is for this reason, the Petitioner insisted on the said obligation to be that of the Respondent No. 1, which has been agreed by the Respondent No. 1 in their submission dated 28.09.2021.

10.10. The Petitioner further submitted that according to Clause 4.5.12 of the Gujarat Electricity Distribution Code, the Petitioner is required to procure equipment to minimise losses. The said clause reads as under:

“12. The planning of the Distribution System shall always keep in view the cost effectiveness and reduction in energy losses without sacrificing the requirements of Security Standards and Safety Standards for the Distribution System.”

10.11. Further, Section 42 (1) of the Electricity Act, 2003 is reproduced as under:

“42 (1) It shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act”

10.12. Accordingly, the Petitioner is extending their distribution network with overhead electrical line as per technical feasibility and utilising Oil type transformer having lower losses compared to Dry type Transformers as per IS 1180 and Energy Conservation Building Code, 2017.

10.13. The Petitioner has submitted that Respondent No. 1 has requested to install meter on each floor of Multi-Storeyed Building. In this regard, Clause 6.10 of the GERC

(Electricity Supply Code and Related Matters) Regulations, 2015, inter-alia, reads as under:

“6.10 The consumer shall provide suitable and adequate space for installation of the meter supply in such a manner that it is always accessible to the licensee or its representatives.

In case of multi-storeyed buildings, it shall be fixed on the ground floor/rising mains having proper air ventilation & adequate illumination.”

10.14. Further, the Petitioner has submitted that Regulation 36 (3) and (4) of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, inter-alia, provide as under:

“36. Provisions for supply and use of electricity in multi-storeyed building more than 15 meters in height –

.....

(3) The supplier or owner of the installation shall provide at the point of commencement of supply a suitable isolating device with cut-out or breaker to operation on all phases except neutral in the 3-phase, 4-wire circuit and fixed in a conspicuous position at not more than 1.70 meters above the ground so as to completely isolate the supply to the building in case of emergency.

(4) The owner of occupier of a multi-storeyed building shall ensure that electrical installations and works inside the building are carried out and maintained in such a manner as to prevent danger due to shock and fire hazards, and the installation is carried out in accordance with the relevant codes of practice.”

10.15. It is submitted that as per above provisions, it is specifically provided that in case of multi-storeyed buildings, the meter shall be provided on the ground floor/rising mains. The rising mains is up to 1.70 meters and to ensure that the installations are maintained in such manner as to prevent danger due to shock and fire hazards. The above provision is on account of the safety requirements, which is paramount. For this reason, the Petitioner has installed meters for other multi-storeyed buildings only on the ground floor/rising mains and not above 1.70 meters in any case.

10.16. The Petitioner has submitted that the Clause 4.27 (1) of GERC (Electricity Supply Code and Related Matters) Regulations, 2015 states as under:

“4.27 During the inspection, the licensee shall:

(1) Fix the point of supply and the place where the meter and the MCB etc. shall be installed in consultation with the consumer:

Provided that the service line shall be laid at an accessible location and the meter shall be fixed outside or at the entry point of the premises in such a manner that it is protected from elements like rain etc. and is easily accessible without getting the premises unlocked or opened for this purpose;

In no case, the Distribution Licensee shall fix its apparatus, meter or any of its property in a place, which entails entry by its employee into private quarters.”

10.17. It is submitted that in the case of Respondent No. 1, bus-bar trunking system and floor wise metering point of multi-storeyed building, the service line will not be easily accessible.

10.18. It is submitted that the internal wiring inside the building is laid by the developer / consumer for which no approval or safety check is carried out by the Petitioner. The Petitioner cannot install the meters after the internal wiring in the building starts, as the safety aspects cannot be taken care of by the Petitioner, apart from it being contrary to the Regulations.

10.19. It is submitted that apart from the safety aspects, the meter readings and maintenance would also become very cumbersome. It is somewhat difficult for the Petitioner officials to visit the individual meters at individual floors for meter readings and other aspects.

10.20. Further, the Petitioner also has to ensure sufficient air ventilation and adequate illumination for individual meters, which is not possible if the meters are segregated in different floors.

- 10.21. It is submitted that this proposal has also not been disputed by the Respondent No. 1 in its reply filed before the Commission.
- 10.22. The Petitioner has submitted that in the matter of Underground Service Cable, Case No. 51/2014 (*Shri Prakashbhai Parashmal Shah and others Versus Deputy Engineer, DGVCL, Rander T-1, Subdivision*) before the Electricity Ombudsman, Para 4.15 and 4.16 of the Order decided that the liability and responsibility is on the licensee for service line and equipment up to point of supply.
- 10.23. The Petitioner has produced a copy of the Kerala Gazette and submitted that the Kerala State Electricity Regulatory Commission has notified Kerala Electricity Supply Code, 2014 vide Notification No. 215/DD/T&D (Rev) 2014/KSERC dated 31.01.2014, in which in Clause No. 49 the provision is made for electricity connection to high rise building, colony and to residential, commercial or industrial complex. The Kerala State Electricity Regulatory Commission has also made amendment in Para 5 of Clause No. 49 vide notification no. 609/D(T)/2018/KSERC dated 22.01.2020 called as "The Kerala Electricity Supply (Amendment) Code, 2020. The Petitioner has also submitted that the electricity network / infrastructures in the high-rise building consist of transformers, busbars, metering system be installed and maintained by developers of such buildings or association of such building etc. The similar provisions are also made by the Commission. The meters need to be installed only on the ground floor / rising mains up to 1.70 meters, beyond which the safety and other issues are not the responsibility of the Petitioner.
- 10.24. Looking to the above facts and provision of various rules, regulations and Act the Petitioner has requested the Commission to decide the matter of One-time Payment for incremental losses and handover lifetime responsibility of Bus Bar trunking system rising up to 15th floor of each building instead of conventional service line and other related mechanism developed by the Respondent No. 1.
- 10.25. The Petitioner has also requested the Commission to make regulation for such type of infrastructures developed by any developer under this type of new concept so that no additional financial burden to be borne by Discoms or and no legal discrepancies arise to define point of supply. It is requested to pass order looking to the broader

prospective of this matter as the order in this will affect all the Discoms of Gujarat and even other Discoms of India for catering power supply in Multi Storeyed building.

10.26. The Petitioner submitted that there are chances of theft of energy. The licensee will not be able to detect such theft easily. It will create burden due to security aspect also. Moreover, in case of electrical accident or hazard or fire difficulties arise to attend the same. Hence, energy meters are to be installed at ground floor in order to overcome various difficulties. The Petitioner has objected to installation of Dry Type Transformers place, meters in the premises relying on the provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended from time to time more particularly for supply and use of electricity in multi-storeyed building more than 15 meters in height and other relevant provisions of the Electricity Act, 2003, Rules, Regulations, etc. pertaining to metering wherein it is submitted that meters to be provided on the ground floor / rising mains and the rising mains is up to 1.70 meters and thus the demand of the Respondent No. 1 to install meters on each floor of multi-storeyed building cannot be accepted.

10.27. Respondent No. 12 GIFT power Company Ltd. contended that intention of the Petitioner to install energy meter at ground floor relying on CEA (Measures related to Safety and Electric Supply) Regulations, 2010 is not valid on following reasons:

- (i) The aforesaid Regulations pertain to measures related to safety aspects and electric supply aspects. It has no linkage with the electric supply.
- (ii) Regulation 36 (3) of the aforesaid Regulations provides for installation of isolating device with cut out or breaker to operate all phases except neutral in three phase four wire circuit and fixed in a conspicuous position at not more than 1.70 meter above the ground so as to completely isolate supply to the building in case of emergency. It has not stated with regard to installation of meter at 1.70 meter from the ground.
- (iii) So far as installation of meter is concerned, CEA has notified the CEA (Installation and Operation of Meters) Regulations, 2006 and also made amendment in it from time to time. The said Regulations state about interphase meter, consumer meter and energy accounting and audit meter.

The location of meters be specified by the appropriate Commission as per the aforesaid Regulations. Thus, the said Regulations do not provide the location of the meter as contended by the Petitioner. The consumer meter be provided by the licensee as per the provision of Regulations notified by the Commission. Hence, the contention of the Petitioner that consumer meter shall be located at ground floor at the height of 1.70 meter is not correct.

11. The Petitioner prayed for approval of methodology for deriving one-time payment required for compensating incremental losses in case of utilization of dry type transformer in place of oil type transformer and installation of sandwich type bus bar trunking system for providing service line instead of conventional service cable for proposed high rise complex as insisted by the Respondent which results in incremental losses and decide issue of point of supply.
- 11.1. The Respondent No.1 is also agreed to indemnify the reasonable incremental financial loss incurred by the Petitioner by installing and use of the dry type transformers purchased by Respondent No.1, if the subjected cost against the incremental losses as mentioned by the Petitioner is justified and approved by the Commission.
- 11.2. The Respondent has submitted that the petition deserves to be dismissed with costs or in the alternative the petition be kept sine a die for three months and the parties to the Petition be directed to submit their reports as to the loss and other aspect of the installation and thereafter the amount of bank guarantee to be decided which will serve the purpose of the parties and will do justice to the parties at large.
- 11.3. Referring to clause No. 6.10 of the Electricity Supply Code, 2015 and Regulation 36(3) of the CEA Regulations submitted that the officials from CEI office has inspected the entire infrastructure developer by the Respondent No.1 and granted certificate for entire installation and the same was conveyed during last hearing.
- 11.4. It is submitted that, with regards to the concern from the DGVCL in regards to the responsibilities of life time operation and maintenance, the Respondent No.1 shall take the responsibility for life time operation and maintenance in prescribed format provided by DGVCL.

CEI Submission:

12. During hearing Shri R. B. Desai, Dy. C.E.I., Vadodara, on behalf of the Office of the Chief Electrical Inspector (CEI), submitted that the infrastructure in the Respondent No.1 multi storied building checked by them with regard to the main isolating switch installed in the building to isolate the electric power supply in case of any accident is easily accessible or not. Further, they have checked the infrastructure of the Respondent No. 1 and provided approval as per Regulation 36 and 43 of the CEA (Measures relating to Safety and Electric Supply) Regulations, 2010. He submitted that they have inspected the infrastructure from Electrical Safety point of view and necessary certificate has been issued. Further, he submitted that location of meter is purely a commercial matter.
13. Shri V. R. Suthar, Electrical Inspector, Surat, on behalf of the Office of the Chief Electrical Inspector (CEI), submitted that Respondent No. 1 has installed the dry-type transformer which can be installed at any floor as they are not having oil transformer and so they are safe to install. He submitted that there must be an isolating facility at HT and LT side, which is checked by them. Moreover, in the electric installation proper and effective earthing needs to be carried out. It is further submitted that he has verified the dry type transformer established in upper basement seems safe as dry type transformer is not consisting of any oil. Hence, there is no chance of fire. The permission is granted to energise transformers under the Regulation 43 of CEA Regulations, 2010 by him.
14. It is necessary to refer to the relevant Sections 43 of the Electricity Act, 2003, which is as under:

“Section 43. (Duty to supply on request): --- (1) 1[Save as otherwise provided in this Act, every distribution] licensee, shall, on an application by the owner or occupier of any premises, give supply of electricity to such premises, within one month after receipt of the application requiring such supply:

Provided that where such supply requires extension of distribution mains, or commissioning of new sub-stations, the distribution licensee shall supply the

electricity to such premises immediately after such extension or commissioning or within such period as may be specified by the Appropriate Commission:

Provided further that in case of a village or hamlet or area wherein no provision for supply of electricity exists, the Appropriate Commission may extend the said period as it may consider necessary for electrification of such village or hamlet or area.

¹*[Explanation.- For the purposes of this sub-section, "application" means the application complete in all respects in the appropriate form, as required by the distribution licensee, along with documents showing payment of necessary charges and other compliances.]*

(2) It shall be the duty of every distribution licensee to provide, if required, electric plant or electric line for giving electric supply to the premises specified in sub-section (1):

Provided that no person shall be entitled to demand, or to continue to receive, from a licensee a supply of electricity for any premises having a separate supply unless he has agreed with the licensee to pay to him such price as determined by the Appropriate Commission.

(3) If a distribution licensee fails to supply the electricity within the period specified in sub-section (1), he shall be liable to a penalty which may extend to one thousand rupees for each day of default."

From the above provision, it appears that it is the duty of the distribution licensee to provide supply of electricity within one month of the application received from person such as occupier or owner of premises. The aforesaid provision also provides that in case where supply requires extension of distribution mains, or commissioning of new sub-stations, the distribution licensee shall supply the electricity to such premises immediately after such extension or commissioning or within such period as may be specified by the Commission. Sub-section (2) of Section 43 provides that it is the duty of the licensee to provide, if required, electric plant or electric line for giving electric supply to the premises specified in Section 43(1) of the Act.

"Section 42. (Duties of distribution licensee and open access): ---

(1) It shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act."

Section 42(1) provides that it shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in its area of supply and to supply electricity in accordance with the provisions contained in the Act. Thus, it is the duty cast upon the Distribution Licensee to develop and maintain an efficient and economical distribution system in its area of supply. It is also necessary to refer the following definitions provided in the Act which are relevant in this case.

14.1. Section 2(18) defines "Distribution main" as below:

"distributing main" means the portion of any main with which a service line is, or is intended to be, immediately connected;

The aforesaid definition provides that the portion of any main with which a service line is or is intended to be immediately connected is qualified as Distribution main.

14.2. Section 2(19) defines "Distribution system" as under:

"Distribution system" means the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers;

The Distribution system in the present case is system of wires and associated facilities between the delivery points and points of connection to the installation of consumer connection.

14.3. Section 2(20) defines "Electric line" of the Act as under:

"Electric line" means any line which is used for carrying electricity for any purpose and includes:

(a) any support for any such line, like any structure, tower, pole or other thing in, on, by or from which any such line is, or may be, supported, carried or suspended; and

(b) any apparatus connected to any such line for the purpose of carrying electricity;

The electric line means line used for carrying electricity includes support for line, structure, power, pole, support system where it is suspended or any apparatus.

14.4. Section 2(22) defines “Electrical plant” of the Act as under:

“Electrical plant” means any plant, equipment, apparatus or appliance or any part thereof used for, or connected with, the generation, transmission, distribution or supply of electricity but does not include-

(a) an electric line; or (b) a meter used for ascertaining the quantity of electricity supplied to any premises; or (c) an electrical equipment, apparatus or appliance under the control of a consumer;

Electric plant means equipment, apparatus or appliances or any part thereof used, connected with generation, transmission, distribution or supply of electricity, it does not include electric line, meter, an equipment, apparatus or appliance under the control of consumer.

14.5. Section 2(40) defines “line” as under:

“Line” means any wire, cable, tube, pipe, insulator, conductor or other similar thing (including its casing or coating) which is designed or adapted for use in carrying electricity and includes any line which surrounds or supports, or is surrounded or supported by or is installed in close proximity to, or is supported, carried or suspended in association with, any such line;

Line means wire, cable, tube, pipe, insulator, conductor or other similar thing designed or adopted for use in carrying electricity, it includes any line surrounded or supported or close in proximity and surrounded, supported, carried or suspended with such line.

14.6. Section 2(42) defines “main” as under:

“main” means any electric supply-line through which electricity is, or is intended to be, supplied”

Main means any electric supply line through which electricity is supplied or intended to be supplied.

14.7. Section 2(61) defines “service line” as under:

“service-line” means any electric supply-line through which electricity is, or is intended to be, supplied –

(a) to a single consumer either from a distributing main or immediately from the Distribution Licensee's premises; or

(b) from a distributing main to a group of consumers on the same premises or on contiguous premises supplied from the same point of the distributing main”

Service line means electric supply line through which electricity is intended to be supplied to a single consumer either from distribution main or immediately from the distribution licensee premises or from distribution main to group of consumers on the same premises or on contiguous premises supplied from same point of the distributing main.

14.8. Section 2(70) defines “Supply” as under:

“Supply”, in relation to electricity, means the sale of electricity to a licensee or consumer”

Supply of electricity means sale of electricity to a licensee or consumer.

On combined reading of aforesaid provisions of the Electricity Act, 2003 it transpires that the duty cast upon the Distribution Licensee to provide electricity supply at consumer premises by establishing efficient and economical distribution system and also maintain the same.

14.9. Further, it is also necessary to refer Section IV of the Distribution Code pertaining to Distribution Planning Code. The relevant portion of the said Code is reproduced below:

“4.1(1) The Distribution Planning Code specifies the technical & design criteria and procedures to be followed by the Distribution Licensee for a proper planning and development of the Distribution System. This Code is also applicable to the Users of the Distribution System for their planning and development in so far as they affect the Distribution System.

.....

.....

4.1(3) The development of the Distribution System must be planned sufficiently in advance allowing adequate time to obtain the required statutory clearances, consents or way leaves, the detailed engineering, design and construction work to be carried out and completed. The suitable management techniques shall be implemented allowing for sufficient time for critical activities and to co-ordinate all the activities in an efficient manner. These shall be taken care of at the time of planning itself.”

According to above provisions of Distribution Code notified by the Commission the Distribution Licensee shall carry out system planning and security standard for providing quality of power supply with consideration of necessary statutory approval clearance and carried out all the activities in an efficient manner. The planning is required to be carried out in advance with consideration of detailed engineering, design, construction work etc.

14.10. It is also necessary to consider system planning and security standard as stated below:

The Distribution System Planning and Security Standard specifies the guidelines for planning methodology of the Distribution System. The scope of this standard covers:

(a) Quality of power supply

- (b) Load forecast*
- (c) Planning procedure*
- (d) Service area of a distribution network.*
- (e) Planning standards.*
- (f) Reliability analysis.*
- (g) Standardisation of design of distribution transformer*
- (h) Standardisation of substation layouts*
- (i) Reactive Compensation*
- (j) Service Mains (k) Metering Cubicles*
- (l) Security Standards*

6.0 PLANNING STANDARDS

1. *Standardisation of Sizes and Ratings: Adequate provision for future load development shall be made while selecting the sizes of power conductors and rating of distribution transformers. The sizes of power conductors, insulators, lightning arresters, transformers, switchgear, etc. used in the Distribution System shall be standardised with the objective of reducing inventory and standard specifications shall be prepared.*
2. *Design Criteria for Distribution Lines*
 1. *Radial system of distribution can be adopted in rural areas and as far as possible loop system with provision for feeding from at least one alternate source shall be adopted in urban areas.*
 2. *The HT and LT distribution lines shall be any of the following types according to the necessity at the required area.*
 - (a) Over-head line with bare conductors;*
 - (b) Over-head line with Aerial Bunched Cables;*
 - (c) Under-ground Cables.*
3. *In thickly populated cities, in areas having heavy traffic densities, under ground cable installation shall be considered to the extent possible. Wherever a number of trees are encountered, either in residential locations or in gardens and forests, over-head lines with aerial bunched cables shall be adopted. In other places over-head lines with bare conductors shall be*

adopted. The following standards shall be adopted for planning and design purposes:

- (a) The design and construction of over-head lines with bare conductors shall be generally in accordance with IS 5613 Part I, sections 1 and 2.*
- (b) Vertical configuration of conductors for LT distribution lines, to prevent accidental short circuit due to galloping of conductors, shall preferably be adopted in rural areas since the spans are large in such areas.*
- (c) The maximum length of LT and HT lines shall be maintained within the prescribed limit so as a safe and quality power may be delivered.*
- (d) The design and construction of over-head lines with aerial bunched cables shall be generally in accordance with REC Specifications 32 and IS 14255.*
- (e) The design and construction of under-ground cables shall be generally in accordance with IS 1255.*

4 The line supports can be of steel, wood, RCC or PCC. The RCC and PCC poles are preferred over the other two considering their cost and longer life. The choice of the size of conductor for a line shall be made based on the following criteria:

- (a) Power to be transmitted and the techno-economic studies conducted for selecting the size of conductor according to the cost of loss of power and the interest and depreciation charges on the cost of the conductor thus selected;*
- (b) Length of Line;*
- (c) Line Voltage;*
- (d) Permissible voltage regulation;*
- (e) Mechanical strength;*
- (f) In coastal areas and other areas where severe corrosion is expected due to heavy rainfall and/or salinity in atmosphere and theft prone areas, appropriate conductors only shall be used.*

The Distribution Code notified by the Commission states that it is the duty of the Distribution Licensee to carry out necessary planning in advance with

consideration of the parameters as specified in the Distribution Code wherein the sizes of power conductors, insulators, lightning arresters, transformers, lines, switchgear etc. used in the Distribution System shall be standardized with the objective of reducing inventory and standard specifications shall be prepared.

14.11. Clause 8 of the Distribution System Planning and Standards provide about standardization of design and rating of distribution transformers. The said clause 8 is reproduced below:

“8.0 STANDARDISATION OF DESIGN AND RATING OF DISTRIBUTION TRANSFORMERS

- 1 The design and rating of distribution transformers shall be standardised. As an initial step, various technical parameters required for the design shall be incorporated in the specifications based on the experience on performance gained among the various designs so far adopted. Later, standard designs of the transformers and their detailed construction drawings shall be evolved based on the performance of these transformers. These shall be adopted for future procurement. This also ensures the inter-changeability of components of similar transformers manufactured by any manufacturer.*
- 2 A good quality assurance plan shall be aimed at the following:*
 - (a) Good quality of raw materials;*
 - (b) Quality control during manufacturing and routine tests;*
 - (c) Acceptance tests at the time of taking delivery;*
 - (d) Inspection and tests on transformers received at stores on random sampling;*
 - (e) Thorough test on one transformer in a lot selected at random. The transformer should be completely dismantled. The quality of core, coil, insulation etc are physically inspected and samples of insulation and other components used etc., are tested.*
 - (f) Ensuring performance guarantee for all distribution transformers for a minimum period of 3 years.”*

According to these provisions, the design and rating of distribution transformers shall be standardized with consideration of technical parameters and experience on the performance gained among various designs adopted by the Licensee. It is also necessary that for future requirement experience gained from the performance of transformers be utilized. Moreover, good quality assurance plan shall be ascertained with consideration of quality of material. Thus, the Distribution Licensee is required to carry out planning for creation of distribution system required to be laid down in the license area.

14.12. It is also necessary to consider Clause 3 which states about management of the Distribution Code wherein provision of Distribution Code Review Panel is provided in Section 3.3. Also, in this connection, it is pertinent to note here the functions of the review panel which are as under:

"3.4 FUNCTIONS OF THE REVIEW PANEL:

The functions of the Review Panel shall be:

- (a) Maintenance of the Distribution Code and its working under continuous scrutiny and review.*
- (b) Consideration of all requests for review made by any User and publication of their recommendations for changes in the Distribution Code together with reasons for such changes.*
- (c) Provide guidance on interpretation and implementation of the Distribution Code.*
- (d) Examination of the problems raised by any User as well as resolution of the problems.*
- (e) Ensuring that the changes/modifications proposed in the Distribution Code are consistent and compatible with standard technical manual or guidelines, codes, laws, acts, rules and regulations in force at that point of time.*
- (f) Constitution of a sub-committee for detailed study of various matters pertaining to the Distribution Code and circulation of the findings and recommendations to Review Panel Members and the entities concerned.*
- (g) Making arrangements for deliberation of the issues (regarding sub committee findings and recommendations) in the Review Panel meetings the time frame, as provided by these sub-committees.*

(h) Holding of meetings as required but at least one meeting shall be held in every three months.

(i) Holding of meetings by sub-committees including with any User or with groups of Users to prepare proposals for review panel consideration.”

The Review Panel is empowered to consider the request of the Users for review of provisions of the Distribution Code. It also provides for guidance, interpretation and implementation of the Distribution Code. The Review Committee consists of different personnel who shall examine the problems raised by the Users and proposes resolution of the same. It also provides for a Review Panel committee to be constituted for detailed study of various matters pertaining to Distribution Code and deliberate on the issues.

14.13. Further, Regulation 3.5 of the said Code provides that any User seeks amendment to the Distribution Code shall send written request to the Secretary of the Review Panel with a copy to this Commission. The Secretary will circulate the proposed changes/modification to all the panel members for their written comments. The Review Panel shall deliberate on the issue and prepare Report and forward to the Commission for consideration and approval of the commission and thereafter necessary amendments / revision may be incorporated in the Distribution Code.

14.14. From the above, it is clear that necessary provisions are also made in the Distribution Code for review of the provisions of the Distribution Code provided in the Regulations.

14.15. It is also necessary to refer the GERC (Electricity Supply Code and Related Matters) Regulations, 2015 notified by the Commission. The relevant provisions of the said Regulations are referred and discussed below:

Connection point 2.3 (17)

“(17) ‘Connection Point’ refers to a point at which the consumer’s installation and/or apparatus are connected to distribution licensee’s distribution system;”

The connection point is a point at which consumer installation and /or apparatus are connected to distribution system of the distribution licensee.

Clause 2.3 (25) – Distribution mains

“(25) ‘Distribution Mains’ refers to the portion of any main with which a service line is, or is intended to be, immediately connected;”

It refers the portion of any mains with which a service line is or is intended to be immediately connected.

2.3 (27) – Distribution System

“(27) ‘Distribution System’ refers to the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers;

Explanation: Any system consisting mainly of overhead lines, underground cables, service lines, electrical plant, control switchgear and meters having design voltage of 33 kV and below and shall also include any other system of higher voltage as the Commission may specifically recognize. The Distribution System shall not include any part of the Transmission System except the terminal equipment (metering system, CT and PT) connected at consumer end and used for the supply of electricity to extra high voltage (66 kV and above) consumers;”

Distribution system is the wires and associated facility between the delivery point of the transmission line or generating station of connection and the point of connection to the installation of the consumer. It shall not include any part of the transmission system except terminal equipment connected at consumer end and use for supply of electricity to EHV consumers.

2.3 (29) – Electric line

“(29) ‘Electric Line’ refers to any line which is used for carrying electricity for any purpose and includes: (i) any support for any such line, that is to say, any structure, tower, pole or other thing in, on, by or from which any such line is, or may be,

supported, carried or suspended; and (ii) any apparatus connected to any such line for the purpose of carrying electricity;”

Any line which is used for carrying electricity for any purpose and includes any support for any such line like any structure, tower, pole or other things in or, by or from which any such line is, or may be supported, carried or suspended and any apparatus connected to any such line for the purpose of carrying electricity.

2.3 (40) – Interconnection

“(40) ‘Interconnection’ shall have the same meaning as “connection point” as defined in sub clause 2.3(17);”

Interconnection means as connection point defined in connection point, i.e. point at which consumer installation / apparatus are connected to distribution licensee, distribution system.

2.45 – Main

“(45) ‘Main’ refers to any electric supply line through which electricity is or is intended to be supplied;”

It refers to any electric supply line through which electricity is or is intended to be supplied.

2.52 – Point of supply

“(52) ‘Point of Supply’ refers to, unless otherwise agreed to, the incoming terminal of the cut-out installed by the consumer, i.e. Meters/switches installed at the Consumer’s Premises in case of LT Consumers; Distribution box installed on transformer centre / substation established on Consumer’s premises, when meter is installed on such a transformer centre/ substation. Control switchgears that may be installed in the Consumer’s Premises as provided subject to provision of this code in case of HT and EHT Consumers;”

The agreed incoming terminal of cut-out installed by the consumer i.e. meter/switches installed at consumer premises in case of LT consumer; distribution box installed on transformer center/ sub-station established on consumer premises when meter is installed on such a transformer center/sub-station, control switchgear that may be installed in the consumer premises as provided subject to provision of the electricity supply code in case of HT/EHT consumer is called point of supply.

2.56 – Service line

“(56) ‘Service Line’ refers to any electric supply line through which electricity is or is intended to be supplied: - a) to a single Consumer either from a distributing main or immediately from the Distribution Licensee’s Premises, or b) from a distributing main to a group of Consumers on the same Premises or contiguous premises supplied from the same point of the distributing mains;”

It refers any electric supply line through which electricity is or intended to be supplied to a single consumer either from distribution main or immediately from the distribution licensee premises or from a distribution main to a group of consumers on the same premise or contiguous premises supplied from same point of distribution mains.

2.59 – Supply

“(59) ‘Supply’, in relation of electricity, refers to the sale of electricity to a licensee or consumer;”

Supply in relation to electricity refers as sale of electricity to a licensee or consumer.

The aforesaid provisions are relevant with regards to the electricity supply connection point to the consumer by the licensee and to decide about what part of the supply system of the distribution licensee falls under purview of the licensee and distribution licensee.

14.16. It is also necessary to refer the provision with regards to electricity supply code review panel provided in the aforesaid Regulation in Section 1 of the said Code. The constitution of review panel for electricity supply code is provided in clause 1.1 of the said Regulations. The function of review panel provided in Regulation 1.6 of the said code which are stated below:

“1.6 Functions of Review Panel

The functions of the Review Panel shall be as follows:-

- a) Review of the Supply Code as and when necessary.*
- b) Consideration of requests for review and making recommendations along with reasons to the Commission.*
- c) Issue of guidelines on implementation of the Supply Code.*
- d) Review of causes of electrical accidents and recommendations about required remedial measures in the light of reports of the Electrical Inspector under Section-161 of the Electricity Act, 2003 to avoid recurrence of such accidents.*
- e) Ensuring the consistency of the changes/modifications proposed in the Supply Code with other Codes, Laws, Acts, Rules and Regulations in force at that point of time.*
- f) Undertaking detailed studies of matters concerning the Supply Code and circulate findings and recommendations of such studies among the members of the Review Panel and other concerned entities.*
- g) Holding of regular meetings as required and at least once in six months. h) Holding of meetings by any sub-committee of the Review Panel for discussing specific issues raised by any group of stake holders.”*

The aforesaid provision provides that the review panel carryout review of the provisions of supply code and it ensures the consistency of the changes, modifications proposed in the supply code with other codes, laws, Acts, Rules, and Regulations in force. It also undertakes detailed study of matter concerning the supply code and circulate findings and recommendations of such study amongst the members of the review panel. Thus, the aforesaid provisions provide that review panel of the supply code suggest the necessary changes in the existing code. It can also undertake detail study of the subject matter.

Regulation 1.7 of said Regulations provides that any person / user seek amendment to the supply code send it written request to the Secretary of the review panel with a copy to the Commission. The Commission also forward same to the review panel if so desire. The recommendations of review panel in amendment to the Regulations if any, proposed the same shall be forwarded with recommendations to the Commission for proposed amendments.

14.17. It is also necessary to refer the following provisions of the supply code which are relevant in this case.

“Licensee’s obligation to extend the distribution system and consumer’s share in the cost

4.3 The licensee is responsible for ensuring that its distribution system is upgraded, extended and strengthened to meet the demand for electricity in its area of supply. The cost of extension of distribution mains and extension / up-gradation of the system up to the point of supply for meeting demand of new consumers and the cost of extension of service connection from the distribution mains to the point of supply shall be levied as per the GERC (Licensee’s Power to Recover Expenditure incurred in providing Supply and Other Miscellaneous Charges) Regulations, 2005 and amendments thereof.”

The aforesaid provision provides that the distribution licensee is obligated to upgrade, extend, strengthen the distribution system to provide electricity supply to the consumer. It is also provided that the cost of extension of distribution mains and extension, upgradation of system upto the point of supply of the consumers to meet out its demand the licensee is eligible to recover the cost as per the GERC (Licensee’s Power to Recover Expenditure incurred in providing Supply and Other Miscellaneous Charges) Regulations, 2005 and amendments thereof notified by the Commission.

Regulation 4.36 pertaining to provide space in the premises by the applicant.

“4.36 If the licensee is of the opinion that provision of supply requires installation of a distribution transformer within the applicant’s premises, the applicant shall

make available to the licensee a suitable room or portion of land within his premises for installation of the distribution transformer.”

The aforesaid provisions provide that if the licensee is of the view that provisions of supply requires installation of distribution transformer within the applicant’s premises the applicant shall make available suitable room or portion of land within his premises for installation of distribution transformer to the licensee.

“Point of Supply

4.105 Unless otherwise agreed to, the point of supply shall be the incoming terminal of the cut-out installed by the consumer, i.e. (a) the incoming terminal of the cut-out /MCB/ELCB installed by the consumer immediately after meter in case of LT Consumers; (b) Distribution box installed on transformer centre / substation established on Consumer’s premises, when meter is installed on such a transformer centre/substation. (c) Control switchgears that may be installed in the Consumer’s Premises as provided subject to provision of this code in case of HT and EHT Consumers.”

The aforesaid provision provides that unless otherwise agreed the point of supply of the consumer shall be the incoming terminal of the cutout installed by the consumer, i.e. the incoming terminal cutout / MCB / ELCB installed by the consumer immediately after meter in case of LT consumer; distribution box installed on transformer center / sub-station established on consumers premises when meter is installed on such a transformer center / sub-station. Control switchgears may be installed in the consumer premises as provided subject to provision of the supply code in case of HT and EHT consumers.

“4.106 At the point of commencement of supply, the consumer shall provide a main switch/circuit breaker. In addition, HT & EHT consumers shall also provide suitable protective devices as per the provisions of clause 35 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 and amendments thereof. The system of protection shall have to be approved by the licensee before commencement of supply. Meters, MCBs/CBs and associated

equipment procured by the Consumer shall be installed by the licensee at the point(s) of supply.”

The aforesaid provision provides that the point of commencement of supply, the consumer shall provide a main switch, circuit breaker. In addition to HT and EHT consumer shall provide suitable protective device as per the provision of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 and amendment thereof. The system of protection shall have to be approved by the licensee before commencement of supply. Meters, MCBs / CBs and associated equipment procure by the consumers shall be installed by the licensee at the point(s) of supply.

Thus, the aforesaid provisions provide that the point of supply shall be incoming terminal of cutout installed at the consumer premises. The consumer shall require to provide main switchgear, circuit breaker etc. at the point of connection / supply.

“Supply and Installation of Meters and MCBs/CBs

....

6.10 The consumer shall provide suitable and adequate space for installation of the meter supply in such a manner that it is always accessible to the licensee or its representatives.

In case of multi-storeyed buildings, it shall be fixed on the ground floor/rising mains having proper air ventilation & adequate illumination.”

It is also necessary for the consumer to provide suitable and adequate space for installation of meter in such a manner that it is accessible to the licensee or its representative. Further, it is provided that in case of multi storied building it shall be fixed on the ground floor / rising mains having proper air ventilation and adequate illumination.

“6.15 It shall be the responsibility of the licensee to maintain the meter and keep it in working order at all times. The licensee may also have a provision for such metering system where the display unit is at the consumer premises and the

metering unit is outside the premises such as on a pole etc. In such cases, the responsibility of safe custody of the metering unit shall lie with the licensee.”

It shall be the responsibility of the licensee to maintain the meter and keep it in working order at all times. The licensee may also have the provisions for such metering system where the display unit is at the consumer premises and the metering unit is outside the premises, Such as on pole etc. In such cases the responsibility of safe custody of the metering unit shall lie with the licensee.

14.18. In the present case the Petitioner has initially requested that the Commission to consider the specific case of the Respondent No.1 SDB, who has proposed to install dry typed transformer, sandwich bus bar trunking system alongwith installation of smart metering panels at each block of multi-storeyed building. The Respondent SDB has laid down necessary infrastructure consist of dry type transformer installed at basement and bus bar trunking system alongwith smart metering panels installed at each floor of the multi-storeyed building at their cost. It is argued that the proposed installation by the Respondent is new concept and having modern type of technology with latest features for which the Petitioner is not having exposure. It is also argued that the additional financial burden in terms of losses due to adoption of the aforesaid new technology be allowed. The Petitioner has also contended that the Commission assign the maintenance of aforesaid network laid down by it on the Respondent No.1. Moreover, the additional financial burden quantifies by the Commission and the Respondent No.1 be directed to pay the same as one-time payment as the Respondent No.1 is a developer and the supply of electricity be made available to the member / owner of premises in the buildings developed by the project developer, i.e. SDB, having more than 4795 units who become consumer of the Petitioner. It may lead to dispute between the licensee and the consumers if the additional charges for compensation of losses against the network laid down by the Respondent No.1 in future for which the Petitioner is not in fault. It is also prayed that no legal discrepancy arising to define the point of supply issue related thereto if any, arising with consideration of provision made in the Regulations. It is the duty of the Respondent No.1 to operate and maintain the network laid down by them and the Petitioner is not having responsibility for it. The Respondent No.1 agreed to pay compensation towards the additional losses if any, occurred on account of laid down

network by them. They are ready to take responsibility to operate and maintain the network laid down by them.

14.19. The Petitioner requested for adoption of new modern technology with latest features proposed / installed by the Respondent No.1 at their place is concerned, as recorded above Section 42 (1) of the Electricity Act, 2003 provides that it is the duty of the distribution network licensee to laid down efficient and economic distribution in its area of supply and maintain it. Moreover, the distribution code notified by the Commission consists of various provision as stated above, where in it is provided that the distribution licensee shall carryout the planning with consideration of technical and designed criteria to meet out the requirement of the power supply of their license area. There are various parameters need to be considered for various technical and design criteria provided for distribution planning. Moreover, it is also provided that the standardization of the design carried out by the licensee with consideration of operation, maintenance, contingency planning, safety aspects etc. Thus, it is duty of the distribution licensee to carry out the distribution system planning in its area of supply with consideration of various aspects like standardization of deriving rating of transformers, quality power supply, load forecast, reliability etc. as specified in the Regulations by the Commission. Hence, the type of the distribution system consists of transformer, lines, equipment etc. be deployed by the distribution licensee as per its planning which is management and administrative work / function of the licensee and the Commission has no role to specify that what particular type of equipment, transformers, lines, conductor be deployed by the licensee as a part of the distribution system installed in its licensee area.

14.20. Further, it is also provided in the said Distribution Code the provision of distribution code review committee which can review of the existing provision of the said code. Hence, any person / users / licensee desires any change / amendment / modification in the existing distribution code the same may be represented to the Distribution Code Review Committee for review of the said code subject matter and prepare a report on such matter for consideration of the Commission.

14.21. In the present matter we note that the Respondent No.1 has laid down the network consists of dry type transformers, bus-bar trunking system and smart metering panel

system in multi storeyed building. The aforesaid network laid down in the buildings by the Respondent No.1, SDB is whether proper or not is required to verify and decide by the distribution licensee, Petitioner, DGVCL and the Commission cannot go in micro management of the licensee in the aforesaid subject matter. If the network system developed by the Respondent No.1, SDB is permissible or not or whether any change with consideration of standardization of system as a part of distribution system planning, is required or not, the same may be decided by the distribution licensee, i.e. Petitioner.

14.22. Moreover, if they are of view that any views on the subject matter i.e. Standardization of materials etc. requires to verify the same may be referred to Distribution Code Review Committee for their views and report on such subject matter. Hence, the contention and prayer of the Petitioner that the Commission may consider the specific request of the Respondent No.1 for adoption of new concept of modern type of technology with latest features and all equipment like installation of dry type transformers, bus bar trunking system, along with installation of smart metering system etc. is decided by the Petitioner with consideration of provision of Act, and Regulations notified by the Commission as stated above as it is responsibility of distribution licensee to laid down distribution network up to point of supply of the consumer.

14.23. Now, we deal with the issue with regards to direct the Respondent No.1 that it would be liable and responsible for life time maintenance and safety related aspects network developed by the Respondent as per the Clause 36.4 of the CEA (Measures Relating and Electric Supply) Regulations, 2010 on adoption of new concept of dry type transformer, sandwich type bus bar trunking system, RMU, underground cable and LT breakers, etc. is concerned, it is necessary to refer the relevant provision of the supply code as referred above. It is also necessary to refer clause 36 (4) of the CEA (Measures Relating and Electric Supply) Regulations, 2010 reproduced below:

“36. Provisions for supply and use of electricity in multi-storied building more than meters in height: -

.....

(4) The owner or occupier of a multi-storied building shall ensure that electrical installations and works inside the building are carried out and maintained in such a manner as to prevent danger due to shock, and fire hazards, and the installation is carried out in accordance with the relevant codes of practice.”

14.24. The aforesaid Regulations notified by the Central Electricity Authority under Section 177 of the Electricity Act, 2003 pertains to measures relating to safety and electricity supply by the licensee. Regulations 36 pertains to provision for supply and use of electricity multi storeyed building more than 15 meters in height. Regulation 36 (1) of the said Regulations provides that the connected load and voltage supply above which inspection carried out by the electrical inspector for a multi storeyed building more than 15 meters heights shall be notified by the appropriate Government. Clause 36 (3) provides that the supplier of owner of the installation shall provide at the point of commencement of supply, suitable isolating device with cut out or breaker to conspicuous position at not more than 1.70 meters above the ground so as to isolate complete supply to the building in case of emergency.

14.25. Clause 36(4) provides that the owner or occupier of a multi storeyed building shall ensure that electrical installation and works inside the building are carried out and maintain in such a manner as to prevent the danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice. Thus, the aforesaid provision states that the installation and work in the building is carried out and maintain in such a manner that danger due to electric shock and fire hazard be prevented with consideration of the code of practice.

14.26. Regulation 36 (5) provides that no other service pipes and cables shall be taken along the ducts provided for laying power cables and all ducts provided for power cables and other services shall be provided with fire barrier at each floor crossing.

14.27. Thus, the aforesaid provisions state about the measures required to be carried out against safety while electricity supply provided to the consumers / persons in the multi storeyed building having more than 15 meters height.

14.28. The aforesaid provisions state about the measures need to be taken while electricity supply provided in multi storeyed building having more than 15 meter height by the

different entities as specified in the said Regulations. It is the duty of the supplier or owner of the installation at the point of commencement of supply to provide suitable isolating device with cutout or breaker to operate all phases except neutral in the 3-phase 4 wire circuit and fix in conspicuous position at not more than 1.7 meter above the ground so as to completely isolate the supply to the building in emergency.

14.29. Regulation 36 (4) provides about ensuring electrical installation and work inside the building carried out by the owner or occupier to prevent danger due to shock and fire hazard and installation carried out with relevant codes of practice. Thus, it is the duty of the owner or occupier of such building to follow the procedures specified in the said Regulations.

14.30. Therefore, the question of direction and to hold responsibility of Respondent for the maintenance and safety aspects of network does not fall within the purview of this Commission. In case of any grievances or disputes about not following the provisions of CEA (Measures Relating and Electric Supply) Regulations, 2010, the same falls within the jurisdiction of Chief Electrical Inspector and the officers / authority recognized in the said Regulations. Hence, the prayer of the Petitioner on this issue is not accepted as it is beyond the jurisdiction of this Commission.

14.31. Now we deal with the issue raised by the Petitioner that the Commission may consider the amendment passed for the Petitioner to not to impose the Electricity Clause No. 4.105 and 4.106 of the supply code and liability and responsibilities thereof as Respondent wants to adopt new technology i.e. installation of dry type transformer, bus bar trunking system along with installation of smart metering panels etc. is concerned, it is necessary to refer clause 4.105 and 4.106 of the GERC (Electricity Supply Code and Related Matters) Regulations, 2015 stated above. The aforesaid Regulations provide about the point of supply at the consumer place. Regulation 4.105 states about the point of supply shall be incoming terminal of cut out installed by the consumers in following different conditions:

- (i) Incoming terminal of the cut-out / MCB / ELCB installed by the consumer after meter.

- (ii) Distribution box installed on transformer center / sub-station established on consumer premises when meter is installed on such transformer center / sub-station.
- (iii) Control switchgear may be installed at consumer premises as provided subject to provision of the aforesaid Code in case of HT and EHT consumer.

14.32. Regulation 4.106 state about the point of commencement of supply, the consumer shall require to provide main switch / circuit breaker. Further, in case of HT / EHT consumer shall require to provide suitable protective device as per Clause 35 of CEA (Measures Relating and Electric Supply) Regulations, 2010, which provides about supply and use of electricity by the consumers. The said Regulations is reproduced below:

“35. Supply and use of electricity:-

(1) The electricity shall not be supplied, transformed, converted, inverted or used or continued to be supplied, transformed, converted, inverted or used unless the conditions contained in sub-regulations (2) to (8) are complied with.

(2) The following controls of requisite capacity to carry and break the current shall be placed as near as possible after the point of commencement of supply so as to be readily accessible and capable of being easily operated to completely isolate the supply to the installation, such equipment being in addition to any equipment installed for controlling individual circuits or apparatus, namely: -

(i) a linked switch with fuse or a circuit breaker by consumers of voltage which does not exceed 650 V; .

(ii) a linked switch with fuse or a circuit breaker by a consumer of voltage exceeding 650V but not exceeding 33 kV having aggregate installed transformer or apparatus capacity up to 1000kVA to be supplied at voltage up to 11 kV and 2500kVA at higher voltages (above 11 kV and not exceeding 33 kV);

(iii) a circuit breaker by consumers at voltage exceeding 650 V but not exceeding 33 kV having an aggregate installed transformer and apparatus capacity above

1000kVA and supplied at voltage up to 11 kV and above 2500 KVA at higher voltages (above 11 kV and not exceeding 33 kV);

(iv) a circuit breaker by a consumer of voltage exceeding 33 kV.

(3) In case of every transformer the following shall be provided; namely: -

on primary side for transformers a linked switch with fuse or circuit breaker of adequate capacity:

Provided that the linked switch on the primary side of the transformer may be of such capacity as to carry the: full load current and to break only the magnetising current of the transformer:

Provided further that for all transformers:

(a) having a capacity of 5000kVA and above installed before the year 2000; and

(b) having a capacity 1000kVA and above installed in or after the year 2000, a circuit breaker shall be provided: Provided also that the linked switch on the primary side of the transformer shall not required for the unit auxiliary transformer and generator transformer;

(ii) in respect of all transformers installed in or after the year 2000, on the secondary side of all transformers a circuit breaker of adequate rating shall be installed:

Provided that for suppliers transformers of capacity below 1000 KVA, a linked switch with fuse or circuit breaker of adequate rating shall be installed on secondary side.

(4) Except in the case of composite control gear designed as a unit each distinct circuit is to be protected against excess energy by means of suitable cut-out or a circuit breaker of adequate breaking capacity suitably located and so constructed as to prevent danger from overheating, arcing or scattering of hot metal when it comes into operation and to permit for ready renewal of the fusible metal of the cut-out without danger.

(5) The supply of electricity to each motor or a group of motors or other apparatus meant for operating one particular machine shall be controlled by a suitable linked switch or a circuit breaker or an emergency tripping device with manual reset of

requisite capacity placed in such a position as to be adjacent to the motor or a group of motors or other apparatus readily accessible to and easily operated by the person in-charge and so connected in the circuit that by its means all supply of electricity can be cut off from the motor or group of motors or apparatus from any regulating switch, resistance of other device associated therewith.

(6) All insulating materials shall be chosen with special regard to the circumstances of their proposed use and their mechanical strength shall be sufficient for their purpose and so far as is practicable of such a character or so protected as to maintain adequately their insulating property under all working conditions in respect of temperature and moisture; and

(7) Adequate precautions shall be taken to ensure that no live parts are so exposed as to cause danger.

(8) Every consumer shall use all reasonable means to ensure that where electricity is supplied by a supplier no person, other than the supplier shall interfere with service lines and apparatus placed by the supplier on the premises of the consumer.”

Regulation 35 (8) specifically provides that every consumer shall require to ensure reasonably that the electricity is supplied by the supplier, no person other than the supplier shall interfere with service lines and apparatus placed by the supplier on the premises of the consumer.

14.33. Regulation 4.106 of the Electricity Supply Code 2015 notified by the Commission provides that it is the duty of the licensee to ensure an approved system of protection be provided at consumer place before commencement of supply. Meters, MCBs / Circuit breakers and associated equipments procured by the consumer shall be installed by the licensee at the point of supply. Thus, it is the duty of the licensee to ensure for various installation provided before the consumer installation i.e., point of supply be provided with consideration of safety aspects specified in the CEA Regulations as well as necessary cut out / protection system etc. be provided by the licensee and it is the duty of the licensee to provide the electric supply line and necessary equipment up to incoming terminal of the cut out / MCB / ELCB etc. provided at point of supply of the consumer. The contention of Petitioner that maintenance of dry type distribution transformer, bus bar trunking system

alongwith installation of smart metering panels at each floor of multi storeyed building for which the Respondent no.1 agreed to take responsibility and liability be imposed on them under the Regulation 4.105 and 4.106 of the Electricity Supply Code Regulations, 2015 and not on the Petitioner by amendment of Regulation is against not permissible under the existing set up and without actual expenditure and details.

14.34. We note that it is the duty of the distribution licensee to provide supply of electricity at consumer place alongwith necessary distribution system and lines, equipments etc. up to the point of supply as a statutory duty cast upon the licensee in the Electricity Act 2003 as well as Regulations framed by the Commission. The function of supply of electricity alongwith the necessary infrastructure like installation of transformer, bus bar trunking system, service line, installation of meter etc. shall not be passed on or allow to the other person who is neither distribution licensee nor authorized to carry out such activity under the Electricity Act, 2003 or Rules / Regulations notified under the said Act. Hence, the contention / prayer of the Petitioner to pass on the liability and responsibility provided under Regulations 4.105 and 4.106 on the Respondent No.1 as they are agreed for it is contrary to provision of law / Regulations. Hence, the same is not permissible and it is rejected.

14.35. Now, we deal with the issue pertaining to installation of meter at the consumer place, the Petitioner has stated that as per clause 4.105 (a) of the Electricity Supply Code, 2015 notified by the Commission point of supply is defined as “the incoming terminal of the cut-out / MCB / ELCB installed by the consumer immediately after meter in case of LT consumers”. It is also contended that the Respondent no. 1 has proposed the metering point at each floor of the high rise building and LT supply will be extended up to each floor through rising bus bar trucking from LT panel installed at upper basement by adopting new technology concept therefore, the responsibility of the same electric network be assigned to the Respondent including metering system.

14.36. The Petitioner contended that the meters need to be installed at the ground floor and not on each floor of the multi storied building outside the premise of the consumers because the building consists of 15 floors and it also consist of the about 4795 consumers. Moreover, the reading of such meter installed at consumer premises is time consuming. Further, the electric supply i.e. point of supply is upto the premises

of the consumers i.e. outside of the consumer premises of each floor, any theft of the energy take place by any person in that situation the licensee may not come to know about such theft of energy. Moreover, in case of any accident or fire due to short circuit or any reasons in the network upto the consumer premises, i.e. up to point of supply of the consumers the licensee shall be held responsible, but the licensee would not able to operate and maintain such system. The maintenance of such supply and monitoring the network etc. is difficult task for the licensee. Hence, such task be assigned to the Respondent. The licensee shall be allowed to install the meter at ground floor with consideration of the provisions of the CEA (Measures Relating to Safety and Electric Supply) Regulations, 2010 readwith CEA (Installation and Operation of Meters) Regulations, 2006 as amended.

14.37. The Respondent No. 1 and 12 contended that the contentions of the Petitioner are not valid and permissible because Regulation 6.10 of the GERC (Electricity Supply Code) Regulations, 2015 notified by the Commission specifically provided that the energy meter be installed on ground floor / rising mains having proper air ventilation and adequate illumination in case of multi storied buildings. Thus, the Regulations itself provides for installation of meter on each floor having proper air ventilation and adequate illumination. It is further argued that clause 4 of the National Building Code, 2019 notified by the Central Government also provides that in multi storied building dry type transformers be utilized and meters be installed on each floor. Further, it is contended that the Respondent has installed modern technology based equipment in the premises. It is necessary to change with time in the existing system by way of adoption of new technology.

14.38. We have considered the submissions of the parties and also considered in detail various relevant provisions of the law and the supply and distribution codes.

14.39. Regulation 36 (3) provides that it is the duty of supplier or owner of installation to install suitable isolating device with cut-out power breaker to operate on all phases except neutral and three phase four wires circuit and fixed in conspicuous position at not more than 1.70 meter above ground so as to complete isolate supply to the building in the case of emergency. The aforesaid Regulations state about the installation of isolating device provided at the point of commencement of supply to

isolate the supply to the building in case of emergency. The point of supply is not defined in the aforesaid Regulations. However, the supplier is defined in the Regulations as it may be either (i) generating company or (ii) licensee from whose system electricity flow into the system of another generating company or licensee or consumer. Thus, the duty cast upon the installation of isolating device is on the supplier in the aforesaid Regulations.

14.40. Regulation 36 (4) provides that the owner or occupier of the multi storied building shall ensure electrical installation and works inside the building are carried out and maintain in such a way to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice. The aforesaid regulations state about electrical installation in a multi storied building and its maintenance. It does not state about the installation of meter at a particular point in prototype manner in all such buildings.

14.41. From the above, it is clear that the aforesaid regulations do not state about the installation of meter, either ground floor or each floor of multi storied building.

14.42. It is also necessary to refer the relevant clauses of the CEA (Installation and Operation of Meters), Regulation 2006 and amendments made in it referred by the parties are as under:

14.42.1. Definition of consumer meter provided in Regulation 2(j) of the aforesaid Regulations reads as under:

"2. Definitions:

...'Consumer Meter' means a meter used for accounting and billing of electricity supplied to the consumer but excluding those consumers covered under Interface Meters;"

The aforesaid definitions provide that a consumer meter is a meter used for accounting and billing of electricity supplied to the consumer.

14.42.2. Ownership of meter is stated in Regulation 6 (2) of the said Regulations reads as under:

"6. Ownership of meters. –

.....

(2) Consumer meters

(a) Consumer meters shall generally be owned by the licensee.

(b) If any consumer elects to purchase a meter, the same may be purchased by him. Meter purchased by the consumer shall be tested, installed and sealed by the licensee. The consumer shall claim the meter purchased by him as his asset only after it is permanently removed from the system of the licensee.

(c) All consumer meters shall bear BIS mark, meet the requirements of these regulations and have additional features as approved by the Appropriate Commission or pursuant to the reforms programme of the Appropriate Government. To facilitate this, the licensee shall provide a list of makes and models of the meters.”

The aforesaid Regulation provides that the ownership of the consumer meters shall be of the licensee. In case the meter is purchased by the consumer, it requires to be tested, installed and sealed by the licensee. The consumer is eligible to claim that the meter purchased by him his asset only after it is permanently removed from the system of the licensee. The meters shall bear BIS mark and meet the requirement of the aforesaid CEA Regulations and have additional features have approved by the appropriate Commission for reform program of the appropriate Government. Further, to facilitate the same the licensee provides a list of makes and model of the meters. Thus, the aforesaid Regulations provides that the ownership of the meter shall be of the licensee and also the responsible to maintain till it is remove from the system.

14.43. Now, we deal with the issue pertaining to location of meters stated in Regulation 7 of the said Regulations reads as under:

“

7. Locations of meters.-

(1) Interface Meters:-

(a) The location of interface meters shall be as specified in Table-1

Provided that the location of main, check and standby meters installed at the existing generating stations shall not be changed unless permitted by the Authority:

Provided further that the generating companies or licensees may install meters at additional locations in their systems depending upon the requirement.

Table

| Sl. No | Stages | Main meter | Check meter | Standby meter |
|--------|--------------------------------------|---|---|--|
| A. | Generating Station | On all outgoing feeders including bus sectionalizer or tie line between two stages of generating stations having different tariffs or different ownership or both | On all outgoing feeders including bus sectionalizer or tie line between two stages of generating stations having different tariffs or different ownership or both | (i) High Voltage (HV) side of Generator Transformers (ii) High Voltage side of all Station Auxiliary Transformers |
| B. | Transmission and Distribution System | (i) At one end of the line between the substations of the same licensee; (ii) At both ends of the line between | - | (i) There shall be no separate standby meter. Meter (ii) Meter installed at other end of the line in case of two |

| | | | | |
|-----------|---|---|---|--|
| | | <p><i>sub-stations of two different licensees. Provided that meters at both ends shall be considered as main meters for respective licensees.</i></p> | | <p><i>different licensees shall work as standby meter.</i></p> |
| <i>C.</i> | <p><i>Inter-Connecting Transformer (ICT)</i></p> | <p><i>High Voltage (HV) side of ICT.</i></p> | - | <p><i>Low Voltage (LV) side of ICT</i></p> |
| <i>D.</i> | <p><i>Consumer directly connected to the Inter-State Transmission System or Intra-State Transmission System or Distribution System who has been permitted open access by the Appropriate Commission or any other system not covered above</i></p> | <p><i>As decided by the Appropriate Commission.</i></p> | | |

(b) The scheme for location of interface meters shall be submitted to the Central Transmission Utility or the State Transmission Utility or the licensee by owner of the meter in advance, before the installation of the scheme .

(2) Consumer meter:-

(a) The consumer meter shall be installed by the licensee either at consumer premises or outside the consumer premises:

Provided that where the licensee installs the meter outside the premises of the consumer then the licensee on a request from consumer shall provide in home display unit at the premises of the consumer for his information to indicate the electricity consumed by the consumer:

Provided further that for the purpose of billing, the reading of consumer meter and not the display unit shall be taken into account.

(b) The location of meter and height of meter display from the floor shall be as specified in IS 15707 and as amended from time to time.

(c) For outdoor installations, the meters shall be protected by appropriate enclosure of level of protection as specified in the IS 15707 and as amended from time to time.

.....”

The aforesaid Regulations provide regarding location of consumer meter and other meters. As per aforesaid Regulations, the consumer meter may be installed outside the premises of the consumer or at consumer premises. An exception is given that if the meter is installed outside the premises of the consumer, then the licensee on a request from consumer shall provide in home display unit at the premises of the consumer for his information to indicate the electricity consumed by the consumer. Further exception is also given in case of meter installed outside the premises for billing purpose reading of consumer meter be taken in account and not display unit. Thus, the aforesaid Regulations given an option for installation of the meter at consumer premises

or outside the consumer premises and the billing methodology and accounting carried out for such meter.

14.44. Thus, from the aforesaid Regulation, it is clear that the CEA (Installation and Operation of Meters) Regulations, 2006 and amendments provide that the location of the consumer meter to be as specified in IS 15707. It also states that meters shall be provided by the licensee either at the consumer premises or outside the consumer premises.

14.45. The Respondent No.1 and GIFT PCL relied on Clause 5.4.1.4.1 of the National Building Code of India, 2016 Volume 2, the same is reproduced below:

“5.4.1.4 Energy meters

5.4.1.4.1 Energy meters conforming to accepted standards [8-2(21)] and other relevant Indian Standards shall be installed in all buildings at such a place which is readily accessible to the owner/operator/occupant of the building and the Authority. Meters should not be located at an elevated area or a depressed area that does not have access by means of a stairway of normal rise. The height of meter display shall be between 750 mm and 1800 mm. In case the meter is provided with a secondary display unit, this requirement applies to the secondary display unit only. A minimum clearance of 50 mm should be maintained around the meter itself for better inspection. This includes the space between two meters, or between meter and the mounting box, or between two mounting boxes as the case may be. The energy meters should either be provided with a protecting covering, enclosing it completely except the glass window through which the readings are noted or should be mounted inside a completely enclosed panel provided with hinged arrangement for locking. Additionally, for outdoor installations, the meters and associated accessories shall be protected by appropriate enclosure of level of protection IP 55 and ensuring compliance with above conditions. The enclosure should preferably be light coloured.

In large multi-storeyed buildings, installation of a large number of energy meters at the ground floor (or first basement) switch-room for the convenience of the meter-reader poses high fire hazard. More than 24 energy meters on one

switchboard is undesirable. In such cases, where number of energy meters to be installed for feeding exceeds 24, energy meters shall be installed at each floor and therefore, the rising main (bus trunking) with tapping point at individual floor shall be provided for meters.”

14.46. The aforesaid provisions provide that the energy meter installed in all building is readily accessible to owner operator and occupant of the building and authority. It is not located at elevated area or depressed area and not have access by mains of stairway or normal rise. It also states that in large multi storied building installation of large number of energy meter at the ground floor (or first basement) switch room poses high fire hazard. It also provides that more than 24 energy meters on one switch board is undesirable. In cases where number of energy meters to be installed for feeding exceeding 24 meters shall be installed at each floor and therefore, the rising mains with tapping point at individual floor shall be provided for meters.

14.47. The aforesaid provision is of the National Building Code of India, 2016 of Bureau of Indian Standard. The aforesaid code is as under:

“The Code contains regulations which can be immediately adopted or enacted for use by various departments, municipal administrations and public bodies. It lays down a set of minimum provisions designed to protect the safety of the public with regard to structural sufficiency, fire hazards and health aspects of buildings; so long as these basic requirements are met, the choice of materials and methods of design and construction are left to the ingenuity of the building professionals. The Code also covers aspects of administrative provisions, development control rules and general building requirements; fire safety requirements; stipulations regarding materials and structural design; rules for design of electrical installations, lighting, air conditioning and heating, installation of lifts; provisions for ventilation, acoustics and plumbing services, such as water supply, drainage, sanitation and gas supply; measures to ensure safety of workers and public during construction; and rules for erection of signs and outdoor display structures.....”

14.48. Here, we are concerned with the Provisions of the Electricity Act, 2003 and the various Regulations and code thereunder.

14.49. The Electricity Safety aspect and Metering aspect are required to be considered with the consideration of the CEA Regulations framed under the Electricity Act, 2003. The aforesaid Code recognises some of the provisions of the CEA Regulations pertaining to safety related to Electricity Supply. The said provisions state about the installation of meters in the multi-storeyed building whereas the CEA Regulations state that the same to be as specified in IS 15707. Moreover, the provision in the said Code provides that the provision of large number of energy meters at ground floor switch room create inconvenience to meter reader and poses for fire hazard. It is also stated that more than 24 energy meters in one switch board is undesirable. Where number of energy meters to be installed is exceeding 24 number then Energy Meter shall be installed at each floor, the rising main with tapping point at individual floor shall be provided for meters. Thus, the aforesaid provisions state about installation of meters at each floor with suitable circuit breaker.

14.50. The CEA Regulations specifically state about Electricity Safety and Metering Point. The Distribution licensee shall require to carry out the activities as per the provisions of the Electricity Act, 2003, Rules and Regulations framed under are requested to be consider. Therefore, while deciding the issue with regard to installation of meter, the provisions of the Electricity Act, 2003 read with Rules and Regulations framed under, are required to be considered.

14.51. It is necessary to refer the provision of Electricity Supply Code and related matters Regulations notified by the Commission wherein the provision for installation of meter is also provided in Section 6 (VI) pertaining to Metering and Billing of these Regulations. It is necessary to refer Regulation 6.10 and 6.15 of the Electricity Supply Code notified by the Commission which states about supply and installation of meters and MCBs/CBs. Regulation 6.10 which reads as under:

“6.10 The consumer shall provide suitable and adequate space for installation of the meter supply in such a manner that it is always accessible to the licensee or its representatives.

In case of multi-storeyed buildings, it shall be fixed on the ground floor/rising mains having proper air ventilation & adequate illumination.”

The aforesaid provision provides that a duty is cast upon the consumer to provide adequate and suitable space for installation of meter by the licensee which can be accessible to the licensee or its representatives. Further it is also provided that the meter shall be fixed on the ground floor/rising mains where proper air ventilation & adequate illumination is available. Thus, the meter shall be fixed either on the ground floor or rising mains by the licensee where proper ventilation and illumination is available.

14.52. It is also necessary to refer Regulations 6.14 and 6.15 which reads as under:

“6.14 The consumer shall be responsible for safe custody of meter(s), MCB/CB etc. if the same are installed at consumer premises. The consumer shall promptly notify the licensee about any fault/accident or problem observed in the meter.”

The aforesaid provision provides that it is the responsibility of the consumer to keep in safe custody the meter installed at its premises with MCB/CB and inform/notify the licensee about any fault, accident or problem noticed on it.

“6.15 It shall be the responsibility of the licensee to maintain meter and keep it in working order at all times. The licensee may also have a provision for such metering system where the display unit is at the consumer premises and the metering unit is outside the premises such as on a pole etc. In such cases, the responsibility of safe custody of the metering unit shall lie with the licensee.”

The aforesaid provision provides that it is the responsibility of the licensee to maintain the meter and keep it in working condition. When the meter is installed outside the premise of the consumer and display unit within the consumer premise, in that case the responsibility of safe custody of the meter shall be with the licensee.

14.53. From the aforesaid provisions it is clear that whenever the meter is installed at consumer premises the responsibility lies with the consumer to safeguard the meter and MCB/CB installed along with it. While the meter is installed outside the premises of the consumer and display unit is installed at the consumer premises it is the duty of the licensee to safeguard the meter and keep it in working condition.

14.54. Considering the aforesaid provisions, it is clear that the meter in the multi-storeyed building shall be fixed either on ground floor or rising main where proper air ventilation and adequate illumination are available. Further, it is duty of the licensee to keep in safe custody of the meter in working condition whenever the meter is installed outside the premises of the consumer. Moreover, if a fault, accident or problem is noticed with the meter, consumer must inform the licensee immediately. The consumer shall also provide suitable and easily accessible adequate space for installation of the meter as per the GERC (Electricity Supply Code and related meters) Regulations, 2015.

14.55. On a combined reading of the CEA Regulations, Electricity Supply Code notified by the Commission, it is clear that the meter installation can be made either on the ground floor or on rising mains. The CEA Regulations on safety as well as metering are silent with regard to exact or preferable location of consumer meters. The National Building Code specifies that large number of energy meters installation at ground floor (first basement) switch room for the convenience of meter reader poses fire hazard. It also states that more than 24 meters in switch board is undesirable. Where energy meters to be installed for more than 24 nos. They shall be installed at each floor with tapping point at individual floor. The aforesaid provision pertains to construction of building utilization of materials and servicing provided in the building and its standards. The Supply Code notified by the Commission under Section 181 read with Section 50, 42 state about the installation of consumer meters at either ground floor or rising mains.

14.56. The Electricity Supply Code, 2015 notified by the Commission states about the installation of meter in multi-storeyed building be on ground floor/(or) rising mains. The aforesaid provisions authorize the licensee to decide about the location of the meter in the multi-storeyed building under the provisions of the Electricity Act, 2003.

14.57. We are, therefore, of the view that the installation of meter at appropriate and suitable place shall be sorted out by mutual agreement(understanding) as laid down in the regulations. Further, the licensees are responsible for maintaining the meters in working condition. In this condition, we are of the view that, it is the

responsibility of the Distribution Licensee to select proper place/location for installation of such meters with consideration of safeguarding the meters. It is the duty of the consumers to provide suitable space for installation of such meter to the licensee so that it is always accessible to the licensee or its representative.

14.58. Now, we deal with the issue of installation of the dry-type transformer in the basement of the multi-storeyed building of the Respondent No. 1 and busbar trunking system along with installation of smart metering panel at each floor of the multi-storeyed building and its permissibility. We note that the installation of transformer and supply line/distribution line upto the consumer premises is the responsibility of the Distribution Licensee. Duty cast upon the Distribution Licensee that they shall carry out proper planning of the distribution system in their license area with consideration of various provisions of the Distribution Code, Supply Code, CEA Regulations etc. to ensure safe and reliable power supply to the consumer premises. Neither the Distribution Code notified by the Commission, nor Supply Code nor CEA (Measures relating to Safety and Electricity Supply) Regulations, 2010 provides for installation for transformer place. The representative of Chief Electrical Inspectorate Office admitted during the hearing that the preferable place for installation of transformer is the ground floor. However, in the Respondent No. 1 building it is provided on upper basement. Regulation 36(3) provides that the installation of isolating devices with cut out or breaker in a conspicuous position at not more than 1.70 meter above the ground so as to completely isolate the supply to the building in case of emergency. The code is silent about the installation of dry-type transformer in the basement or ground floor of the multi-storeyed building. Regulation 36(4) provides that the owner or occupier of the multi-storeyed building shall ensure that electric installation and works inside the building are carried out and maintained in such manner to prevent danger due to shock and fire hazards and installation is carried out in accordance with the relevant Codes of Practice. The aforesaid provision is also silent about the installation of dry type transformer in the multi-storeyed building. It states about the installation of equipment as per the provisions of the relevant Codes. Hence, the contention of the Respondent No. 1 and 2 for installation of dry type transformer is concerned, the same is the responsibility of

Petitioner, Distribution Licensee, who is responsible for reliable, safe and uninterrupted power supply to the consumers in its license area with consideration of aforesaid aspect. Hence, we are of the view that the installation of transformer and other equipment in the multi-storeyed building is the responsibility of the Distribution Licensee upto the point of supply of the consumer by laying down necessary distribution system line, including transformer. Hence, the contention of the Respondents to allow the installation of dry type transformers installed in the multi-storeyed building of Respondent No. 1 is to be decided by the Petitioner with consideration of the provisions of the Supply Code, Distribution Code, CEA Regulations and other relevant Codes applicable in such case with consideration of its planning. It may be noted that there is nothing in the code which prohibits use of Dry Type Transformer or any advanced technology.

14.59. Now we deal with the issue raised by the Petitioner that they shall be allowed to recover additional cost towards increase in losses due to installation of dry type transformer instead of existing practice of installation of oil transformers as a part of the distribution supply system to the consumers. The Petitioner submitted that the additional loss due to installation of dry type transformers would pass on to other group of consumers. The dry type transformers having higher losses than the losses in the oil cooled transformers is also admitted by the Respondent No. 1 and agreed to compensate the Petitioner for such additional losses occurred due to installation of dry type transformers. The Petitioner has claimed that the Commission may decide the formula for One-Time Payment required to compensate loss amount by using dry type transformers in place of oil cooled type transformers. The contention of the Petitioner is that the necessary infrastructure of dry type transformer, busbar trunking system along with installation of smart meter panels done by the Respondent No. 1 and they have also agreed for operation and maintenance of the system laid down by them. The Respondent No. 1 also submitted undertaking and agreed for payment of compensation to the Petitioner due to additional loss etc. on monthly basis in the consumer bills. The power supply given by the Petitioner Distribution Licensee to the consumers who are owners of different premises of the multi-storeyed building created by the Respondent No. 1.

- 14.60. The Respondent No. 1 had earlier agreed for payment of compensation due to loss, if any, occurred to the Petitioner with consideration of actual losses suffered by the Petitioner. Subsequently, the Respondent No. 1 has contended that the losses need to be compensated on monthly basis and not in advance as one time compensation. The compensation amount claimed by the Petitioner and formula submitted by the Petitioner is also not correct and it needs to be verified and decided by the Commission. The Petitioner has earlier claimed compensation amount as Rs.4,86,19,123/- is increased to Rs. 5,52,81,182.16 is not proper calculation and not calculated as per requirement and facts in respect to dry type transformer. Moreover, such losses may vary from month to month and it shall be reflected in the bill issued to the respective consumers on monthly basis.
- 14.61. The Respondent No. 12 submitted that the claim for compensation of losses due to installation of dry type transformer by the Petitioner to provide power supply to the consumer is not permissible. It is the duty of the licensee to provide electric supply to the consumers by laying down the necessary electricity supply infrastructure in its license area. The recovery of additional cost for compensation on a ground of installation of dry transformer and associated equipment as a part of supply network leads to additional cost is not permissible as per the provisions of the Electricity Act, 2003 and Rules and Regulations framed under it. It is the duty of the licensee to create necessary infrastructure for supply for providing power supply to the consumers. It is pertinent to note that GIFT is a distribution licensee whereas here in this case, the Respondent No. 1 is only a developer who is distinct and different from the would be end user/consumers and the Petition filed by the GIFT is yet to be decided as per the issues involved separately.
- 14.62. In this regard, it is pertinent to note here that it is the liability of the Distribution Licensee to lay down necessary infrastructure in its license area for providing power supply to the consumers. Further, it is also required to refer to the provisions of various Regulations notified by the Commission consisting of the Electricity Supply Code, Distribution Code, and power of Licensee to recover the expenses incurred by it.

14.63. We note that as far as recovery of additional cost due to losses occurred for installation of dry type transformers by the Respondent No. 1 instead of oil cooled transformers installed by the Petitioner as a part of laying down the distribution system in its license area is concerned, there is no such provision for recovery & one-time advance payment in the Supply Code or the Distribution Code notified by the Commission. Further, the aforesaid Regulations provide that it is the duty of the licensee to carry out planning for laying down necessary infrastructure in their license area consisting of transformers, supply lines, equipments, etc. for providing efficient and reliable power supply in their license area. Further, the licensee shall standardize the equipment, materials etc. while planning the establishment of distribution system network in their license area. The standardization of materials etc. will be helpful to the licensee to carry out the operation, maintenance of the equipment etc. of the distribution network easily and effectively. The recovery of the charges for installation of general network is to be done by the licensee as a part of recovery of expenditure from the individual consumers or as a part of capital expenditure as the case may be permissible under the Regulations read with Orders of the Commission.

14.64. The contention of the Petitioner that the additional loss is suffered by them due to installation of dry type transformers having higher loss than oil cooled transformers is concerned, the dry type transformers installed by the Respondent No. 1 at their cost which is not disputed by the Petitioner is a part of distribution system network laid down at the Respondent No. 1 premises. The Petitioner has not incurred any expenses for such lay down network. However, recovered the supervision charges for laying down such network by as claimed by the Respondent No. 1. The contention of the Petitioner is that dry type transformers are not installed/utilized by the Petitioner and other Government Distribution Licensees, as per their prevailing practice.

14.65. We note that the Supply Code and Distribution Code notified by the Commission do not state about the type of distribution transformers and associated equipments be utilized for laying down distribution system. The distribution licensees are at liberty to lay down the distribution system consisting of transformers and other equipment and lines by adopting new technology etc. There is no bar for adoption of such

practice by the licensee. Only reference is given to standardization of planning for design, construction, operate and maintenance of the distribution system with uniform practice as far as possible.

14.66. The claim of the Petitioner for additional loss incurred by the Petitioner for dry type transformers be permitted to be utilized by the Respondent is not acceptable as it is against the equitable treatment given to the consumers while granting the connection and supply the electricity. The losses, if any, due to installation of dry type transformer etc. be of the distribution system network laid down by the Distribution Licensee the same is considered as a part of the tariff determination, open access charges, etc. while deciding the various parameters connected with consumer tariff and open access charges etc. The same are not differentiated among the individual consumer or group of consumers.

14.67. We note that the Respondent No. 1 has given undertaking stating that they are agreed for carrying out operation and maintenance of the dry type transformer along with busbar trunking system and metering system and also agree to pay the incremental additional losses on monthly basis instead of one-time payment of Rs. 5,52,81,182.16 claimed by the Petitioner against earlier demand of Rs. 4,86,19,123.00 is not legal and valid. The Respondent No. 1 has already paid Rs. 7,63,18,590 for fix charge, HT miscellaneous, project cost, security deposit and supervision charges for new LT connection etc. The infrastructure was created by the Petitioner with cost of around Rs. 21 crores and also incurred an expenditure at 15% on it which has been already received by the Petitioner. Moreover, the responsibility and expenses for life time operation and maintenance of electrical infrastructure shall be borne by the Respondent. So no expenses to the Petitioner.

14.68. We have already clarified in earlier para that it is the duty of the licensee to create necessary infrastructure for electric supply as a part of distribution system network laid down in the license area by the licensee. Further, it is the duty of the licensee to provide necessary network upto the point of supply for the consumers with consideration of safety and other aspects. The duty is also cast upon licensee to operate and maintain the distribution system laid down by them efficiently, reliable and with consideration of safety aspects. Therefore, there is no question to give any

direction in this regard at this stage and that too in the absence of any actual data of expenses losses etc.

14.69. We note that the representative of the office of the Chief Electrical Inspectorate has on affidavit submitted that the permission for dry type transformer installation / energization has been granted by them. So far as location of such transformer in multi-storied building/towers of the Respondent No. 1 SDB is concerned, it is submitted that the same is located/installed at upper basement and the Chief Electrical Office Inspectorate has granted permission for energization of it with consideration of safety Regulations notified by the Central Electricity Authority. However, in so far as fire safety related aspects are concerned it is submitted that the same is governed by the National Building Code and rules/regulations of Fire Department. With regard to 'Point of Supply' and installation of energy meters are concerned the same are commercial matters and hence, Electrical Inspectorate office has no role in this regard. It is further submitted that with regard to electrical installations in multi-storied buildings is concerned, as per Regulation 36 of the Central Electricity Authority Regulations, 2010 it is necessary to have Main Isolating Switch of appropriate capacity installed in each multistoried building at a convenient place so that in any emergent situation the power supply of such multi storied building can be isolated. With regard to electrical wiring/cables in such multi storied building it is submitted that there should be separate duct for same and no water line, gas line, drainage line etc. should be there in such electrical wiring/cables duct and there should be provision/installation of 'Fire Barrier' at every floor. Also, the entire electrical installation should have proper and efficient earthing.

14.70. From the aforesaid submissions of the office of Electrical Inspectorate filed on affidavit, it transpires that the Dry Type Transformer installation in upper basement in multi-storied building/towers of the Respondent No. 1 SDB is approved by them as per CEA Regulations and energization of same is allowed. So far as 'Point of Supply' and Installation of energy meters are concerned, the same are commercial matters and CEI office has no role in this regard. Further, with regard to fire safety in these towers/buildings/electrical equipment is concerned is governed by the provisions of the National Building Code and Fire Department.

14.71. Considering the above, the location of Dry Type Transformer is concerned, the office of Electrical Inspectorate has granted approval for energization it with consideration of safety aspect as CEA Regulations. Hence, the contention of the Petitioner against the same does not survive so far as safety aspect is concerned. Further, with regard to 'Point of Supply' and Installation of energy meters, the CEI office has stated that there is no role of CEI office in the commercial matter as above. With regard to fire safety in these towers/buildings/electrical equipment is concerned is governed by the provisions of the National Building Code and Fire Department. Moreover, while granting connection by the distribution licensee the Electrical Safety aspect which falls under the purview of Chief Electrical Inspectorate and fire safety aspect fall under purview of Fire Department and relevant Code notified by concerned authority needs to be followed with consideration of the provisions of the Electricity Act, 2003, Rules & Regulations framed under it.

14.72. The Petitioner has contended that reliance placed by the Respondent SDB on National Building Code, 2016, Volume-2 (NBC) Part 8 'Building Services, Section I – Lighting and Natural Ventilation issued by the Bureau of Indian Standards and the provisions of CEA Regulations with regard to meter installation and Point of Supply are concerned, it requires to install the meter as per the provisions of the Electricity Act, 2003 and Regulations framed under it. The CEA Regulations and Regulations notified by the Commission are delegated legislation and dealing specifically with technical and safety aspects. The Building Code relied by the Respondent SDB cannot override the provisions of the Electricity Act, 2003 and Regulations framed under it. Regulation 36(3) provides for 'Point of Connection, Commencement of Supply in Multi storied Building having more than 15 meters height provides for installation of isolating device with cut-out or breaker to operate on all phases except neutral in three phase four wire circuit and fixed in a conspicuous position at not more than 1.7 meters above the ground to completely isolate the supply to the building. Relying on the above, it is submitted that the installation of meter cannot be read in isolation by the Respondents.

14.73. We note that the Respondent No. 1 had laid down necessary infrastructure for electricity supply received from the Petitioner by way of installation of dry type transformer bus bar trunking system and smart metering panel at each floor of multi

storied building by incurring expenses about Rs. 21 Crores and on it they had incurred 15% expenses by payment to the Petitioner. The Respondent has also stated that they had paid Rs. 76,318,590/- against fixed charge, HT misc., project cost, security deposit and supervision charge for LT connection of 4739 nos. It is also contended by the Respondent No.1 that they take responsibility and expenses for life time operation and maintenance of electrical infrastructure so that the Petitioner has not to bear expenses by way of their undertaking and also admitted fact in the submission dated 28.09.2021. The aforesaid contentions are not disputed by the Petitioner. Thus, it is fact that the Petitioner has received infrastructure for supply of electricity to the consumer created by the Respondent No.1 with its cost. The Respondent No.1 also agreed to carryout operation and maintenance work of the aforesaid infrastructure without any expenses borne by the Petitioner.

14.74. We clarify that the infrastructure created by the Respondent needs to be verified and confirmed by the Petitioner that it is in compliance with the provisions of the Act, Rules and Regulations framed under the Act and also with consideration of safety as well as other aspects require to follow by the distribution licensee while supplying the electricity to the consumers with creation of the distribution system. It is a part of distribution system needs to be created by the Petitioner instead of that it has been created by the Respondent.

14.75. However, all safety and other aspects related to operation and maintenance of the distribution network system shall remain with the licensee even though the operation and maintenance work is carried out by the Respondent No. 1, if Petitioner deemed fit and allow to carry out by it on behalf of itself, it shall be considered as the aforesaid work done by the Respondent No. 1 on behalf of the Petitioner and all obligations, liabilities etc. arise from it as a consequential effect if any arise in future the same is of the Petitioner, distribution licensee and not of the Respondent No. 1.

14.76. So far as recovery of additional loss towards installation of dry type transformers instead of oil cooled transformers, installed by the Respondent No. 1 at their premises is concerned, we note that the Petitioner has submitted the various technical details as stated below for calculation of losses occurred in dry type transformers and oil cooled transformers and derived the financial burden during

life time of the transformers as one-time payment as Rs. 4,568,663.06 when the petition was filed. Thereafter, when I.A No. 20 of 2021 was filed the loss amount was claimed as Rs. 5,52,81,182.16.

The aforesaid details are stated below:

| Sr. No. | Dry type Dist. Trans. Cap (KVA) | No. of Transformers | Annual Unit loss (AUL)/Transformer (in KWH) | Capacity-wise Annual unit loss (AUL) / Transformer (IN kwh) | Onetime payment (OP) in Rs. / Transformers | Total of onetime payment (OP) in Rs. |
|---------|---------------------------------|---------------------|---|---|--|--------------------------------------|
| 1 | 1000 | 2 | 19259.1841 | 38518.36824 | 4016163.47 | 8023236.95 |
| 2 | 1250 | 4 | 23781.5166 | 95126.0664 | 4959217.99 | 19836871.97 |
| 3 | 1600 | 6 | 21908.6461 | 131451.8767 | 4568663.87 | 27411983.24 |
| Total | | | | | | 55281182.16 |

14.77. The Respondent No. 1 has earlier agreed for the payment of additional amount if any, payable due to the incremental losses in dry type transformer utilized in place of the oil cooled transformers. However, the Respondent No.1 has in its reply dated 28.09.2021 disputed about the additional amount of Rs. 1,44,07,078.90 demanded by the Respondent in comparison to earlier demand of Rs. 4,86,19,123. The Respondent No. 1 has also contended that it is agreed to pay actual financial burden against the incremental losses of dry type transformer purchased by it and installed with metering arrangement on 11 KV HV side of dry type transformer. The Respondent No. 1 has raised following issues with regards to the additional cost demanded by the Petitioner:

- (i) The losses in the transformer are dependent on loading condition, ambient temperature, size of the transformer and modulation arrangement for connected load as well as apparent power requirement.
- (ii) The entire connected load of the building is divided into two transformers with 50% loading resulting with lesser losses than oil type transformer than 80% loading. Therefore, the possible losses can be reduced by lower than power requirement.
- (iii) The formula needs to approve by the Commission prior to deciding the compensation claim by the Petitioner. There are several errors in the formula and same values had been changed three times by the DGVCL.
- (iv) LLF (Loss Load Factor) applied in the formula is of sub transmission system i.e. 44 KV/ 33 KV needs to be reviewed as $(0.2 \times LF) + (0.8 \times LF^2)$ applicable

for distribution system i.e. 22 KV / 11 KV / 400 Volt / 230 Volt interest rates considered as 4.65% which is interest rate of refundable security deposited. The same shall be revised as 12.67% approved by the Commission in its true up Order dated 31.03.2021.

- (v) The dry type transformers capacity in kVA is almost double than the actual connected load. Therefore, losses shall be considered on 50% loading instead of 100% loading.
- (vi) The demand of additional amount is not any dues on the Respondent no. 1. It is demanded by the Petitioner as advanced payment to cover up losses as mentioned by the Petitioner, which is yet decided by the Commission.
- (vii) If any reasonable amount asked by the Petitioner by way of security it can attract the interest on the same payable by the Petitioner.
- (viii) The additional charges are recoverable as a dues since the distribution licensee have right to refuse to give supply or disconnect the power supply in the event the amount of losses has not been paid by the Respondent.
- (ix) As there are defects in the calculating the loss as they are not found realistic or proper. The compensation for such losses be payable on regular basis by the consumer.
- (x) In absence of any consumption during the period if any, found the Respondent No. 1 undertake to pay the losses without fail.
- (xi) In a situation like present case the loss of energy if any, it is always open for the authorities to access the loss of energy by resorting to power under Section 126 (1) of the Act.
- (xii) In the GIFT PCL as well as Torrent Power Ltd. licensee area dry type transformer were installed. However, no charges are recovered from the effected group of consumers.
- (xiii) The Respondent No. 1 undertake to provide bank guarantee for the 1 year loss if any, to the Petitioner due to installation of the system at its premises.

Based on the aforesaid submissions, the Respondent No. 1 contended that the Commission may decide the losses with consideration of aforesaid aspects.

14.78. We note that the claim of additional losses compensation prayed by the Petitioner is with the formula stated above. In the aforesaid formula, the assumption taken by the

Petitioner (i) load factor as 0.7, (ii) interest (R) at prevailing interest rate of 6.25% for FY 2019-20, (iii) prevailing cost to serve at HT level Rs. 5.64 per kWh.

14.79. The Respondent No. 1 has disputed interest rate and loading of the transformer etc. Moreover, the cost to serve of HT category of consumers considered as part of calculation. There may be consumers having LT category also and their rate may be different and distinct from the HT category of consumers. The interest rate considered by the Petitioner may vary from year to year. Further, the CAGR considered by the Petitioner as 1.72%. However, no details calculation for it has been provided. In absence of aforesaid details, it is premature to derive the actual losses incurred by the Petitioner due to utilization of dry type transformers and its financial impact on the Petitioner.

14.80. The various issues raised by the Respondent need to be verified on technical, commercial as well as legal aspects prior to allowing recovery of such losses, if any, suffered by the Petitioner, due to installation of dry type transformers. We are of the view that the aforesaid issue needs deliberation amongst the Member Distribution Licensees as the submission of the Respondent that the dry type transformers are utilized by the Torrent Power Ltd. and GIFT PCL in their license area, who are not charging any additional amount from the consumers or developers of the buildings for the incremental losses, if any. In that situation, the charging of additional losses as part of recovery from the Respondent No. 1 by the Petitioner, DGVCL, leads to situation that there is discrimination amongst the licensees with regard to levy of losses on the consumers of the licensee. Moreover, the licensees are applying and calculating the losses of the system with consideration of different factors in different license area is not valid. Hence, we are of the view that the aforesaid issue be referred to the Supply Code and Distribution Code Review Committee which needs to deliberate the said issue and give its report on the subject matter for consideration of the Commission.

15. In view of above discussion, we pass following orders:

1. The dry type transformers, busbar trunking system along with smart metering panels at each floor of the multistoried building can be installed or not is a subject

matter of the licensee. There is no restriction on the distribution licensee on adoption of new / advanced technology. Hence, it is the function of the distribution licensee to decide manner in releasing new consumer connection with consideration of provisions of law. There is no restriction in releasing connections only on this ground. On the contrary any advance modern technology should be appreciated and adopted.

2. The prayer of the Petitioner to permit for recovery of additional amount from the consumers/developer of the building towards the incremental losses, if any, occurred due to installation of dry type transformers cannot be allowed at this stage and that too in advance. We make it clear that actual loss as and when incurred and recognized in future, due to use of Dry Type Transformers etc., the Petitioner is entitled and always at liberty to claim it in appropriate manner after approval of the Commission.
3. The amendment sought in clause 4.105 and 4.106 and shifting of liability and responsibility thereof on the Respondent No. 1 the building developer/consumer is not accepted at present at this juncture.
4. It is the duty of the Petitioner licensee and the Respondent No. 1 to take necessary safety measures, precautions, verification and certification from the concerned authorities and to maintain/periodical verification which are necessary. In this connection, office of the CEI, Surat is directed to carry out necessary inspection immediately and all shall ensure regarding safety of the distribution network system including meters installed at the premises of the Respondent No. 1.
5. The Petitioner cannot be allowed to recover additional financial burden from the Respondent No. 1 as one-time recovery for the incremental losses in distribution system consists of dry type transformers and others equipment installed by the Respondent No. 1 in this manner at present in advance. However, we make it clear that as the Petitioner has estimated one-time lump sum amount approximately of Rs. 5.52 crores which is objected by the Respondent No. 1 but at the same time it has shown its readiness to furnish bank guarantee of appropriate amount and keeping in view this being a special case wherein the end consumers i.e., actual

occupiers/owners of the licensed premises would be different and distinct from the Respondent No. 1 and therefore it is necessary to ensure it against additional losses, if any, to the Petitioner. The Petitioner is entitled to file Petition at appropriate time after operationalization of the connections on the basis of actual data and in the meanwhile, it would be proper and in the fitness of the thing that Respondent No. 1 shall furnish a bank guarantee of Rs. 1 crore for one year initially so as to bind the would be end consumers/owners of the premises.

6. Simultaneously, the Petitioner and the Respondent No. 1 may also approach the Review Committee as discussed herein above if so desire.
 7. The installation of energy meter and maintenance of it is responsibility of the distribution licensee as per the Provision of Central Electricity Authority (Installation and Operation of meters) Regulations 2006 as amended read with the GERC (Electricity Supply Code and Related Matters) Regulations, 2015 notified by the Commission.
 8. In case of any practical difficulties experienced or apprehended in future, parties may approach appropriate authority or the Commission as the case may be.
16. This Petition along with IA No. 20 of 2021 stand disposed of as above.

Sd/-
[S. R. Pandey]
Member

Sd/-
[Mehul M. Gandhi]
Member

Place: Gandhinagar
Date: 11/02/2022