

	DAKSHIN GUJARAT VIJ COMPANY LIMITED
	CIN U40102GJ2003SGC042909
	Regd. & CORPORATE OFFICE: "UrjaSadan" Nana Varachha Road, KapodraChar Rasta, SURAT-395006 Telephone: (0261) 2506113/12 Website: www.dgvcl.com
	Fax: (0261) 2572636 e-mail: dgvcl.gebmail.com
"Save Energy for Benefit of Self and Nation"	

Ref. No. DGVCL/I/c CE (O&M/GL)/SDB/21 **1 5 7 0 3** Date: **21 SEP 2021**

To,
The Secretary,
Gujarat Electricity Regulatory Commission,
6th Floor, GIFT ONE, Road No.5-C, Zone-5,
Gandhinagar-382355.

Sub: Submission for amendment in Petition in the matter of case No.1955/2021
Filed Under section-45, 46, 86 & other applicable provision of Electricity Act
2003 read with the Gujarat Electricity Regulatory Commission (Electricity
Supply Code and Related Matters Regulations Notification No. 4 of 2015).

Respected Sir,

Please find enclosed here with DGVCL's submission for amendment in Petition on
Affidavit (Original plus 4 Copies) in the matter of Petition No.1955 of 2021 Filed
by DGVCL on dated 12.02.2021.

Thanking You,

Yours faithfully,


(R. J. Pereira)
I/c Chief Engineer (O&M/GL)
DGVCL, Corp. Office, Surat.

Encl: As Above

Copy To:

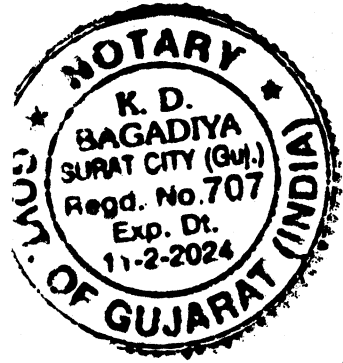
1. The Chief Executive Officer,
Surat Diamond Bourse,
67, 1st Floor, Tapti Exports,
Patel Falia, Gotolawadi,
Katargam, Surat – 395004.
2. Madhya Gujarat Vij Company Ltd (MGVCL),
Sardar Patel Vidyut Bhavan, Race Course,
Vadodara- 390007.
email-ceproject.mgvcl@gebmail.com

3. Uttar Gujarat Vij Company Ltd (UGVCL),
Corporate Office, Visnagar Road,
Mehsana-384001.
email- ceop@ugvcl.com
4. Paschim Gujarat Vij Company Ltd (PGVCL),
Corporate Office, Nana Mava Road,
Laxminagar, Rajkot-360005.
email- cetech.pgvcl@gmail.com
5. Torrent Power Ltd (Distribution Ahmedabad),
Electricity House, Lal Darwaja,
Ahmedabad-380001.
email- connect.srt@torrentpower.com
6. Torrent Power Ltd (Distribution Surat),
3 "Torrent House", Station Road,
Surat-396003.
email- connect.srt@torrentpower.com
7. Torrent Power Ltd (Distribution Dahej),
Plot No. Z/21, Phase-1, SEZ,
At Dahej, Tal Vagra,
Dist:Bharuch-392130
email- connect.srt@torrentpower.com
8. Torrent Power Ltd (Distribution Dholera),
Office Address: Electricity House,
Lal Darwaja, Ahmedabad-380001.
email- connect.srt@torrentpower.com
9. Deendayal Port Trust,
Business Development Cell,
P.O Box No. 50, Kandala,
Dist: Kutchh-370201.
email- ce@deendayalport.gov.in
10. Aspen Park Infra Vadodara Private Limited,
Survey No. 26, Village Pipaliya,
Tal: Waghodia, Dist.- Vadodara-391760.
11. Jubilant Infrastructure Ltd., Plot No. 5,
Vilayat GIDC, Tal: Vagra,
Dist: Bharuch-392130.
12. GIFT Power Co. Ltd, Office No. 1,
28th Floor, GIFT One Tower,
Building 56A, Block No. 56,
Road-5C, Zone-5, GIFT CITY,
Gandhinagar- 382355.
email- customercare.power@giftgujrat.in
13. MPSEZ Utilities Pvt. Ltd. Mundra (Kutchh),
Adani House, Nr. Mithakhali Circle,
Navrangpura, Ahmedabad-380009.
email- utility@mundrasez.com

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10/07/2021

BEFORE the GUJARAT ELECTRICITY REGULATORY COMMISSION AT
GANDHINAGAR



I.A. NO. OF 2021

IN

PETITION NO. 1955 OF 2021



IN THE MATTER OF:

Dakshin Gujarat Vij Company Limited

... Petitioner/ Applicant

Versus

Surat Diamond Bourse

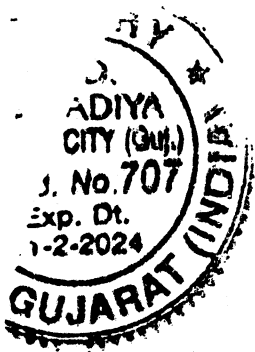
... Respondent

APPLICATION FOR AMENDMENT OF THE PETITION AND IMPLEADMENT
OF PARTIES

MOST RESPECTFULLY SHOWETH

1. That the Petitioner has filed the present petition for approval of levy of additional charges from Respondent towards installation of Dry type Transformer and Sandwich type Busbar Trunking system for providing service line instead of conventional service cable for propose high raise complex which resulting in incremental losses and issue of point of supply. The Petitioner has sought for approval of methodology for deriving one time payment (OP) required for compensating incremental losses amount 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 insist by the respondent which resulting in incremental losses and issue of point of supply.
2. That in the said Petition, the Petitioner had submitted the methodology to calculate the incremental losses for dry type transformer compared to oil type transformer considering test certificates of the Dry type transformer submitted by the Respondent for different capacities of dry type transformers

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(Annexure A to the Petition). The Petitioner had also provided for a illustrative computation at Para 10 of the Petition and enclosed Annexure B. The computation at Para 10 and Annexure B was based on parameters for FY 2018-19. Subsequently, in view of change in value of parameters and based on data and parameters for FY 2019-20, the computation has been changed and the One Time Payment is now Rs. 5,52,81,182.16. The Petitioner is filing the complete computation along with the supporting computation/facts for the same. Further there are certain additional document, facts and submissions which would provide the complete picture and are necessary for complete adjudications of all issues and certain amendments to the prayer to reflect a more complete resolution of the issue. There are also some subsequent developments which are brought on record.

3. The Petitioner had initially filed additional submissions; however on hearing held on 15.09.2021, the Hon'ble Commission had directed for filing of application for amendment and further directed for impleadment of all the distribution companies as the issue may have relevance to all distribution companies.
4. In light of the above, the Petitioner is filing the present application for impleadment of the distribution companies in the State of Gujarat as Respondents to the present petition and further seeking amendments to the Petition.
 - a. Amend the Memo of Parties and Cause title of the Petition to reflect the impleaded Respondents as under:

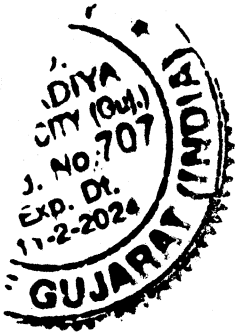
Dakshin Gujarat Vij Co. Ltd., (DGVCL)
Corporate Office: Urja Sadan, Nana Varachha Road,
Kapodara Char Rasta, Surat -395006

PETITIONER

VERSUS

1. The Chief Executive Officer,
Surat Diamond Bourse, 67, 1st Floor,
Tapti Exports, Patel Falia, Gotolawadi, Katargam,
Surat - 395 004.

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2. **Madhya Gujarat Vij Company Ltd (MGVCL)**
Sardar Patel Vidyut Bhavan, Race Course,
Vadodara- 390007
3. **Uttar Gujarat Vij Company Ltd (UGVCL)**
Corporate Office, Visnagar Road,
Mehsana
4. **Paschim Gujarat Vij Company Ltd (PGVCL)**
Corporate Office, Nana Mava Road, Laxminagar,
Rajkot
5. **Torrent Power Ltd (Distribution Ahmedabad)**
Electricity House, Lal Darwaja,
Ahmedabad
6. **Torrent Power Ltd (Distribution Surat),**
3 "Torrent House", Station Road,
Surat
7. **Torrent Power Ltd (Distribution Dahej),**
Plot No. Z/21, Phase-1, SEZ, At Dahej,
Tal Vagra, Dist:Bharuch-392130
8. **Torrent Power Ltd (Distribution Dholera)**
Office Address: Electricity House, Lal Darwaja,
Ahmedabad.
9. **Deendayal Port Trust,**
Business Development Cell,
P.O Box No. 50, Kandala, Dist: Kutchh
10. **AspenPark Infra Vadodara Private Limited**
Survey No. 26, Village Pipaliya, Tal: Waghodia,
Dist.- Vadodara
11. **Jubilant Infrastructure Ltd.,**
Plot No. 5, Vilayat GIDC,
Tal: Vagra, Dist: Bharuch
12. **GIFT Power Co. Ltd,**
Office No. 1, 28th Floor, GIFT One Tower,
Building 56A, Block No. 56, Road-5C, Zone-5,
GIFT CITY, Gandhinagar- 382355.
13. **MPSEZ Utilities Pvt. Ltd. Mundra (Kutchh)**
Adani House, Nr. Mithakhali Circle,
Navrangpura, Ahmedabad

RESPONDENTS

R. Lewis



A copy of the Amended Memo of Parties is attached hereto and marked as **Annexure-1**

b. The Existing Para 10 of original petition may be amended as follows:

10. The Petitioner has calculated the transformer capacity wise incremental annual losses and to compensate the same one time amount arrived to be Rs. 4,86,19,123/-)based on the parameters/data for FY 2018-19(Annexure-B) which is Rs. 5,52,81,182.16 based on the parameters/data now applicable (Annexure - F).

c. The following paras may be added after Para 10

10A. The change in value of parameters since 2018-19 are as under:

(a) Average cost of service for the year FY 2019-20 for High Voltage Industrial Consumer

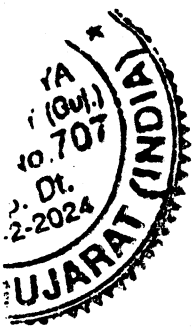
(b) The bank interest has been revised from 5.40% to 4.65% as declared by Reserve Bank of India with effect from 27.03.2020

(c) Compound Annual Growth Rate (CAGR) in cost to serve at HT level is revised to 1.72%.

10B. 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 (Part-I-2014) is attached as per (Annexure-D). 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 energy conservation building code-2017 is attached as per (Annexure-E1& E2). The losses of Dry Type Dist. Transformer are higher than losses of oil type transformer.

10C The illustrative example for onetime payment (OP) required

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for compensating incremental losses amount in case of utilization of dry type transformer in place of oil cooled type transformer based on revised parameters is attached herewith as per (Annexure-F). The onetime payment calculation shown at 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 attached as per (Annexure-G1 to G9).

10D The calculation of the one time payment amount to compensate incremental losses of Dry Type Transformers to be installed by Respondent in place of Oil Type Transformers comes to Rs. 5,52,81,182.16 (Annexure-F). The capacity wise comparison of additional losses of Dry Type Transformer and oil type Transformer are attached as per Annexure-H.

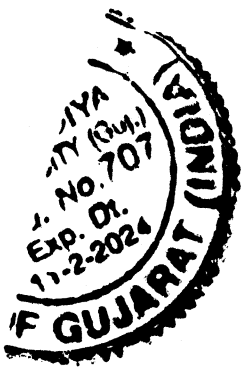
d. After Para 11 of the Petition, the following Para may be added:-

11A. The Section-42 (1) of 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".*

Accordingly, the Petitioner is extending their distribution network with overhead electrical line as per technical feasibility

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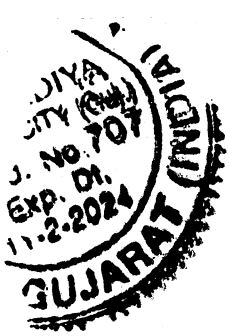
and utilized oil type transformer having lower load losses compared to Dry Type Transformer as per IS 1180 and energy conservation building code-2017.

11B. The Respondent has represented vide his 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 installed like Dry type Transformer, Busbar Trunking System along with installation of smart metering panels at each floors of Multi-storeyed Building. The request letter of the Respondent is attached herewith as per Annexure-I.

11C. At present, the petitioner is releasing the connections in multi-storeyed building with usage of oil- type transformer and installing meters at ground floor in conventional practice. The specific requirement for adoption of modern type technology with latest features requested by the respondent is completely new concept for the petitioner and the petitioner does not have such established infrastructure for operation and maintenance of the same.

11D. The Petitioner had sought guideline from GUVNL for adoption of modern type technology as insisted by the Respondent. GUVNL has issued guideline vide letter No. GUVNL/Tech-2/DE-1/HT/2551, dated 03.12.2019 in which GUVNL has directed to Petitioner to approach Hon'ble Commission to get suitable Amendment / Incorporation of the relevant Clauses of Notification for 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

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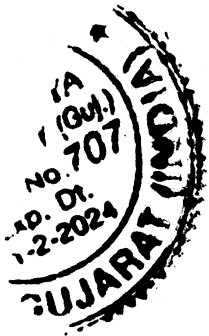


type Bus bar Trunking System subjected to monitor and maintain foolproof safety by the Respondent with employment of full time qualified safety officer by the Respondent (4) Installation of floor wise smart metering panel subjected to monitor and maintain foolproof safety by the Respondent with employment of full time qualified safety officer by the Respondent and (5) Distribution of Smart Meter and related software for communication.

According to the guideline given by GUVNL, the Respondent should submit the Notarized Undertaking to the Petitioner regarding additional burden due to higher losses of Dry Type Transformer shall be borne by the respondent and procurement, life time maintenance (Repair / Replacement) of Dry Type Transformer , LT distribution panel, Sandwich Bus bar 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. A copy of guideline received from GUVNL is attached here with as Annexure-J.

11E. The Respondent (SDB) has submitted Notarized Undertaking dated 09.10.2019 regarding installation & life time maintenance of electrical network of their infrastructure. In Para No. 7 of this undertaking, the respondent agree to the condition 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. While Para No. 9 of this undertaking, it is mentioned that Petitioner (DGVCL) will provide, operate and maintain power supply to the point of supply (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. Copy of the undertaking submitted by the respondent is attached herewith as Annexure-K.

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- 11F. The petitioner has informed the Respondent 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 notarized undertaking incorporating Points No. 01 to 05 mentioned in the said letter which is attached herewith as Annexure-L. The Respondent did not submit the notarized undertaking as asked by the Petitioner's letter dated 19.12.2019 till today.
- 11G. The Respondent has not submitted the consent for one time payment of the incremental losses of Dry Type Transformer but respondent has requested vide his letter No. SDB/57 dated 20.01.2021 (Annexure-M) 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 Dtd. 03.12.2019 (Annexure-J).
- 11H. The Petitioner has again instructed the respondent to submit Undertaking for the one time payment of financial burden against incremental losses due to Dry Type Transformer vide Letter No. DGVCL/CE (O&M)/SE (O&M)/SDP/21/2602, dated 09.02.2021 (Annexure-N). The petitioner has also 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.
- 11I. The respondent has represented vide letter No. SDB/66, dated 25.02.2021 (Annexure-O) that burden due to higher losses with Dry type transformer shall be borne by the respondent and therefore mutually agreed methodology/ mechanism for allocation of incremental losses needs to be prescribed / decided. The respondent agreed to have provision of metering arrangement at 11 KV HV side of Dry type transformer to borne actual burden due to higher losses of dry

R. Perera



type transformer instead of one time payment as asked by the petitioner. The respondent confide to pay the amount for incremental losses due to dry type transformer as per order and approved methodology from Hon'ble Commission.

11J. The Petitioner has to submit here that the GUVNL has devised the methodology to calculate incremental losses of dry type transformers compare to oil type transformers and to recover onetime payment require to compensate incremental losses and conveyed to Petitioner along with all Distribution Companies vide letter No. GUVNL/TECH-3/DE-1/Transformer/1233 dated 19.06.2020 which is attached here with as Annexure-P.

11K. GUVNL has also directed in above letter that (1) The Respondent has to give undertaking to pay amount for incremental losses. (2) The respondent 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 by its own under consultation with respective Distribution Company.

11L. The Respondent insisted for utilization of Dry Type Transformers in place of Oil Type Transformers (normally used by petitioner). But, respondent neither submit undertaking as asked by petitioner nor ready to pay one time payment against incremental losses for Dry Type Transformer. The reasons for requesting one time payment from the respondent are as under :-

I. The Respondent is a developer who will develop whole project after completion of project the respondent will hand over 4739 nos. of premises for the purpose of Diamond trading offices to different diamond businessmen. Therefore, different diamond businessmen will became the

R. Perera



end user & forthcoming consumers of Petitioner. It means in this case, respondent (developer) and the end user cum forthcoming consumers will be different legal entity.

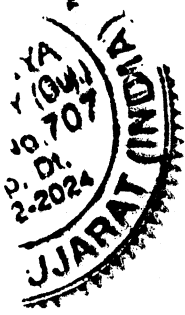
- II. The end-user cum forthcoming consumers i.e. owner of Diamond trading offices may deny to pay additional lifetime financial burden to compensate the incremental losses due to installation of dry-type transformer in addition to their regular energy usage bill.
- III. Due to above mentioned reasons, the petitioner may not able to recover additional financial burden towards incremental losses. If the individual forthcoming consumers of Diamond Trading Offices may deny to pay the additional life time financial burden towards incremental losses then this additional financial burden towards incremental losses shall be borne by the petitioner.

Therefore, Petitioner hereby requests Hon'ble Commission to allow onetime payment from the respondent required to compensate incremental losses of Dry Type Transformer as the respondent is insisting to install Dry Type Transformer.

11M. The Respondent (M/s. Surat Diamond Bourse) has insisted to install Energy Meters at every floor up to 15th Floor, for this they have proposed to install Sandwich type Bus-Bar Trunking System instead of cable for supply up to meter from main panel. The request letter of the Respondent is attached herewith as per Annexure-I.

11N. The Respondent have represented on 14.08.2019 to the petitioner (Annexure-Q) to install Meter on each floor of Multi-storeyed Building as per GERC Supply Code cl. No. 6.10. According to the Supply Code notification no. 4/2015 Clause no. 6.10 which states that in case of Multi-storeyed Building,

R. Perera



it shall be fixed on the Ground Floor / rising mains having proper air ventilation & adequate illumination.

110. The Respondent want to use Insulated flat radial shaped aluminium conductor through Sandwich type Bus bar Trunking system which will carry electric supply from LT Distribution panel located at upper basement to meters located at each floor. Instead of conventional service cable Sandwich type Busbar Trunking system will be used which is a unique concept and totally new concept to the petitioner (DGVCL) as well as other Distribution Companies of Gujarat. The Sandwich type Busbar Trunking system arrangement is insisted by the Respondent for their convenience to provide individual connection on each floor hence the safety related liability will be of the Respondent. The petitioner have no such infrastructure for operation and maintenance of such new concept and complicated infrastructure developed by the respondent.

11P. The Clause-36 (4) of Central Electricity Authority Regulation, 2010 for Multi-storeyed Building is reproduced as under :-

"The owner or 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."

11Q. The Respondent has sought approval for his proposed electrical network from Electrical Inspector, Surat and accordingly, approval has been accorded for electrical network plan under provision of Regulation No. 36 of Central Electricity Authority Regulation, 2010 for Multi-storeyed Building vide Letter No. EI/SRT/Plan/1568, 1570, 1572, 1574, 1576, 1578, 1580, 1582, 1584, dated 05.10.2020. (Annexure-R-1 to R-9)

R. Peris



11R. While going through the approval of Electrical Inspector, Surat accorded to the Respondent, the approval is given to the respondent subjected to following conditions :-

The approval does not absolve respondent for obtaining any other permission get 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 / equipments / cables / other electrical items utilized by respondent as per prevailing BIS.

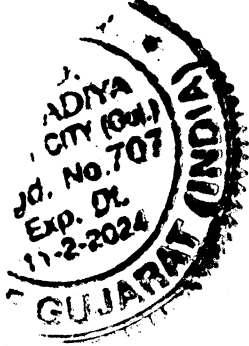
11S. It is requested to provide appropriate regulation for such type of new concept so that no any additional financial burden to be bear by DISCOM or no any discrepancies arise to define point of supply in case of all the material except meter is planned to provide by the respondent as per site requirement of the Respondent (developer).

11T. The respondent has requested for adoption of new concept of Dry Type Transformer, Sandwich type Busbar Trunking system, RMU, underground cable and LT breakers. Therefore, the responsibility of life time maintenance/safety related aspect of such network developed by the respondent shall be at his own as per Clause No.36(4) of Central Electricity Authority Regulation, 2010.

e. In the Prayer clause,

i. Para 1 may be amended as under:

1. Hon'ble Commission may please admit this present Petition with amendments.



ii. Para 2 may be substituted as under:

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 floors of Multi-storeyed building.

iii. After Para 2, the following para may be added:

2A. Hon'ble Commission may allow the Petitioner to recover additional financial burden in terms of losses from the respondent.

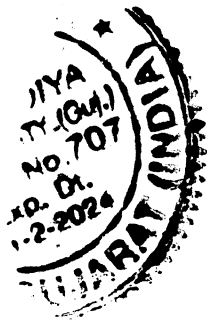
iv. Para 3 may be substituted as under:

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 750C (at maximum current tap).

v. After Para 3, the following paras may be added:

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 Authority 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.

R. Peris



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

vi. Para 4 may be substituted as under:

4. As per supply code Notification no 4/2015 Clause No.105 (a) the point of supply is define 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 propose the metering point at each floor of the high rise building and LT Supply will be extend through rising Bus bar trunking from LT penal 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.

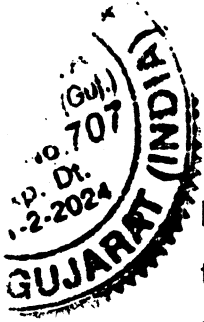
vii. After Para 4, the following paras may be added

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

A copy of the amended Petition is annexed hereto and marked as Annexure 2.

5. It is submitted that the present Amendment is necessary for adjudication of all issues raised in the present Petition and for consideration of the complete picture. The present Application ought to be allowed in light of the fact that Order VI, Rule 17 of the CPC permits amendment of pleadings. The hearing in the Petition has not commenced. Therefore the amendments may be allowed.

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It is submitted that the present Application is bonafide and made in the interest of justice. No harm or prejudice would be caused to the Respondents if the present application is allowed.

7. PRAYER

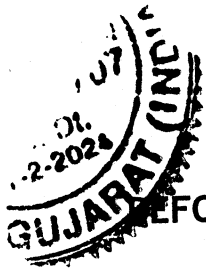
In view of above submissions and factual background, it is most respectfully prayed that this Hon'ble Commission may be pleased to:-

- (a) Allow the impleadment of the parties as Respondent No. 2 to 13 as per Para 4 and take the Amended Memo of Parties (Annexure-1 to the present Application) on record.
- (b) Allow amendment of the Petition in terms of the present application and take on record the amended Petition (Annexure-2 to the present Application);
- (c) Pass such other or further order or orders as this Hon'ble Tribunal may deem fit and proper in the interest of justice.

DATE: 21/9/2021
PLACE: S429+

Signature

(Ms. R. J. Pereira)
I/c Chief Engineer (O&M/GL)

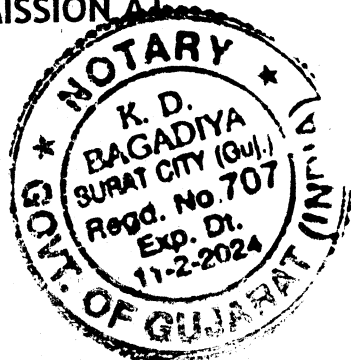


BEFORE the GUJARAT ELECTRICITY REGULATORY COMMISSION AT
GANDHINAGAR

I.A. NO. OF 2021

IN

PETITION NO. 1955 OF 2021



IN THE MATTER OF:

Dakshin Gujarat Vij Company Limited

... Petitioner/ Applicant

Versus

Surat Diamond Bourse

... Respondent

AFFIDAVIT

I, Ms. Rita Pereira, wife of James Pereira, aged 57 years, residing at Surat, do hereby
solemnly affirm and state as follows:

- I. I am the I/c Chief Engineer (O&M/GL) of the Dakshin Gujarat Vij Company Limited (DGVCL), the Petitioner in the above matter and am duly authorized by the said the Petitioner to make this affidavit.
- II. I say that the contents of accompanying Application are based on the records maintained by the Petitioner Company and believed by me to be true.
- III. I say that the annexures are true copies.

R. Pereira
Deponent

Verification

I, deponent above named, do verify that the contents of the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at Surat on this 21st day of September 2021.

R. Pereira
DEPONENT

Reg. Sr. No. 10787

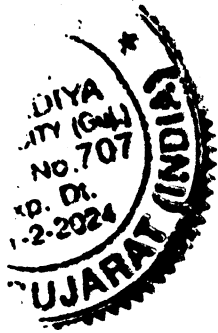
21 SEP 2021

My Commission Expires
on 11-2-2024

Solemnly affirmed
BEFORE ME

K. D. Bagadiya

K. D. BAGADIYA
NOTARY
GOVT. OF GUJARAT
SURAT CITY (GUJ.)



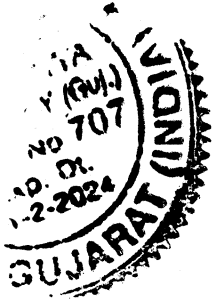
ANNEXURE-1

Dakshin Gujarat Vij Company Ltd (DGVCL)
Corporate Office, Kapodra, **Surat**.

..... **Petitioner**

1. The Chief Executive Officer,
Surat Diamond Bourse, 67, 1st Floor,
Tapi Exports, Patel Falia, Gotalawadi, Katargam,
Surat-395 004.
2. Madhya Gujarat Vij Company Ltd (MGVCL)
Corporate Office, Sardar Patel Vidyut Bhavan,
Race Course, **Vadodara- 390007**
3. Uttar Gujarat Vij Company Ltd (UGVCL)
Corporate Office, Visnagar Road, **Mehsana**.
4. Paschim Gujarat Vij Company Ltd (PGVCL)
Corporate Office, Nana Mava Road,
Laxminagar, **Rajkot**.
5. Torrent Power Ltd (Distribution Ahmedabad),
Electricity House, Lal Darwaja, **Ahmedabad**.
6. Torrent Power Ltd (Distribution Surat), 3 "Torrent
House", Station Road, **Surat**
7. Torrent Power Ltd (Distribution Dahej), Plot No.
Z/21, Phase-1, SEZ, **At Dahej, Tal Vagra,**
Dist:Bharuch-392130.

f. P. P. P.



8. Torrent Power Ltd (Distribution Dholera),
Office Address: Electricity House, Lal Darwaja,
Ahmedabad.
9. Deendayal Port Trust, Business Development
Cell, P.O Box No. 50, **Kandala**, Dist: Kutchh.
10. Aspen Park Infra Vadodara Private Limited.,
Survey No. 26, Village Pipaliya,
Tal: **Waghodia**, Dist.- Vadodara.
11. Jubilant Infrastructure Ltd., Plot No. 5, **Vilayat**
GIDC, Tal: Vagra, Dist: Bharuch
12. GIFT Power Co. Ltd, Office No. 1, 28th Floor,
GIFT One Tower, Building 56A, Block No. 56,
Road-5C, Zone-5, GIFT CITY, **Gandhinagar**-
382355.
13. MPSEZ Utilities Pvt. Ltd. **Mundra (Kutchh)**
Address: Adani House, Nr. Mithakhali Circle,
Navrangpura, Ahmedabad

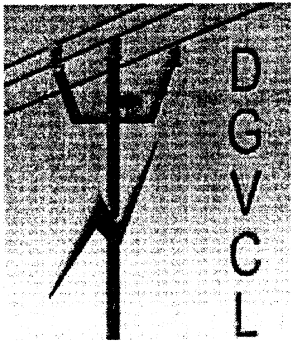
.....Respondents

R. Kevir



Annexure-2

FOR THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR



Case No.

Filing No.

IN THE MATTER OF

Filing of Petition section-45, 46, 86 & other applicable provision of Electricity Act 2003 read with the Gujarat Electricity Regulatory Commission (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 and trunking 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

Dakshin Gujarat Vij Co. Ltd., (DGVCL)
Corporate Office:UrjaSadan, Nana Varachha Road,
Kapodara Char Rasta, Surat -395006

PETITIONER

AND

IN THE MATTER OF

1. The Chief Executive Officer,
Surat Diamond Bourse, 67, 1st Floor,
Tapti Exports, Patel Falia, Gotolawadi, Katargam,
Surat - 395 004.
2. Madhya Gujarat Vij Company Ltd (MGVCL)
Sardar Patel Vidyut Bhavan, Race Course,
Vadodara- 390007

R. Peria



3. Uttar Gujarat Vij Company Ltd (UGVCL)
Corporate Office, Visnagar Road,
Mehsana
4. Paschim Gujarat Vij Company Ltd (PGVCL)
Corporate Office, Nana Mava Road, Laxminagar,
Rajkot
5. Torrent Power Ltd (Distribution Ahmedabad)
Electricity House, Lal Darwaja,
Ahmedabad
6. Torrent Power Ltd (Distribution Surat),
3 "Torrent House", Station Road,
Surat
7. Torrent Power Ltd (Distribution Dahej),
Plot No. Z/21, Phase-1, SEZ, **At Dahej**,
Tal Vagra, Dist:Bharuch-392130
8. Torrent Power Ltd (Distribution Dholera)
Office Address: Electricity House, Lal Darwaja,
Ahmedabad.
9. Deendayal Port Trust,
Business Development Cell,
P.O Box No. 50, **Kandala**, Dist: Kutchh
10. AspenPark Infra Vadodara Private Limited
Survey No. 26, Village Pipaliya, Tal: **Waghodia**,
Dist.- Vadodara
11. Jubilant Infrastructure Ltd.,
Plot No. 5, **Vilayat GIDC**,
Tal: Vagra, Dist: Bharuch
12. GIFT Power Co. Ltd,
Office No. 1, 28th Floor, GIFT One Tower,
Building 56A, Block No. 56, Road-5C, Zone-5,
GIFT CITY, **Gandhinagar**– 382355.
13. MPSEZ Utilities Pvt. Ltd. **Mundra (Kutchh)**
Adani House, Nr. Mithakhali Circle,
Navrangpura, Ahmedabad

RESPONDENTS

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS

Preamble

1. The Government of Gujarat (hereinafter referred to as "GoG") notified the Gujarat

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Electricity Industry (Reorganization and Regulation) Act 2003 (herein after called as "Act") in May 2003 for the reorganization of the entire power sector in the State of Gujarat.

2. Pursuant to the above, Government of Gujarat in their letter vide GO / 19th August 2003 had directed GEB to form four Distribution Companies (Discoms) based on geographical location of the circles. Accordingly the four distribution companies had been incorporated with the Registrar of Companies (RoC) on September 15th, 2003. Dakshin Gujarat Vij Company Limited (DGVCL) is one of the distribution companies engaged in distribution of electricity in the south zone area of Gujarat.
3. The Dakshin Gujarat Vij Co. Ltd obtained its Certificate of Commencement of Business on the 15th October, 2003. However, the company did not commence its commercial operations during the financial year ending 31st March, 2005. The Company has started its commercial function w.e.f. 1st April 2005.
4. The Gujarat Electricity Regulatory Commission (hereinafter referred to as "GERC" or "the Hon'ble Commission"), an independent statutory body constituted under the provisions of the Electricity Regulatory Commissions (ERC) Act, 1998 and is currently under purview of the Electricity Act, 2003. GERC is vested with the authority of regulating the power sector in the State inter alia including determination of Tariff for electricity consumers and notify the regulations.

Introduction

1. Diamond Research and Merchantile City Limited (A Government of Gujarat owned company) is handling the Dream City Project at Village Khajod under Surat City. The iconic building of anchor tenant M/s. Surat Diamond Bourse (SDB) is under progress for the purpose of Diamond trading and it is planned to complete by June-2021.
2. M/s. Surat Diamond Bourse required total load of about 25.5 MVA and they have demanded one number EHT connection at 66 KV voltage level having contract demand 13.49 MVA for common utilities and amenities of M/s. Surat Diamond Bourse.
3. M/s. Surat Diamond Bourse have planned to develop 9 Nos. of commercial towers for Diamond trading offices having 15 Nos. of Floors Each. M/s. Surat Diamond Bourse have require 4739 Nos. 1 phase/3 phase commercial lighting connections having total approximate load demand of 11381 KW.
4. M/s. Surat Diamond Bourse have planned to installed Dry Type transformer having capacity of 1000 KVA to 1600 KVA, Two nos transformer for each tower which will be installed at upper basement area of every tower with utilizing 11 KV VCB and LT Panel instead of conventional DP Structure or plinth mounting in open area.

R. Perin



The petitioner has informed the Respondent regarding the present practice adopted by DGVCL to release power supply to the applicant but the Respondent insist Petitioner to process for the new concept of their own dry type transformer and sandwich type bus bar trunking system.

6. The losses of dry type transformers in the specification submitted by the respondent (**Annexure-C**) is higher than the specification submitted by the petitioner than the permissible limit specified in IS-1180. If the respondent install this proposed dry type Dist. Transformers it will lead financial burden to the petitioner due to higher losses.
7. The Petitioner as well as other state own DISCOMs have till the date not used dry type transformer as in normal course petitioner used only oil cool transformer in distribution network.
8. The Petitioner is purchase and use oil cool transformers of various capacity ranging from 10 KVA to 500 KVA as per requirement which are in compliance with the standard specified in IS-1180.
9. For recover financial burden against the incremental losses of dry type transformer purchased by respondent the formula for calculation of losses need to be approved. Hence, the petitioner also request to approve the formula.
10. The Petitioner has calculated the transformer capacity wise incremental annual losses and to compensate the same one time amount arrived to be Rs. 4,86,19,123/- based on the parameters/data for FY 2018-19 (Annexure- B) and Rs. 5,52,81,182.16 based on the parameters/data now applicable (Annexure - F).

10A. *The change in value of parameters since 2018-19 are as under:*

- (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%.*

10B. *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 (Part-I-2014) is attached as per (Annexure-D). 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 energy conservation building code-2017 is attached as per (Annexure-E1 & E2). The losses of Dry Type Dist. Transformer are higher than losses of oil type transformer.*

10C *The illustrative example for onetime payment (OP) required for compensating incremental losses amount in case of utilization of dry type transformer in place* *f. Lewis*



of oil cooled type transformer based on revised parameters is attached herewith as per **(Annexure-F)**. The onetime payment calculation shown at 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 attached as per **(Annexure-G1 to G9)**.

- 10D The calculation of the one time payment amount to compensate incremental losses of Dry Type Transformers to be installed by Respondent in place of Oil Type Transformers comes to Rs. 5,52,81,182.16 (**Annexure-F**). The capacity wise comparison of additional losses of Dry Type Transformer and oil type Transformer are attached as per **Annexure-H**.
11. The Petitioner has derived the methodology to calculate the incremental losses for dry type transformer compare to oil cool transformer and considering different capacity wise test certificate of the Dry type transformer submitted by the respondent work out the incremental losses due to installation of such transformers.**(Annexure-A)**

11A. The Section-42 (1) of 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".

Accordingly, the Petitioner is extending their distribution network with overhead electrical line as per technical feasibility and utilized oil type transformer having lower load losses compared to Dry Type Transformer as per IS 1180 and energy conservation building code-2017.

- 11B. The Respondent has represented vide his 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 installed like Dry type Transformer, Busbar Trunking System along with installation of smart metering panels at each floors of Multi-storeyed Building. The request letter of the Respondent is attached herewith as per **Annexure-I**.

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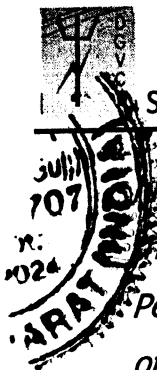
At present, the petitioner is releasing the connections in multi-storeyed building with usage of oil-type transformer and installing meters at ground floor in conventional practice. The specific requirement for adoption of modern type technology with latest features requested by the respondent is completely new concept for the petitioner and the petitioner does not have such established infrastructure for operation and maintenance of the same.

11D. The Petitioner had sought guideline from GUVNL for adoption of modern type technology as insisted by the Respondent. GUVNL has issued guideline vide letter No. GUVNL/Tech-2/DE-1/HT/2551, dated 03.12.2019 in which GUVNL has directed to Petitioner to approach Hon'ble Commission to get suitable Amendment / Incorporation of the relevant Clauses of Notification for 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 fool proof 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 fool proof 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 fool proof 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.

According to the guideline given by GUVNL, the Respondent should submit the Notarized Undertaking to the Petitioner regarding additional burden due to higher losses of Dry Type Transformer shall be borne by the respondent and procurement, life time maintenance (Repair / Replacement) of Dry Type Transformer, LT distribution panel, Sandwich Bus bar 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. A copy of guideline received from GUVNL is attached here with as **Annexure-J**.

11E. The Respondent (SDB) has submitted Notarized Undertaking dated 09.10.2019 regarding installation & life time maintenance of electrical network of their infrastructure. In Para No. 7 of this undertaking, the respondent agree to the condition that any kind of events such as electrical breakdown / accident / fire /

R. Patel



High voltage damages to property or human due to poor workmanship will be their responsibility. While Para No. 9 of this undertaking, it is mentioned that Petitioner (DGVCL) will provide, operate and maintain power supply to the point of supply (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. Copy of the undertaking submitted by the respondent is attached herewith as **Annexure-K**.

- 11F. The petitioner has informed the Respondent 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 notarized undertaking incorporating Points No. 01 to 05 mentioned in the said letter which is attached herewith as **Annexure-L**. The Respondent did not submit the notarized undertaking as asked by the Petitioner's letter dated 19.12.2019 till today.
- 11G. The Respondent has not submitted the consent for one time payment of the incremental losses of Dry Type Transformer but respondent has requested vide his letter No. SDB/57 dated 20.01.2021 (**Annexure-M**) 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 Dtd. 03.12.2019 (**Annexure-J**).
- 11H. The Petitioner has again instructed the respondent to submit Undertaking for the one time payment of financial burden against incremental losses due to Dry Type Transformer vide Letter No. DGVCL/CE (O&M)/SE (O&M)/SDP/21/2602, dated 09.02.2021 (**Annexure-N**). The petitioner has also 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.
- 11I. The respondent has represented vide letter No. SDB/66, dated 25.02.2021 (**Annexure-O**) that burden due to higher losses with Dry type transformer shall be borne by the respondent and therefore mutually agreed methodology/ mechanism for allocation of incremental losses needs to be prescribed / decided. The respondent agreed to have provision of metering arrangement at 11 KV HV side of Dry type transformer to borne actual burden due to higher losses of dry type transformer instead of one time payment as asked by the petitioner. The respondent confide to pay the amount for incremental losses due to dry type transformer as per order and approved methodology from Hon'ble

R. Parekh

Commission.

The Petitioner has to submit here that the GUVNL has devised the methodology to calculate incremental losses of dry type transformers compare to oil type transformers and to recover onetime payment require to compensate incremental losses and conveyed to Petitioner along with all Distribution Companies vide letter No. GUVNL/TECH-3/DE-1/Transformer/1233 dated 19.06.2020 which is attached here with as **Annexure-P**.

11K. GUVNL has also directed in above letter that (1) The Respondent has to give undertaking to pay amount for incremental losses. (2) The respondent 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 by its own under consultation with respective Distribution Company.

11L. The Respondent insisted for utilization of Dry Type Transformers in place of Oil Type Transformers (normally used by petitioner). But, respondent neither submit undertaking as asked by petitioner nor ready to pay one time payment against incremental losses for Dry Type Transformer. The reasons for requesting one time payment from the respondent are as under :-

I. The Respondent is a developer who will develop whole project after completion of project the respondent will hand over 4739 nos. of premises for the purpose of Diamond trading offices to different diamond businessmen. Therefore, different diamond businessmen will became the end user & forthcoming consumers of Petitioner. It means in this case, respondent (developer) and the end user cum forthcoming consumers will be different legal entity.

II. The end-user cum forthcoming consumers i.e. owner of 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. Due to above mentioned reasons, the petitioner may not able to recover additional financial burden towards incremental losses. If the individual forthcoming consumers of Diamond Trading Offices may deny to pay the additional life time financial burden towards incremental losses then this additional financial burden towards incremental losses shall be



borne by the petitioner.

Therefore, Petitioner hereby requests Hon'ble Commission to allow onetime payment from the respondent required to compensate incremental losses of Dry Type Transformer as the respondent is insisting to install Dry Type Transformer.

*11M. The Respondent (M/s. Surat Diamond Bourse) has insisted to install Energy Meters at every floor up to 15th Floor, for this they have proposed to install Sandwich type Bus-Bar Trunking System instead of cable for supply up to meter from main panel. The request letter of the Respondent is attached herewith as per **Annexure-I**.*

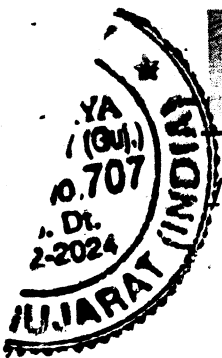
*11N. The Respondent have represented on 14.08.2019 to the petitioner (**Annexure-Q**) to install Meter on each floor of Multi-storeyed Building as per GERC Supply Code cl.No. 6.10. According to the Supply Code notification no. 4/2015 Clause no. 6.10 which states that in case of Multi-storeyed Building, it shall be fixed on the Ground Floor / rising mains having proper air ventilation & adequate illumination.*

11O. The Respondent want to use Insulated flat radial shaped aluminium conductor through Sandwich type Bus bar Trunking system which will carry electric supply from LT Distribution panel located at upper basement to meters located at each floor. Instead of conventional service cable Sandwich type Busbar Trunking system will be used which is a unique concept and totally new concept to the petitioner (DGVCL) as well as other Distribution Companies of Gujarat. The Sandwich type Busbar Trunking system arrangement is insisted by the Respondent for their convenience to provide individual connection on each floor hence the safety related liability will be of the Respondent. The petitioner have no such infrastructure for operation and maintenance of such new concept and complicated infrastructure developed by the respondent.

11P. The Clause-36 (4) of Central Electricity Authority Regulation, 2010 for Multi-storeyed Building is reproduced as under :-

"The owner or 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."

R. P. Patel



11Q. *The Respondent has sought approval for his proposed electrical network from Electrical Inspector, Surat and accordingly, approval has been accorded for electrical network plan under provision of Regulation No. 36 of Central Electricity Authority Regulation, 2010 for Multi-storeyed Building vide Letter No. EI/SRT/Plan/1568, 1570, 1572, 1574, 1576, 1578, 1580, 1582, 1584, dated 05.10.2020. (Annexure-R-1 to R-9)*

11R. *While going through the approval of Electrical Inspector, Surat accorded to the Respondent, the approval is given to the respondent subjected to following conditions :-*

The approval does not absolve respondent for obtaining any other permission get 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 / equipments / cables / other electrical items utilized by respondent as per prevailing BIS.

11S. *It is requested to provide appropriate regulation for such type of new concept so that no any additional financial burden to be bear by DISCOM or no any discrepancies arise to define point of supply in case of all the material except meter is planned to provide by the respondent as per site requirement of the Respondent (developer).*

11T. *The respondent has requested for adoption of new concept of Dry Type Transformer, Sandwich type Busbar Trunking system, RMU, underground cable and LT breakers. Therefore, the responsibility of life time maintenance/safety related aspect of such network developed by the respondent shall be at his own as per Clause No.36(4) of Central Electricity Authority Regulation, 2010.*

12. *M/s. Surat Diamond Bourse have planned to install Energy Meters at every floor up to 15th Floor, for this they have planned to install sandwich type Bus-Bar trunking instead of Armoured cable for supply up to meter from main panel. Insulated flat radial shaped aluminium conductor is used for trunking which will carry electric supply from LT Distribution panel located at upper basement to meters located at each floor. It means, instead of conventional service cable bus-bar trunking is a unique concept which is totally new to DGVCL.*

R. Perin

The provision of Clause No.4.105& 4.106 of supply code notification No.4/2015 which is reproduce here as under :

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.

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.

5.13 The consumer shall provide space of requisite dimensions and at 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 his premises, transformers, switch gear, meter and all other apparatus up to the point of commencement of supply. The whole of service line and other apparatus shall be deemed to be the property of the licensee and shall remain under his control.

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 bus bar located at upper basement to each floor will be provided by the respondent own hence question arise regarding provisions of above mention clauses about consideration of point of supply and liability of service line.

14. The Petitioner has no such power to recover any charges from the applicant other than mention in Notification No.9 of 2005 (Licensees Power To Recover Expenditure Incurred In Providing Supply And Other Miscellaneous Charges) Regulation 2005 as well as the provision of respective Tariff order.

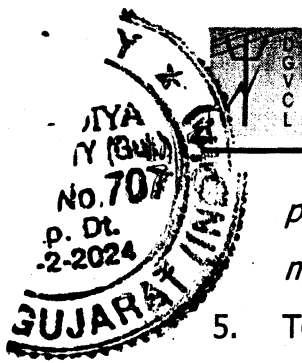
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PRAYER

The Petitioner most respectfully submits and prays to the Hon'ble Commission 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 floors 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 750C (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 Authority 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 define 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 propose the metering point at each floor of the high rise building and LT Supply will be extend through rising Bus bar trunking from LT penal 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*

R. Patel



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 Hon'ble Commission may consider appropriate.
6. The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
7. Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

Declaration

Declaration that the subject matter of the Petition has not been raise by the Petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any Orders in relation thereto.

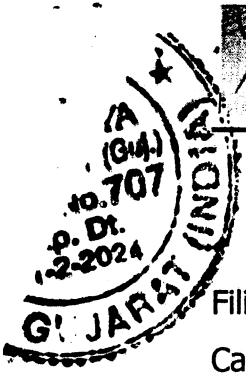
Signature of the Petitioner


(Ms. R. J. Pereira)

Place: Surat

Date: 21 September, 2021

I/c Chief Engineer (O&M/GL)



**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION
GANDHINAGAR**

Filing No:

Case No:

IN THE MATTER OF

Filing of Petition section-45, 46, 86 & other applicable provision of Electricity Act 2003 read with the Gujarat Electricity Regulatory Commission (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 and trunking system for providing service line instead of conventional service cable for propose high raise complex which resulting in incremental losses and issue of point of supply.

AND

IN THE MATTER OF

Dakshin Gujarat Vij Company Limited,
"Urja Sadan", Corporate Office, Nana Varachha Road,
Kapodara Char Rasta,
Surat - 395 006

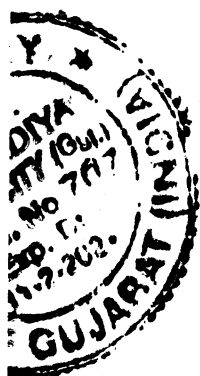
R. K. Verma
PETITIONER

AND

The Chief Executive Officer, Surat Diamond Bourse and
Others

IN THE MATTER OF

RESPONDENTS



Affidavit verifying the Petition

I, Ms. Rita Pereira, wife of Mr. James Pereira, aged 57 years, residing at Surat, do hereby solemnly affirm and state as follows:

- I. I am the I/c Chief Engineer (O&M/GL) of the Dakshin Gujarat Vij Company Limited (DGVCL), the Petitioner in the above matter and am duly authorized by the said the Petitioner to make this affidavit.
- II. The Statements made in the Petition application herein above are true to my knowledge and belief, which I believe them to be true.

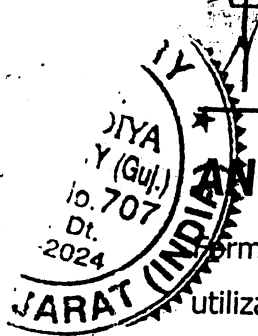
Solemnly affirmed at Surat on this __ September, 2021 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.


(Ms. R. J. Pereira)
I/c Chief Engineer (O&M/GL)

Identified before me

Place: Surat

Date: 21 September, 2021



ANNEXURE : A

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) =

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

$$(\text{OP})=[\text{AUL} \times \text{Ec}]/(\text{R}-\text{CAGR}) \times 1000$$

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

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

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.

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ANNEXURE : B

Illustrative example for Onetime Payment (OP) required to compensate losses amount in case of utilization of dry type transformer in place of oil cooled type transformer.

Transformer Capacity : 1000 KVA (Procured by applicant/developer)

DRY_NL=Measured maximum No load losses of Dry Type Distribution Transformer, procured by applicant/Developer (in KW)=2.000 KW.

DRY_LL=Measured maximum load losses of Dry Type Distribution Transformer, procured by applicant/Developer (in KW) at 75° C=10.000 KW (at maximum current Tap).

OIL_NL=Calculated maximum No load losses of Oil Cooled Distribution Transformer of identical capacity to Dry Type Transformer, for BIS Level-2/BEE Star-1 Rating as being procured by DISCOMs (in KW)=1.153 KW.

OIL_LL=Calculated maximum load losses of Oil Cooled Distribution Transformer of identical capacity to Dry Type Transformer, for BIS Level-2/BEE Star-1 Rating as being procured by DISCOMs (in KW)=6.547 KW.

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

LF =Load Factor =0.7

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

R = Prevailing Rate of Interest (%) p.a. on Consumer Deposit=6.25% (2019-20)

Ec =Prevailing cost to serve (Rs./KWH) at HT level=Rs.5.64 (2018-19)

CAGR =Compound Annual Growth Rate (%) in cost to serve at HT level=1.60%.

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.

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

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

$$= \{(2.000-1.153) + \{(10.000-6.547) \times 0.553\} \times 8760\}$$

$$= \{2.757 \times 8760\}$$

$$= 24151.32 \text{ KWH}$$

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.)

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

$$= [(24151.32 \times 5.64) / (6.25 - 1.60)] \times 100$$

$$= [(136213.44) / (4.65)] \times 100$$

$$= \text{Rs.} 2929321.29$$

$$= \text{Rs.} 29,29,321/-$$

Capacity wise no load losses (NL)/full load losses(LL)/load factor etc for dry type and oil cool type transformer

	Dry NL KW			Dyr LL KW			Oil NL KW			Oil LL KW			Hr.		
KVA	1000	1250	1600	1000	1250	1600	1000	1250	1600	1000	1250	1600	1000	1250	1600
VALUE	2	2.5	3.2	10	12.5	16	1.153	1.4413	1.8448	6.547	8.1838	10.4752	8760	8760	8760
	LF			LLF			R			EC			CAGR		
KVA	1000	1250	1600	1000	1250	1600	1000	1250	1600	1000	1250	1600	1000	1250	1600
VALUE	0.7	0.7	0.7	0.553	0.553	0.553	6.25%	6.25%	6.25%	5.64	5.64	5.64	1.60%	1.60%	1.60%

1. Capacity wise Annual Unit Loss :

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

For 1000KVA

$$\begin{aligned} &= \{(2.000-1.153) + \{(10.000-6.547) \times 0.553\} \times 8760\} \\ &= \{2.757 \times 8760\} \\ &= 24151.32 \text{ KWH} \end{aligned}$$

For 1250KVA

$$\begin{aligned} &= \{(2.5-1.44125) + \{(12.5-8.18448) \times 0.553\} \times 8760\} \\ &= \{3.45 \times 8760\} \\ &= 30184 \text{ KWH} \end{aligned}$$

For 1600KVA

$$\begin{aligned} &= \{(3.2-1.8448) + \{(16-10.4752) \times 0.553\} \times 8760\} \\ &= \{4.41041 \times 8760\} \\ &= 38636 \text{ KWH} \end{aligned}$$

2. Capacity wise One Time compensatory Payment amount:

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

For 1000KVA

$$\begin{aligned} &= [(24151.32 \times 5.64) / (6.25 - 1.60)] \times 100 \\ &= [(136213.44) / (4.65)] \times 100 \\ &= \text{Rs.} 2929321. \end{aligned}$$

For 1250KVA

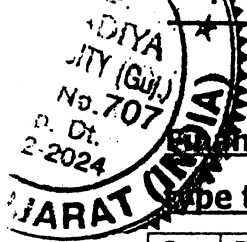
$$\begin{aligned} &= [(30184 \times 5.64) / (6.25 - 1.60)] \times 100 \\ &= [(170238) / (4.65)] \times 100 \\ &= \text{Rs.} 3661000 \end{aligned}$$

For 1600KVA

$$\begin{aligned} &= [(38636 \times 5.64) / (6.25 - 1.60)] \times 100 \\ &= [(217907) / (4.65)] \times 100 \\ &= \text{Rs.} 4686080 \end{aligned}$$

B. Perera

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Financial burden against incremental losses calculation for total propose dry type transformer by the Respondent

Sr. No.	Dry Type Dist Trans. Cap (KVA)	Nos. of Transformers	Annual loss (AUL)/Transformer (In KWH)	Total Annual Unit Loss (AUL)	Onetime Payment (OP) In Rs./Transformer	Total of onetime payment (OP) in Rs.
1.	1000	2	24151	48303	2929321	5858643
2.	1250	4	30184	120736	3661000	14644000
3.	1600	6	38636	231816	4686080	28116480
Total					11276401	48619123

Comparison of additional losses due to installation of Dry type transformer instead of Conventional oil cool Transformer.

Sr. No.	Capacity of Transformer (in KVA)	Numbers of Dry transformer to be installed by the Respondent.	Total Losses at 100% load for Dry Type Transformers (KW)/per transformer.	Total Losses at 50% load for Dry Type Transformer (KW)/per transformer.	Total Losses at 100% load for Conventional Transformer as per IS-1180 Part-1 (KW)/per transformer.	Total Losses at 50% load for Conventional Transformer as per IS-1180 Part-1 (KW)/per transformer.	Total monthly losses in Kwh for Dry type transformer for 12 Hrs 100% & 50% Load.	Total monthly losses in Kwh for conventional transformer for 12 Hrs 100% & 50% Load.	Total monthly losses in Kwh due to Dry type transformer for commercial office load.
1	1000	2	12	4.5	5.3	1.86	11880	5155.2	6724.8
2	1250	4	13.87	5.19	7.7	2.79	27446.4	15105.6	12340.8
3	1600	6	16.8	6.32	11.8	4.2	49939.2	34560	15379.2
							89265.6	54820.8	34444.8
Total monthly losses in Units : 34445									



ANNEXURE : D

Illustrative example for Onetime Payment (OP) required to compensate losses amount in case of utilization of dry type transformer in place of oil cooled type transformer.

Surat diamond bourse Dry-type dist. Transformer diff .losses calculation compare to oil-type dist. Transformer:

(A) Calculated maximum No-load losses & Load losses of Oil-cooled distribution transformers of 11/1000 KVA, 11/1250 KVA & 11/1600 KVA:

(A1) Calculation of No-load losses & Load losses of Oil-cooled distribution transformers of 11/1000 KVA :

As per BIS-1180 level-2/B.E.E.start-1/ ECB-Code-2017,

Maximum Total losses (W) of 11/1000 KVA Level-2(Star-1) Distribution transformer@ 100 % load= 7700 W (7.7 KW)

Maximum Total losses (W) of 11/1000 KVA Level-2(Star-1) Distribution transformer@ 50 % load= 2790 W (2.790 KW)

NL=No-load losses, LL=Full load losses (Maximum load losses) @100 % Load,

Therefore, $NL+LL=7700$ Watts..... (A)

$NL+1/4*LL=2790$ Watts..... (B)
 $LL=7700-NL$

Therefore, $NL+1/4(7700-NL) = 2790$
 $(4NL+7700-NL)/4=2790$
 $3NL+7700=2790*4$
 $3NL=11160-7700$
 $3NL=3460$
NL=1153.33 Watts

Therefore, $NL+LL=7700$ Watts
 $1153.33+LL=7700$
 $LL=7700-1153.33$
LL=6546.67 Watts

Therefore, No-load losses (NL) =1153.33 Watts (1.153 KW)
Full load losses (LL) =6546.67 Watts (6.547 KW)
Maximum load losses (LL) =6546.67 Watts (6.547 KW)

(A2) Calculation of No-load losses & Load losses of Oil-cooled distribution transformers of 11/1250 KVA :

As per BIS-1180 level-2/B.E.E.start-1/ ECB-Code-2017,

Maximum Total losses (W) of 11/1250 KVA Level-2(Star-1) Distribution transformer@ 100 % load= 9200 W (9.2 KW)

Maximum Total losses (W) of 11/1250 KVA Level-2(Star-1) Distribution transformer@ 50 % load= 3300 W (3.3 KW)

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NL=No-load losses, LL=Full load losses (Maximum load losses) @100 % Load,

Therefore, $NL+LL=9200$ Watts..... (A)

$NL+1/4*LL=3300$ Watts..... (B)
 $LL=9200-NL$

Therefore, $NL+1/4(9200-NL)=3300$
 $(4NL+9200-NL)/4=3300$
 $3NL+9200=3300*4$
 $3NL=13200-9200$
 $3NL=4000$
 $NL=1333.33$ Watts

Therefore, $NL+LL=9200$ Watts
 $1333.33+LL=9200$
 $LL=9200-1333.33$
 $LL=7866.67$ Watts

Therefore, **No-load losses (NL) =1333.33 Watts (1.333 KW)**
Full load losses (LL) =7866.67 Watts (7.867 KW)
Maximum load losses (LL) =7866.67 Watts (7.867 KW)

(A3) Calculation of No-load losses & Load losses of Oil-cooled distribution transformers of 11/1600 KVA :

As per BIS-1180 level-2/B.E.E.start-1/ ECB-Code-2017,

Maximum Total losses (W) of 11/1600 KVA Level-2(Star-1) Distribution transformer@ 100 % load= 11800 W (11.8 KW)

Maximum Total losses (W) of 11/1600 KVA Level-2(Star-1) Distribution transformer@ 50 % load= 4200 W (4.2 KW)

NL=No-load losses, LL=Full load losses (Maximum load losses) @100 % Load,

Therefore, $NL+LL=11800$ Watts..... (A)

$NL+1/4*LL=4200$ Watts..... (B)
 $LL=11800-NL$

Therefore, $NL+1/4(11800-NL)=4200$
 $(4NL+11800-NL)/4=4200$
 $3NL+11800=4200*4$
 $3NL=16800-11800$
 $3NL=5000$
 $NL=1666.67$ Watts

Therefore, $NL+LL=11800$ Watts
 $1666.67+LL=11800$
 $LL=11800-1666.67$
 $LL=10133.33$ Watts

Therefore, **No-load losses (NL) =1666.33 Watts (1.667 KW)**
Full load losses (LL) =10133.33 Watts (10.133 KW)
Maximum load losses (LL) =10133.33 Watts (10.133 KW)



(B) Measured maximum No-load losses & Load losses of Dry-Type Distribution Transformers of 11/1000 KVA, 11/1250 KVA & 11/1600 KVA:

(B1) Maximum Total losses of Dry-Type distribution Transformers of 11/1000 KVA as per **ECB Code-2017: 12000 Watts (12 KW)**

No-Load losses of 11/1000 KVA as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse= 1.953 KW

Load losses of 11/1000 KVA @ 100 % load as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse (At principal Tap No.3)= 9.076KW (Which should be at maximum current Tap)

Maximum Total losses of 11/1000 KVA as per Test-certificate of Manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse=**1.953+9.076=11.029 KW**

(B2) Maximum Total losses of Dry-Type distribution Transformers of 11/1250 KVA as per **ECB Code-2017: 13870 Watts (13.870 KW)**

No-Load losses of 11/1250 KVA as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse= 2.198 KW

Load losses of 11/1250 KVA @ 100 % load as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse (At principal Tap No.3) = 11.212 KW (Which should be at maximum current Tap)

Maximum Total losses of 11/1250 KVA as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse =**2.198+11.212=13.410 KW**

(B3) Maximum Total losses of Dry-Type distribution Transformers of 11/1600 KVA as per **ECB Code-2017: 16800 Watts (16.800 KW)**

No-Load losses of 11/1600 KVA as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse=2.410 KW

Load losses of 11/1600 KVA @ 100 % load as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse (At principal Tap No.3) = 13.312 KW (Which should be at maximum current Tap)

Maximum Total losses of 11/1600 KVA as per Test-certificate of manufacturer (Volt-amp) produced by applicant Surat Diamond Bourse =**2.410+13.312=15.722 KW**

(C) CALCULATION FOR TOTAL ANNUAL UNITS FOR INCREMENTAL LOSSES (in Kwh)(AUL): (For 11/1000, 11/1250 & 11/1600 KVA):

(1) Calculation for total annual units for incremental losses (in Kwh)-AUL

DRY_NL= Measured maximum No Load losses of Dry type Distribution transformer, Procured by applicant (in KW)

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DRY_LL= Measured maximum Load losses of Dry type Distribution transformer, Procured by Applicant (in KW) at 75 °c (at maximum current tap)

OIL_NL= Calculated maximum No load losses of Oil cooled Distribution transformer of Identical Capacity to Dry type transformer for BIS Level-1/BEE star-1 rating

OIL_LL= Calculated maximum load losses of Oil cooled Distribution transformer of Identical Capacity to Dry type transformer for BIS Level-1/BEE star-1 rating

Hr. = Nos. of service hours per year of the distribution transformer
= (8760 Hours (365 days×24 hours))

LF = Load Factor=0.7

LLF = Loss Load Factor= $0.3LF+0.7LF^2 = (0.3 \times 0.7) + (0.7 \times 0.7 \times 0.7) = 0.553$

R = Prevailing Rate of Interest (%) p.a. on Consumer Deposit= 4.65 (2020-21)

Ec = Prevailing Cost to serve (Rs./Kwh) at HT level = Rs. 6.11(2019-2020)

CAGR = Compound Annual Growth Rate (%) in Cost to serve at HT level = 1.72 %

(1) Calculation for total annual units for incremental losses (in Kwh)-AUL & Onetime Payment to Compensate losses amount for 11/1000 KVA Dry-type distribution Transformer.

DRY_NL=1.953 KW	OIL_NL=1.153 KW	LF=0.7	Hrs. = 8760
DRY_LL= 9.076 KW	OIL_LL= 6.547 KW	LLF=0.553	R =4.65
Ec= Rs. 6.11/Kwh	CAGR= 1.72 %		

Total annual unit for incremental losses in (Kwh) (AUL) =
 $= \{[(\text{DRY_NL} - \text{OIL_NL}) + \{(\text{DRY_LL} - \text{OIL_LL}) \times \text{LLF}\}] \times \text{Hr.}\}$
 $= \{[(1.953 - 1.153) + \{(9.076 - 6.547) \times 0.553\}] \times 8760\}$
 $= \{2.198537 \times 8760\}$
 $= 19259.18 \text{ Kwh}$

Therefore, Onetime Payment to Compensate losses amount for utilization of 11/1000 KVA Dry-type distribution Transformer in place of oil-cooled type distribution transformer (in Rs.)

OP (in Rs.)= $[(\text{AUL} \times \text{Ec}) / (\text{R} - \text{CAGR})] \times 100$
 $= [19259.18 \times 6.11 / (4.65 - 1.72)] \times 100$
 $= \text{Rs. } 4016164.34$

(2) Calculation for total annual units for incremental losses (in Kwh)-AUL & Onetime Payment to Compensate losses amount for 11/1250 KVA Dry-type distribution Transformer.

DRY_NL=2.198 KW	OIL_NL=1.333 KW	LF=0.7	Hrs. = 8760
DRY_LL= 11.212KW	OIL_LL= 7.867 KW	LLF=0.553	R =4.65
Ec= Rs. 6.11/Kwh	CAGR= 1.72 %		

Total annual unit for incremental losses in (Kwh) (AUL) =
 $= \{[(\text{DRY_NL} - \text{OIL_NL}) + \{(\text{DRY_LL} - \text{OIL_LL}) \times \text{LLF}\}] \times \text{Hr.}\}$
 $= \{[(2.198 - 1.333) + \{(11.212 - 7.867) \times 0.553\}] \times 8760\}$
 $= \{2.714785 \times 8760\}$
 $= 23781.52 \text{ Kwh}$

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Therefore, Onetime Payment to Compensate losses amount for utilization of 11/1250 KVA Dry-type distribution Transformer in place of oil-cooled type distribution transformer (in Rs.)

$$\begin{aligned} \text{OP (in Rs.)} &= [(AUL \times E_c / (R - CAGR)) \times 100] \\ &= [23781.52 \times 6.11 / (4.65 - 1.72)] \times 100 \\ &= \text{Rs. } 4959217.28 \end{aligned}$$

(3) Calculation for total annual units for incremental losses (in Kwh)-AUL & Onetime Payment to Compensate losses amount for 11/1600 KVA Dry-type distribution Transformer.

$$\begin{aligned} \text{DRY_NL} &= 2.410 \text{ KW} & \text{OIL_NL} &= 1.667 \text{ KW} & \text{LF} &= 0.7 & \text{Hrs.} &= 8760 \\ \text{DRY_LL} &= 13.312 \text{ KW} & \text{OIL_LL} &= 10.133 \text{ KW} & \text{LLF} &= 0.553 & \text{R} &= 4.65 \\ E_c &= \text{Rs. } 6.11/\text{Kwh} & \text{CAGR} &= 1.72 \% \end{aligned}$$

$$\begin{aligned} \text{Total annual unit for incremental losses in (Kwh) (AUL)} &= \\ &= \{[(\text{DRY_NL} - \text{OIL_NL}) + \{(\text{DRY_LL} - \text{OIL_LL}) \times \text{LLF}\}] \times \text{Hr.}\} \\ &= \{[(2.410 - 1.667) + \{(13.312 - 10.133) \times 0.553\}] \times 8760\} \\ &= \{2.500987 \times 8760\} \\ &= 21908.65 \text{ Kwh} \end{aligned}$$

Therefore, Onetime Payment to Compensate losses amount for utilization of 11/1000 KVA Dry-type distribution Transformer in place of oil-cooled type distribution transformer (in Rs.)

$$\begin{aligned} \text{OP (in Rs.)} &= [(AUL \times E_c / (R - CAGR)) \times 100] \\ &= [21908.65 \times 6.11 / (4.65 - 1.72)] \times 100 \\ &= \text{Rs. } 4568663.06 \end{aligned}$$

S. Verma

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Annexure-F

Financial burden against Incremental Losses calculation for total propose dry type transformers by the Respondent

SR NO.	Dry type Dist Trans. Cap(KVA)	Nos. 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	8032326.95
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



Annexure-H.

Comparison of additional losses due to installation of Dry type transformer instead of Conventional oil cool Transformer.

Sr No.	Capacity of Transfor mer (in KVA)	Number s of Dry transfor mer to be installe d by the Respon dent.	Total Losses at 100% load for Dry Type Transfor mers (KW)/pe r transfor mer.	Total Losses at 50% load for Dry Type Transfo rmer (KW)/p er transfo rmer.	Total Losses at 100% load for Conventi onal Transfor mer as per IS- 1180 Part-1 (KW)/pe r transfor mer.	Total Losses at 50% load for Convent ional Transfo rmer as per IS- 1180 Part-1 (KW)/p er transfor mer.	Total monthly losses in Kwh for Dry type transform er for 12 Hrs 100% & 12 Hrs 50% Load.	Total monthly losses in Kwh for conventio nal transform er for 12 Hrs 100% & 12 Hrs 50% Load.	Total monthly losses in Kwh due to Dry type transform er for commerci al office load.
1	1000	2	11.03	4.50	7.70	2.79	11180.88	7552.80	3628.08
2	1250	4	13.41	5.19	9.20	3.30	26784.00	18000.00	8784.00
3	1600	6	15.72	6.32	11.80	4.20	47606.40	34560.00	13046.40
							85571.28	60112.80	25458.48
Total monthly losses in Units : 25458									

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7. Electrical and Renewable Energy Systems

7.1 General

All electric and renewable energy equipment and systems shall comply with the mandatory requirements of §7.2.

7.2 Mandatory Requirements

7.2.1 Transformers

7.2.1.1 Maximum Allowable Power Transformer Losses

Power transformers of the proper ratings and design must be selected to satisfy the minimum acceptable efficiency at 50% and full load rating. The permissible loss shall not exceed to values listed in Table 7-1 for dry type transformers and Table 7-2 for oil type transformers.

Table 7-1 Permissible Losses for Dry Type Transformers

Rating (kVA)	Up to 22 kV class	33 kV class	66 kV class	110 kV class
100	940	2,400	1,120	2,400
160	1,290	3,300	1,420	3,300
200	1,500	3,800	1,750	4,000
250	1,700	4,320	1,970	4,600
315	2,000	5,040	2,400	5,400
400	2,380	6,040	2,900	6,800
500	2,800	7,250	3,300	7,800
630	3,340	8,820	3,950	9,200
800	3,880	10,240	4,550	11,400
1,000	4,500	12,000	5,300	12,800
1,250	5,190	13,870	6,250	14,500
1,600	6,320	16,800	7,500	18,000
2,000	7,500	20,000	8,880	21,400
2,500	9,250	24,750	10,750	26,500

* The values as per Indian Standard/BEE Standard & Labeling notification for dry type transformer corresponding to values in this table will supersede as and when the Indian standards/BEE Standard & Labeling notification are published.

Table 7-2 Permissible Losses for Oil Type Transformers.

Rating (kVA)	Impedance (%)	Max. Total Loss (W) for transformers up to 33 kV			
		ECBC Building		EEBC Building	
		50% Load	100% Load	50% Load	100% Load
16	4.5	135	440	135	440
25	4.5	190	635	190	635
63	4.5	340	1,140	340	1,140
100	4.5	475	1,650	475	1,650
160	4.5	670	1,950	670	1,950
200	4.5	780	2,300	780	2,300
250	4.5	980	2,930	980	2,930
315	4.5	1,025	3,100	1,025	3,100
400	4.5	1,225	3,450	1,225	3,450
500	4.5	1,510	4,300	1,510	4,300
630	4.5	1,860	5,300	1,860	5,300
1,000	5	2,790	7,700	2,790	7,700
1,250	5	3,300	9,800	3,300	9,800
1,600	6.25	4,200	11,800	4,200	11,800
2,000	6.25	5,050	15,000	5,050	15,000
2,500	6.25	6,150	18,500	6,150	18,500

Total loss values given in above table are applicable for thermal classes E, B and F and have component of load loss at reference temperature according to Clause 17 of IS 1180 i.e., average winding temperature rise as given in Column 2 of Table B.2 plus 30°C. An increase of 7% on total for thermal class H is allowed.

Permissible total loss values shall not exceed:

- (a) 5% of the maximum total loss values mentioned in IS 1180 for oil type transformers in voltage class above 11 kV but not more than 22 kV
- (b) 7.5% of the maximum total loss values mentioned in above IS 1180 for oil type transformers in voltage class above 22 kV and up to and including 33 kV

7.2.1.2 Measurement and Reporting of Transformer Losses

All measurement of losses shall be carried out by using calibrated digital meters of class 0.5 or better accuracy and certified by the manufacturer. All transformers of capacity of 500 kVA and above would be equipped with additional metering class current transformers (CTs) and potential transformers (PTs) additional to requirements of Utilities so that periodic loss monitoring study may be carried out.

Energy Conservation Building Code 2017

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TRANSFORMER Sr.No.

Format No. TST/F/10

JNC

63951/1

CAST RESIN DRY TYPE TRANSFORMER

Principal Contractor
 Purchaser
 Purchaser's PO No.
 Project
 Consultant

PSP Projects Ltd.
 Adishwaram Corporation
 ADC/AHD/SDB/006/19 Dated 24.10.2019
 Surat Diamond Bourse at Khajod, Surat
 AECOM India Pvt. Ltd.

ROUTINE TESTS

Date of Testing : 20.02.2020

Vector Group : Dyn11

IS : 11171 / 2026 - Up to Date

KVA : 1600
 Voltage Ratio : 11000 / 433 Volts
 % Tappings : + 5 % to - 7.5 % in Step of 2.5 %
 Temperature : 25.6 °C

1 MEASUREMENT OF WINDING RESISTANCE AT									
H.V. Winding in "0" At Tap No.									L.V. Winding in "m0"
Between 1U1V =			0.6189						Between 2u2n = 0.207
1V1W =			0.6172						2v2n = 0.208
1W1U =			0.6189						2w2n = 0.208

Tested at 25.2 °C on HV Side

2 MEASUREMENT OF SHORT CIRCUIT IMPEDANCE & LOAD LOSSES:									
C.T. Ratio = C = 100 / 1 = 100 P.T. Ratio = P = 660 / 110 = 6									
Tap No.	Current X C			Imp Voltage x P x √3			Wattmeter Reading		
	I _r	I _y	I _b	V _{ry}	V _{yb}	V _{br}	W1	W2	W3
3	0.8369	0.8498	0.8341	70.76	71.30	70.98	5.07	6.01	5.85

Total M.F. = C X P

(W1+W2+W3) X M.F.

Load Loss in Watts

600

16.93 X 600

10158

3 MEASUREMENT OF NO-LOAD LOSS & CURRENT : Tested at 433 Volts on									
C.T. Ratio = C = 40 / 1 = 40 P.T. Ratio = P = 660 / 110 = 6									
% V	Voltage x P x √3		No Load Current X C			Wattmeter Reading			
	V _{mean} (V)	V _{rms} (V)	I _r	I _y	I _b	W1	W2	W3	
100	41.65	42.07	0.2258	0.1599	0.2420	5.57	2.04	2.53	240

LV side.

Total M.F. = C X P

(W1+W2+W3) X M.F.

No Load Loss in Watts

240

10.14 X 240

2434

4 INDUCED OVER VOLTAGE TEST :									
Applied 2 x 433 Volts at 124.8 Cycles/Secs. And withstood for 50 Secs.									
5 SEPARATE SOURCE VOLTAGE TEST :									
(A) Applied 20 kV Between HV winding to L.V. Winding & Earth and withstood for 60 secs. (LC - 20mA)									
(B) Applied 3 kV Between LV winding to H.V. Winding & Earth and withstood for 60 secs. (LC - 04mA)									
6 INSULATION RESISTANCE TEST :									
AT 25.4 °C									
(a) H.V. winding to Earth 47000 MO (With 5.0kV Megger)									
(b) L.V. Winding to Earth 99000 MO (With 1.0kV Megger)									
(c) H.V. winding to L.V. Winding 85800 MO (With 5.0kV Megger)									

7 TURNS RATIO TEST :									
Tap Link Position No.	1	2	3	4	5	6			
U/u Phase	46.193	45.108	44.021	42.935	41.855	40.768			
V/v Phase	46.193	45.109	44.029	42.935	41.850	40.767			
W/w Phase	46.199	45.113	44.027	42.941	41.861	40.776			

8 POLARITY PHASE RELATIONSHIP (VECTOR GROUP) CHECKED :									
FOUND OK Dyn11									

WITNESSED BY

Manoj Yadav
 MMC

Kiran Kumar
 AECOM

Mihir Shah
 ACPL

TESTED BY

Rajendra Chauhan
 Voltamp

VOLTAMP TRANSFORMERS LIMITED

UNIT - II, VADADALA, SAVALI
VADODARA - 391520
GUJARAT, INDIA



TRANSFORMER S. NO.

Form No. TST

JNC 6395

Email ID : voltamp@voltamptransformers.com

PHONES : 91-9374648493, 937-648522

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FAX NO : 91-2667-251250

Principal Contractor

PSP Projects Ltd.

Purchaser

Adishwaran Corporation

Purchaser's PO No.

ADC/AHD/SOB/006/19 Dated 24.10.2019

Project

Surat Diamond Bourse at Khajod, Surat

Consultant

AECOM India Pvt. Ltd.

SPECIAL TESTS

Date of Testing : 20.02.2020

KVA 1600

Voltage Ratio

11000 / 433

Volts

Vector Group

Dyn11

% Tappings : + 5

% 10

7.5 %

Step of

2.5 %

IS : 11171 / 2026 - Up to Date

1. Measurement of Partial Discharge Test

* Pre-Stress Voltage of 1.5Um was Applied for 30 Seconds Before reaching upto the Measurement Voltage

Partial Discharge Measured at 1.1Um for 180 Seconds : 7.0 pC

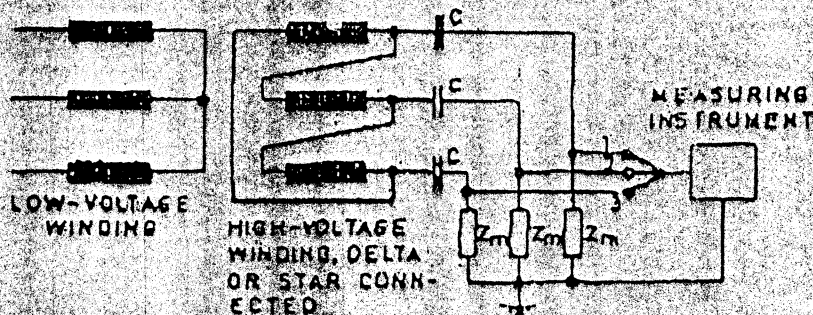


FIG. 1 BASIC MEASURING CIRCUIT FOR THE PARTIAL DISCHARGE TEST FOR A THREE-PHASE TRANSFORMER

WITNESSED BY :

TESTED BY :

Manoj Yadav
MMC

Kiran Kumar
AECOM

Mihir Shah
ACPL

Rajendra Chavhan
VTL

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f. Lewis

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TRANSFORMER Sr.No.

Format No. TST/F/10

JNC 63952/1

CAST RESIN DRY TYPE TRANSFORMER

Principal Contractor
Purchaser
Purchaser's PO No.
Project
Consultant

PSP Projects Ltd.
Adishwaram Corporation
ADC/AHD/SDB/006/19 Dated 24.10.2019
Surat Diamond Bourse at Khajod, Surat
AECOM India Pvt. Ltd.

ROUTINE TESTS

Date of Testing : 22.02.2020

Vector Group : Dyn11

IS : 11171 / 2026 - Up to Date

KVA : 1250

Voltage Ratio : 11000 / 433 Volts

% Tappings : 5 % to 7.5 % in Step of 2.5 %

1 MEASUREMENT OF WINDING RESISTANCE AT 24.6 °C

H.V. Winding in "m"	At Tap No.	3	L.V. Winding in "mΩ"
Between 1U1V	=	0.7971	Between 2U2n = 0.267
1V1W	=	0.7961	2v2n = 0.268
1W1U	=	0.7963	2w2n = 0.269

2 MEASUREMENT OF SHORT CIRCUIT IMPEDANCE & LOAD LOSSES

Tested at 25.4 °C on HV Side

C.T. Ratio = C = 100 / 1 = 100 P.T. Ratio = P = 660 / 110 = 6

Tap No	Current X C			Imp Voltage x P x √3			Wattmeter Reading			Total M.F. = C X P	(W1+W2+W3) X M.F	Load Loss in Watts
	I _r	I _y	I _b	V _{ry}	V _{yb}	V _{br}	W1	W2	W3			
3	0.6544	0.6606	0.6540	63.65	63.80	64.24	4.60	5.15	5.15	600	14.90 X 600	8940

3 MEASUREMENT OF NO-LOAD LOSS & CURRENT : Tested at 433 Volts on LV side.

C.T. Ratio = C = 40 / 1 = 40 P.T. Ratio = P = 660 / 110 = 6

% V	Voltage x P x √3		No Load Current X C			Wattmeter Reading			Total M.F. = C X P	(W1+W2+W3) X M.F	No Load Loss in Watts
	V _{mean} (n)	V _{rms} (n)	I _r	I _y	I _b	W1	W2	W3			
100	41.56	41.90	0.1345	0.0995	0.1426	4.11	2.18	2.92	240	9.21 X 240	2210

4 INDUCED OVER VOLTAGE TEST

Tested on LV Side

Applied 2 x 433 Volts at 124.6 Cycles/Secs. And withstood for 50 Secs.

5 SEPARATE SOURCE VOLTAGE TEST

(A) Applied 28 kV Between HV winding to L.V. Winding & Earth and withstood for 60 secs (LC - 16mA)

(B) Applied 3 kV Between LV winding to H.V. Winding & Earth and withstood for 60 secs. (LC - 04mA)

6 INSULATION RESISTANCE TEST :

AT 25.4 °C

(a) H.V. winding to Earth 50000 MΩ (With 5.0kV Megger)
(b) L.V. Winding to Earth 92800 MΩ (With 1.0kV Megger)
(c) H.V. winding to L.V. Winding 94400 MΩ (With 5.0kV Megger)

7 TURNS RATIO TEST :

Tap Link Position No.	1	2	3	4	5	6
U/u Phase	45.169	45.095	44.022	42.937	41.560	40.780
V/v Phase	46.178	45.101	44.029	42.944	41.865	40.793
W/w Phase	46.175	45.098	44.027	42.945	41.864	40.785

8 POLARITY PHASE RELATIONSHIP (VECTOR GROUP) CHECKED : FOUND OK Dyn11

WITNESSED BY

Manoj Yadav
MMC

Kiran Kumar
AECOM

TESTED BY

Rajendra Chauhan
Vollamp

52

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VOLTAMP TRANSFORMERS LIMITED
UNIT - II, VADADALA, SAVALI,
VADODARA - 391520
GUJARAT, INDIA



TRANSFORMER S/N No.

Form No. TST/

JNC 63951

Email ID: voltamp@voltamptransformers.com
PHONES: 91-9374648493, 91-9374648492
91-9374648513
FAX NO: 91-2667-251250

Principal Contractor : PSP Projects Ltd.
Purchaser : Adishwaram Corporation
Purchaser's PO No. : ADC/AHD/SDB/006/19 Dated 24.10.2019
Project : Surat Diamond Bourse at Khajod, Surat
Consultant : AECOM India Pvt. Ltd.

SPECIAL TESTS

Date of Testing : 22.02.2020

KVA 1250 Voltage Ratio : 11000 / 433 Vols
% Tappings : 5 % to 7.5 % in Step of 2.5 %

Vector Group : Dyn11
IS : 11171 / 2020 - Up to Date

1. Measurement of Partial Discharge Test :

* Pre-Stress Voltage of 1.5Um was Applied for 30 Seconds Before reaching upto the Measurement Voltage
Partial Discharge Measured at 1.1Um for 180 Seconds : 5.0 pC

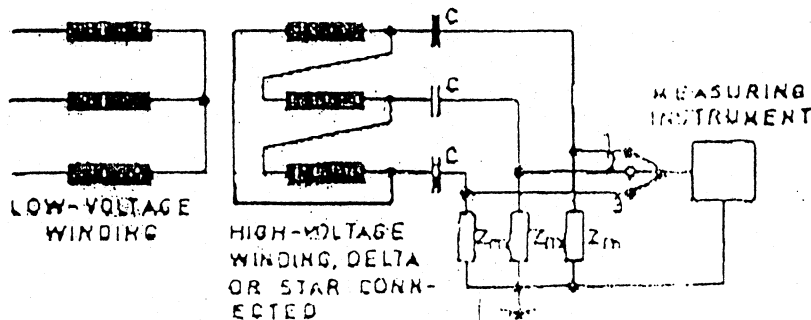


FIG. 1 BASIC MEASURING CIRCUIT FOR THE PARTIAL DISCHARGE TEST FOR A THREE-PHASE TRANSFORMER

WITNESSED BY :

TESTED BY

Manoj Yadav
MMC

Kiran Kumar
AECOM

Rajendra Chauhan
VTL

VOLTAMP TRANSFORMERS LTD.
TEST CERTIFICATE FOR CAST RESIN DRY TYPE TRANSFORMER

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Transformer Sr. No.	JNC - 639521	DATE	22.02.2020
Manufactured to	IS - 11171 / 2025 - Up to Date	DGN / F / 17	
Principal Contractor	PSP Projects Ltd.		
Purchaser	Adishwaram Corporation		
Purchaser's PO No	ADC/AHD/SDB/006/19 Dated 24.10.2019		
Project	Sural Diamond Bourse at Khajod, Sural		
Consultant	AECOM India Pvt. Ltd.		

KVA	1250	Voltages	HV	11.0	KV	LV	433	V
Cooling	AN	Currents	HV	65.61	A	LV	1666.72	A
Phases	3	Frequency	50	Hz.		Vector Group:	Dyn11	
Connections	HV	Delta			Winding:	90 °C		
	LV	Star			Off Circuit Tap Links	For + 5 % to - 7.5 % in Steps of 2.5 %		

Average Winding Resistance / Phase at 120 °C on Principal Tap No 3

H.V.	1.6338	Ω	L.V.	0.366	mΩ
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No Load Test at 100 % rated Voltage and Frequency applied to L.V. Winding

No Load Loss	2198 Watts	Total Losses at 50% Load	5001 Watts (GTD. - 5190 W - Max.)
No Load Current	5.02 A	Total Losses at 100% Load	13410 Watts (GTD. - 13870 W - Max.)
	(0.3 %)		

Load Loss Test at rated current at 120 °C on Principal Tap No 3

Load Loss	11212 Watts	Guaranteed Value: 6.25 % (Subject to IS Tolerance)
% Z	6.05 %	
Impedance Voltage	666 Volts	

Included over Voltage Withstand Test

Withstood 86F V for 50 Sec at 124.8 Hz Applied to LV Winding

Separate source Voltage withstand Test

Withstood 28 KV for 60 Secs applied between HV & (LV + Earth)

Withstood 3 KV for 60 Secs applied between LV & (HV + Earth)

Insulation Resistance Test at 26.4 °C

HV to Earth	50000 MΩ	LV to Earth	92800 MΩ	HV to LV	94400 MΩ
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Percentage Efficiency at 120 °C

% Load	125	100	75	50	25
At Unity Power Factor	98.75	98.94	99.10	99.21	99.08
At 0.8 Power Factor	98.45	98.68	98.88	99.01	98.85

% Regulation at 120 °C

At Full Load Unity Power Factor	1.08
At 0.8 Power Factor (Lag)	4.4

Vector Group Checked and Found OK

Turns Ratio Test (Acceptance Value : ± 0.5% of Actual Ratio)

Tap No.	Actual Ratio	Un. Phase	% Error	Ww Phase	% Error	Ww Phase	% Error
1	46.201	46.169	-0.070	46.176	-0.051	46.176	-0.056
2	45.171	45.095	-0.014	45.101	-0.021	45.098	-0.007
3	44.001	44.022	0.047	44.029	0.063	44.027	0.058
4	42.011	42.037	0.063	42.044	0.100	42.045	0.102
5	41.011	41.060	0.141	41.065	0.153	41.064	0.150
6	40.011	40.080	0.104	40.093	0.226	40.085	0.206

Prepared By	Checked By	Certified By
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TRANSFORMER Sr.No.

Formal No. IST/F110

JNC

63953/1

CAST RESIN DRY TYPE TRANSFORMER

Principal Contractor
Purchaser
Purchaser's PO No.
Project
Consultant

PSP Projects Ltd.
Adishwaram Corporation
ADC/AHD/SDB/006/19 Dated 24.10.2019
Sural Diamond Bourse at Khajod, Sural
AECOM India Pvt. Ltd.

ROUTINE TESTS

Date of Testing : 21.02.2020

Vector Group : Dyn11

Rated Voltage : 11000 / 433 Volts
% Tappings : 5 % 10 - 7.5 % in Step of 2.5 %
Tested at 25.4 °C

1 MEASUREMENT OF WINDING RESISTANCE AT									
H.V. Winding in "m": At Tap No.	3								
Between	101V	=	1050						
	1V:1W	=	1031						
	1W:1J	=	1051						
L.V. Winding in "m":									
Between	2v2n	=	0.305						
	2v2n	=	0.304						
	2w2n	=	0.304						

2 MEASUREMENT OF SHORT CIRCUIT IMPEDANCE & LOAD LOSSES									
C.T. Ratio = C = 60 / 1 = 60 P.T. Ratio = P = 660 / 110 = 6									
Tap No.	Current X C			Imp. Voltage x P x V3			Wallmeter Reading		
	I _r	I _y	I _b	V _{ry}	V _{yb}	V _{br}	W1	W2	W3
3	0.8720	0.8819	0.8752	84.10	84.22	84.33	6.34	6.75	6.68
							360	19.97 X 360	7189

3 MEASUREMENT OF NO-LOAD LOSS & CURRENT : Tested at 433 Volts on									
C.T. Ratio = C = 40 / 1 = 40 P.T. Ratio = P = 660 / 110 = 6									
% V	Voltage x P x V3			No Load Current X C			Wallmeter Reading		
	V _{mean} (n)	V _{rms} (n)		I _r	I _y	I _b	W1	W2	W3
100	41.65	41.87		0.1354	0.1003	0.1417	3.78	1.92	2.47
							240	8.18 X 240	1963

100	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41.65	41
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8 POLARITY PHASE RELATIONSHIP (VECTOR GROUP) CHECKED :									
FOUND OK Dyn11									

WITNESSED BY

Manoj Yadav
MMC

Kiran Kumar
AECOM

TESTED BY

Rajendra Chauhan
Voltamp

R. Kumar

VOLTAMP TRANSFORMERS LIMITED

UNIT - II, VADADALA, SAVALI,
VADODARA - 391520
GUJARAT, INDIA



TRANSFORMER S/N. No.

Formal No. TST

JNC 6395

Email ID : voltamp@voltamptransformers.com

PHONES: 91-9374648499, 9374648522

91-9374648513

FAX NO.: 91-2667-251266

Principal Contractor : PSP Projects Ltd.
Purchaser : Adishwaram Corporation
Purchaser's PO No. : ADC/AHD/SDB/006/19 Dated 24.10.2019
Project : Surat Diamond Bourse at Khajod, Surat
Consultant : AECOM India Pvt. Ltd.

SPECIAL TESTS

KVA 1000

Voltage Ratio :

11000

433

Volts

Date of Testing

21.02.2020

% Tappings : 5

0%

7.5%

10%

Step up

2.5%

Vector Group :

Dyn11

IS : 11171 / 2020 - Up to Date

1. Measurement of Partial Discharge Test :

* Pre-Stress Voltage of 1.5Um was Applied for 30 Seconds Before reaching upto the Measurement Voltage

Partial Discharge Measured at 1.1Um for 180 Seconds

3.0

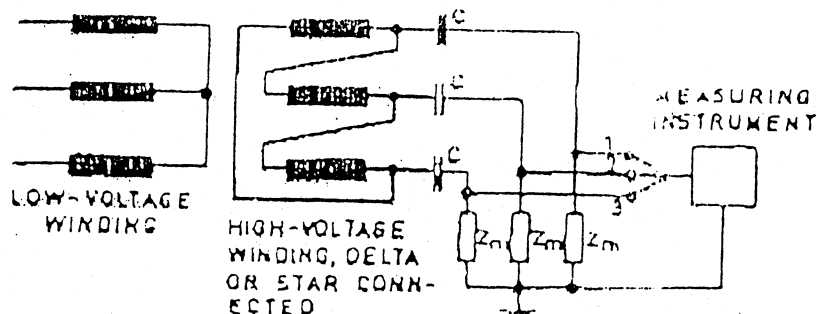


FIG. 1 BASIC MEASURING CIRCUIT FOR THE PARTIAL DISCHARGE TEST FOR A THREE-PHASE TRANSFORMER

WITNESSED BY :

TESTED BY :

Manoj Yadav
MMC

Kiran Kumar
AECOM

Rajendra Chauhan
VTL

66

VOLTAMP TRANSFORMERS LTD.
TEST CERTIFICATE FOR CAST RESIN DRY TYPE TRANSFORMER

Transformer Sr. No. : JNC - 63953/1
 Date : 21.02.2020
 Manufactured to : IS : 11171 / 2021 - Up to Date
 Principal Contractor : Projects Ltd.
 Purchaser : Adishwaram Corporation
 Purchaser's PO No. : ADC/AHD/SDB/006/19 Dated 24.10.2019
 Project : Surat Diamond Bourse at Khajod, Surat
 Consultant : AECOM India Pvt. Ltd.

KVA : 1000
 Cooling : AN
 Phases : 3
 Connections : HV : Delta
 LV : Star

Voltages : HV : 11.0 KV
 LV : 433 V
 Currents : HV : 52.49 A
 LV : 1333.37 A
 Frequency : 50 Hz.
 Vector Group : Dyn11
 Guaranteed Temperature Rise : Winding : 90 °C
 Variation by : Off Circuit Tap Links For + 5 % to - 7.5 % In Steps of 2.5 %

Average Winding Resistance / Phase at 120 °C on Principal Tap No. 3
 H.V. : 2.2513 Ω
 L.V. : 0.413 mΩ

No Load Test at 100 % rated Voltage and Frequency applied to L.V. Winding

No Load Loss : ... 1953 Watts	Total Losses at 50% Load : 4222 Watts (GTD. - 4500 W - Max.)
No Load Current : 5.03 A (0.38 %)	Total Losses at 100% Load : 11029 Watts (GTD. - 12000 W - Max.)

Load Loss Test at rated current at 120 °C on Principal Tap No. 3

Load Loss : ... 9076 Watts
 % Z : 6.08 %
 Impedance Voltage : 659 Volts
 Guaranteed Value : 6.25 % (Subject to IS Tolerance)

Induced over Voltage Withstand Test

Withstood 666 V for 50 Sec at 124.9 Hz Applied to LV Winding.

Separate source Voltage withstand Test

Withstood 28 KV for 60 Secs applied between HV & (LV + Earth)
 Withstood 3 KV for 60 Secs applied between LV & (HV + Earth)

Insulation Resistance Test at 28.7 °C

HV to Earth : 48000 MΩ
 LV to Earth : 82100 MΩ
 HV to LV : 84300 MΩ

Percentage Efficiency at 120 °C :

% Load	125	100	75	50	25
At Unity Power Factor	98.73	98.91	99.07	99.16	99.00
At 0.8 Power Factor	98.41	98.64	98.84	98.96	98.76

% Regulation at 120 °C :

At Full Load Unity Power Factor : 1.09
 At 0.8 Power Factor (Lag) : 4.42

Vector Group Checked and Found OK

Turns Ratio Test

(Acceptance Value : ± 0.5% of Actual Ratio)

Tap No.	Actual Ratio	U/V Phase	% Error	V/V Phase	% Error	W/W Phase	% Error
1	45.201	46.167	-0.074	46.094	-0.232	46.173	-0.061
2	45.161	45.096	-0.012	45.027	-0.165	45.105	0.008
3	44.001	44.031	0.058	43.959	-0.095	44.035	0.077
4	42.901	42.061	0.139	42.891	-0.024	42.965	0.149
5	41.801	41.091	0.215	41.819	0.043	41.922	0.289
6	40.701	40.876	0.307	40.754	0.130	40.851	0.319

Prepared By : *[Signature]* Checked By : *[Signature]* Certified By : *[Signature]*
 Works : UNIT - II, VADADALA, SAVALI, VADODARA - 391520
 Phone : +91 9374648493 / 8513 / 8522 Fax : +91 2667 251250 Email ID : vollamp@vollamptransformers.com

[Signature]

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VOLTAMP TRANSFORMERS LIMITED
JAROD-SAVLI ROAD, VILL. VADADLA, TAL. SAVLI,
DIST. VADODARA, GUJARAT, INDIA



Purchaser : Adishwaram Corporation
Principal Contractor : PSP Projects Ltd.
Project : Surat Diamond Bourse at Khajod, Surat
Consultant : AECOM India Pvt. Ltd.
Contractor's PO No : -----
Voltamp's Ref. No : 63951/1-6
Qty. : 06 nos.

Data Sheet for 06 Nos. 1600 KVA, 11 / 0.415 KV Cast Resin Dry Type Transformer

MAKE : Voltamp Transformers Limited
TYPE OF TRANSFORMER : Cast Resin Dry Type Transformer
LOCATION OF TRANSFORMER : Indoor
RATING : 1600 kVA
NO LOAD VOLTAGE RATIO (HV / LV) : 11 | 0.433 KV
VECTOR GROUP : Dyn11
TAPPING RANGE : +5% | -7.5% | Steps : 2.50%
TAPPING BY : Off Circuit Tap Links
TAPPINGS ON : HV side
CLASS OF INSULATION : F
TEMPERATURE RISE IN WINDING : 90 °C Over Ambient: 50 °C
% IMPEDENCE AT 75°C & PRINCIPAL TAP : 6.25 % (Subject to IS Tolerance)
TOTAL LOSSES AT RATED VOLTAGE & 50% LOAD : 6.32 KW (Maximum)
TOTAL LOSSES AT RATED VOLTAGE & 100% LOAD : 16.80 KW (Maximum) } As per ECBC

EFFECIENCY *

% LOAD	1 PF	0.8 PF
100	98.95	98.70
75	98.92	98.90
50	99.23	99.04

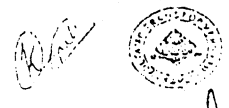
REGULATIONS *

% LOAD	1 PF	0.8 PF
100	1.073	4.515

ENCLOSURE PROTECTION : IP 23
PAINT SHADE : RAL 7032

* The above furnished values of Efficiency & Regulation are based on Losses / Impedance.
The actual value of Efficiency & Regulation will be based upon the tested value of Losses & Impedance.

Checked & Approved By



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VOLTAMP TRANSFORMERS LIMITED
 JAROD-SAVLI ROAD, VILL. VADADLA, TAL. SAVLI,
 DIST. - VADODARA, GUJARAT, INDIA



Purchaser : Adishwaram Corporation
 Principal Contractor : PSP Projects Ltd.
 Project : Surat Diamond Bourse at Khajod, Surat
 Consultant : AECOM India Pvt. Ltd.
 Contractor's PO No : -----
 Voltamp's Ref. No : 63952/1-4
 Qty : 04 nos.
 Date : 23.11.2011
 Rev. : 01

PAGE 1 OF 1

Data Sheet for 04 Nos. 1250 KVA, 11 / 0.415 KV Cast Resin Dry Type Transformer

MAKE : Voltamp Transformers Limited
 TYPE OF TRANSFORMER : Cast Resin Dry Type Transformer
 LOCATION OF TRANSFORMER : Indoor
 RATING : 1250 KVA
 NO LOAD VOLTAGE RATIO (HV / LV) : 11 | 0.433 KV
 VECTOR GROUP : Dyn11
 TAPPING RANGE : +5% | -7.5% | Steps 2.50%
 TAPPING BY : Off Circuit Tap Links
 TAPPINGS ON : HV side
 CLASS OF INSULATION : "F"
 TEMPERATURE RISE IN WINDING : 90 °C Over Ambient: 50 °C
 % IMPEDENCE AT 75°C & PRINCIPAL TAP : 6.25 % (Subject to IS Tolerance)
 TOTAL LOSSES AT RATED VOLTAGE & 50% LOAD : 5.19 KW (Maximum)
 TOTAL LOSSES AT RATED VOLTAGE & 100% LOAD : 13.87 KW (Maximum) } As per ECBC

EFFICIENCY

% LOAD	1 PF	0.8 PF
100	98.80	98.63
75	98.07	98.84
50	97.18	98.97

REGULATIONS

% LOAD	1 PF	0.8 PF
100	2.117	4.546

ENCLOSURE PROTECTION : IP 23

PAINT SHADE : RAL 7032

* The above furnished values of Efficiency & Regulation are based on Losses / Impedance.
 The actual value of Efficiency & Regulation will be based upon the tested value of Losses & Impedance.

Checked & Approved By



Signature

R. Peria

59

29

VOLTAMP TRANSFORMERS LIMITED
 JAROD-SAVLI ROAD, VILL.-VADADLA, TAL.-SAVLI,
 DIST.-VADODARA, GUJARAT, INDIA



Purchaser : Adishwaram Corporation
 Principal Contractor : PSP Projects Ltd.
 Project : Surat Diamond Bourse at Khajod, Surat
 Consultant : AECOM India Pvt. Ltd.
 Contractor's PO No. : -----
 Voltamp's Ref. No. : 63953/1-2
 Qty. : 02 nos.
 Date : 22.10.2014
 Rev. 01

PAGE 1 OF 1

Data Sheet for 02 Nos. 1000 KVA, 11 / 0.415 KV Cast Resin Dry Type Transformer

MAKE : Voltamp Transformers Limited
 TYPE OF TRANSFORMER : Cast Resin Dry Type Transformer
 LOCATION OF TRANSFORMER : Indoor
 RATING : 1000 kVA
 NO LOAD VOLTAGE RATIO (HV / LV) : 11 | 0.433 KV
 VECTOR GROUP : Dyn11
 TAPPING RANGE : +5% | -7.5% | Steps : 2.50%
 TAPPING BY : Off Circuit Tap Links
 TAPPINGS ON : HV side
 CLASS OF INSULATION : "F"
 TEMPERATURE RISE IN WINDING : 90 °C Over Ambient 50 °C
 % IMPEDANCE AT 75°C & PRINCIPAL TAP : 6.25 % (Subject to IS Tolerance)
 TOTAL LOSSES AT RATED VOLTAGE & 50% LOAD : 4.50 KW (Maximum)
 TOTAL LOSSES AT RATED VOLTAGE & 100% LOAD : 12.00 KW (Maximum) As per ECBC
 EFFICIENCY :

% LOAD	1 PF	0.8 PF
100	98.81	98.52
75	98.90	98.75
50	99.11	98.99

REGULATION :

% LOAD	1 PF	0.8 PF
100	1.180	4.596

ENCLOSURE PROTECTION : IP 23
 PAINT SHADE : RAL 7032

* The above furnished values of Efficiency & Regulation are based on Losses / Impedance.
 The actual value of Efficiency & Regulation will be based upon the tested value of Losses & Impedance.

Checked & Approved By

Signature

R. Verma



SURAT DIAMOND BOURSE

Promoted by SDB DIAMOND BOURSE A Section 8 Company Registered Under The Companies Act, 2013
CIN NO. U74140GJ2014NPL081370

March 19, 2019

Ref No. SDB/1

TO,
The Executive Engineer
DGVCL
Piprod Division
Vesu, Surat.

SUBJECT: Proposal for the LT Connections of offices and HT connections of utilities for project "SURAT DIAMOND BOURSE" along with proposed electrical Infrastructure, Installation with advanced technology equipment

Dear Sir / Madam,

"SURAT DIAMOND BOURSE" project is promoted by M/s. SDB Diamond Bourse, which is a Public company limited by Share incorporated under section 8 of Company act, 2013 and it is NON PROFIT ORGANISATION. The object of the company is to promote, develop and encourage the Diamonds, gems & Jewellery trade and industry by establishing the Diamond Bourse. No objects of the Company shall be carried out on commercial basis.

"SURAT DIAMOND BOURSE" is the best example of cooperative and self-sustainable development for the industry (Diamond and Gems and Jewellery industry) and for the nation.

M/s. SDB Diamond Bourse has signed MOU with Gujarat Infrastructure Development Board on 12 January, 2015 in Vibrant Gujarat 2015 at Gandhinagar, Gujarat (India)

"SURAT DIAMOND BOURSE" will be located in DREAM CITY (DIAMOND RESEARCH AND MERCHENTILE CITY) near Khajod, at Surat, Gujarat (India). It is to be constructed in 66,00,000 sq. ft. area and allowing more than 4900 Diamond merchants to have offices in it. Being one of a world's largest office building, "SURAT DIAMOND BOURSE" is the one of its own kind of project in India.

"SURAT DIAMOND BOURSE" consists 9 nos. Iconic towers with 2 Nos. of basements for parking. Each tower is having 15 nos. of floors which allows more than 4900 diamond merchants to establish their trading offices. Project has multiple amenities as well such as Diamond Club, Conference room, Recreational zone, Auction house, space for Banks and Cafeteria etc.

LT Service (1PH / 3PH) are proposed for offices at each floor level through smart metering panels which are integrated with building management system. Each panel shall be charged through the DBT (Busbar Trunking). Standby DBT is proposed for the 100% redundancy of power.

Utilities and amenities shall be developed and provided by "SURAT DIAMOND BOURSE". Based on the requirement, we proposed HT Service for the Utilities/Amenities of the building. For the safe operation and maintenance we proposed total 5 Nos. of HT Services: 1 Nos. each for 3 Towers cluster and 2 Nos. for Utility Building.

Surat Office: 57, 1st Floor Tanti Exports, Patel Estate, Nr. Dharmaramnagar Diamonds, Opp. H.V.K. Gotalawadi, Vatarpam, Surat-395034. (Gujarat) INDIA
Phone: +91 261 6051133 • E-Mail: info@sdbbourse.com • Website: www.sdbbourse.com
Mumbai Office: 11B, 2nd Floor, A Wing, Laxmi Tower, Near ICICI Bank, Bandra Kurla Complex (BKC), Bandra (East), Mumbai: 400051.
Phone: +91 22 26533754

R. B. Borse

62



SURAT DIAMOND BOURSE

Promoted by SDB DIAMOND BOURSE A Section 8 Company Registered Under The Companies Act, 2013
CIN NO. U74140GJ2014NPL081370

Electrical Infrastructure (Distribution Network) from the one point of source to the end user or consumer shall be developed by "SURAT DIAMOND BOURSE" with the support of the DGVCL. All the equipment which are proposed for network shall be of modern type technology with latest features. Considering the Quality of Power with minimal Losses and the ease of maintenance; Dry type Transformers are proposed in Basement of each tower with assured safety measures.

Please find the attached documents for the further clarifications

- 1) Summary of HT & LT load requirements
- 2) Proposed Load Distribution Drawing.
- 3) Make specifications of VCB.
- 4) Make specifications of Transformer.
- 5) Make specifications of Smart Energy Meter.
- 6) SLD & GAD of Main LT Panel.

Thus we request you to provide us the permission for the same.

Thanks & Regards,

For, SDB DIAMOND BOURSE

Authorized Signatory

Received By
L
25.3.19
Dispatch Clerk
In. Asst.
DGVCL. Ahmednagar.

Surat Office: 58, 1st Floor Tapti Exports, Patel Estate, Nr. Chamanandam Diamonds, Opp. HVK, Gotaiwadi, Katargam, Surat 395004, (Gujarat) INDIA
Phone: +91 261-6054430 • E-Mail: info@sdbbourse.com • Website: www.sdbbourse.com
Mumbai Office: 115, 2nd Floor, A Wing, Laxmi Tower, Near ICICI Bank, Bandra Kurla Complex (BKD), Bandra (East), Mumbai - 400051
Phone: +91 22 26533754

R. Peris

2524

	Gujarat UrjaVikas Nigam Limited (An ISO 9001:2008 Company) Sardar Patel Vidyut Bhavan Race Course, Vadodra-390007 (GST NO. 24AACCG2861L1ZK CIN U40109GJ2004SGC045195)		
	E-mail IDs - cetech.guvnl@ggbmail.com eetech2.guvnl@ggbmail.com		
No. GUVNL/Tech-2/DE-1/HT/ 2551		Date: 03.12.2019	

By - Fax

To
 ✓ The Chief Engineer (O&M),
 Corporate Office,
 DGVCL,
 Surat.

M.D.	D.G.V.C.L.	H.R.
F&A		GECL
O&M	31720	5089
HT&DR	09 DEC 2019	23A
C.S.		10
GTL connections for		
P&P		

Sub: Guideline for releasing EHT connection for common utility & individual offices at "Surat Diamond Bourse", Khajod, Surat.

Ref: Your letter No. DGVCL/CE(O&M)/TECH-1/10571 dated 09.07.2019.

Kindly refer your above cited letter vide which your Office has asked guidelines for permitting this new technology and policy related matter regarding electrification of Diamond Bourse on the following points. In pursuant to the approval of Competent Authority, following guidelines are issued.

A. For demanding individual connections on same name for individual offices it is to state that, DGVCL may follow the guideline of the Electricity Supply Code.

B. DGVCL is requested to approach Hon'ble GERC to get suitable amendment/ incorporation in the relevant clause of Notification for following points.

1. Dry type transformer: - They shall have provision of metering arrangements and shall be provided with HT side appropriate protection to ensure safety.

Further, burden due to higher losses of Dry type transformer shall be borne by the applicant. Therefore, mutually agreed methodology/mechanism for allocation of such incremental losses need to be prescribed/decided.

Developer/Applicant shall be responsible for maintenance /procurement of the above transformers for life time and make a provision of spare transformer of relevant ratings for replacement in case of failure and replacement shall be done by its own under consultation with DGVCL.

2. LT distribution panel: - Developer/Applicant shall be responsible for maintenance /procurement of LT distribution panel with advance protection devices like motorized remotely communicable MCCB/ACB for life time. Repair/replacement of such devices shall be done by the Developer/Applicant in case of any fault/failure.

3. Sandwich type Bus Bar Trunking: - The Developer/Applicant shall be responsible for the maintenance/procurement of bus bar chamber which shall be properly sealed to make it pillar proof and 100% safe.

gmr

R. Kumar

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32-A

4. For installing floor wise meter in meter panel room, the developer/applicant shall provide a separate room for installation meters on every floor in a safe situation away from the staircase/lift. All meters shall be installed in an enclosed metallic/fiber sealable housing with proper earthing and adequate protection. There shall be a main MCCB as well as circuit wise protection through remotely communicable main motorized MCCB so that main MCCB can be remotely tripped from centralized control room in case of any fault to avoid any hazardous situation. The centralized electric control room shall be maintained by the developer/applicant throughout the life. Over and above, to monitor and maintain foolproof safety, the developer/applicant shall deploy a full time qualified safety officer.
 5. Further, developer may be allowed to procure and install smart meters/ static meters with communication and software at their own cost as per our specifications and from our approved vendors so that issues of compatibility of such meters and software with DISCOMs billing system may not arise. They will also maintain stock of spare meters for replacement. Regarding meters, GUVCL may take a view with respect to the ease of meter reading, accuracy, timely billing, testing and proper sealing.
- C. Also, estimate for individual connection to be served as per GUVNL guideline dated 07.06.2017. The 15% supervision charges may be recovered on total estimate including both i.e. material cost and labour cost towards development of Electrical Infrastructure.
- D. GUVNL vide letter No. GUVNL/CoM/Misc/550 dated 07.06.2017 has finalized guideline for allowing to develop private HT/LT underground distribution network by developer and acquiring privately developed existing distribution network for release of connections. All applicable provisions of above guideline shall also be made applicable.
- E. Infrastructure shall be charged/ connection shall be released after observing all safety related formalities and only after getting approval of Electrical Inspector to ensure 100% safety.
- F. Notarized Undertaking on appropriate stamp paper has to be taken from the Developer/Applicant for point no. B that they will maintain/ procure the Dry type Transformers, LT distribution panel, Sandwich type Bus Bar, Trunking for lighting and repair/replacement shall be done by them in case of any fault/ failure.

This is for your information and further necessary action in the matter, please.

(R B Patel)
Asst Chief Engineer (Tech).

Cfwcs to:

- MD, GUVNL, Vadodara.
- Director (Tech), GUVNL, Vadodara.

R. Peris

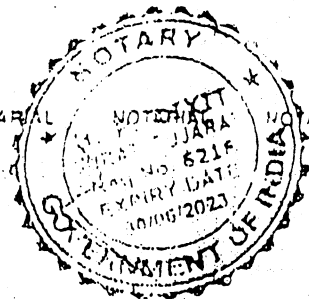
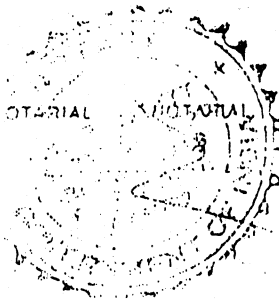
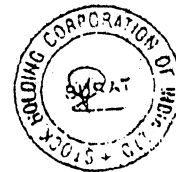
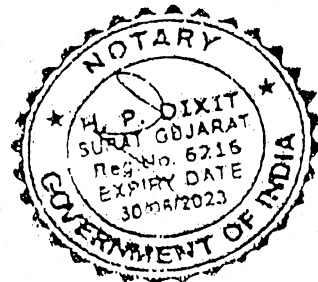


सत्यमेव जयते

INDIA NON JUDICIAL
Government of Gujarat
Certificate of Stamp Duty

09 OCT 2019

Certificate No. IN-GJ21081090263120R
Certificate Issued Date 11 Sep-2019 10:29 AM
Account Reference SHCIL (FI)/ gjsheil01/ SURAT/ GJ-SU
Unique Doc. Reference SUBIN-GJGJSHCIL0185365066384795R
Purchased by ALPESH PRAJAPATI
Description of Document Article 29 Indemnity Bond
Description UNDERTAKING
Consideration Price (Rs.) 0
(Zero)
First Party MS SDB DIAMOND BOURSE
Second Party DGVCL
Stamp Duty Paid By MS SDB DIAMOND BOURSE
Stamp Duty Amount(Rs.) 300
(Three Hundred only)



0000673062

NOTARIAL NOTARIAL NOTARIAL NOTARIAL NOTARIAL

1. The Government of India, Ministry of Revenue, has issued the following instructions for the use of this Certificate and as a condition of its use, the user must comply with the following instructions:

2. The user must ensure that the Certificate is used for the purpose of the stamp duty and not for any other purpose.

3. The user must ensure that the Certificate is used for the purpose of the stamp duty and not for any other purpose.

IDENTIFIED BY

Alpesh

Serial No. 38320112
Book No. 53
09 OCT 2019

R. Perin

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3h

UNDERTAKING OF Electrical Distribution Network for HT & LT

To,
Deputy Engineer
DGVCL,
Althan Sub-division,
Althan, Surat

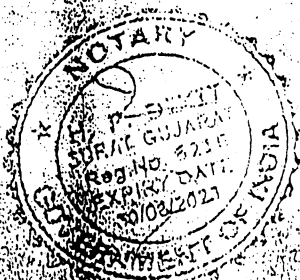
We are coming up with the commercial project of "Surat Diamond Bourse" at Dream City, Khajod, Taluka Choryasi, Dist: Surat. We intend to develop the HT & LT Electrical Distribution Network in our Commercial complex, entire details of the network with specifications have been submitted to DGVCL- Pipet Division office on 04/07/2019

Hereby

- (1) We agree to condition that we will install and maintain Electrical network for our Infrastructure for the lifetime.
- (2) We agree to the condition that we will allow to install an audit meters on each transformers. Also we agree that we will pay for the amount that is difference between the reading of the energy meter and summation units of the all the consumers for each transformer in case of any discrepancy arise.
- (3) We agree to the condition that we will provide space to DGVCL for Tariff meters in Electrical Rooms on each floor which will be accessible to DGVCL personnel round the clock through service doors. All the energy meters will be strictly installed as per guidance of DGVCL Authority.
- (4) We also agree to the condition that we will form and register a society that will give an undertaking to the DGVCL regarding payment of the audit meter.
- (5) We will not demand any connection until we submit the undertaking for the payment of energy audit energy meters.
- (6) We agree to any condition or decision of the competent authority of the DGVCL in the above matter decided time by time.
- (7) We agree to the condition that any kind of events such as electrical breakdown/accident/Fire/ high voltage damages to property or human due to poor workmanship will be our responsibility.
- (8) Certificate of all energy meters (the audit meter at transformer as well as meters at customer end) will be provided.
- (9) DGVCL will provide, operate and maintain power supply to the point of supply in the premise and further power through transformer, cable, Panel, rising mains excluding energy meters will be maintained by us.

Date: 07/03/2019

Place: Surat



Your faithfully,

ATTESTED
[Signature]
H. P. DIXIT, NOTARY
Govt. Of India
Surat, Gujarat

APPLICANT'S NAME: **M/S SURAT DIAMOND BOURSE**
BLOCK NO: **HT/PAK**
SURAT DIAMOND BOURSE, DREAM CITY,
AT: KHAJOD, TA: CHORYASI, DIST: SURAT

UNDERTAKING BY

[Signature]
3838112
07/03/2019

[Signature]

56

35

	DAKSHIN GUJARAT VIJ COMPANY LIMITED	
	CIN U40102GJ2003SGC042909	
	Regd. & CORPORATE OFFICE:	
	"Urja Sadan" Nana Varachha Road, Kapodra Char Rasta, SURAT-395006	
	Telephone: (0261) 2506111/12	Fax: (0261) 2572636
	Website: www.dgvcl.com	e-mail: ceom.dgvcl@gebmil.com
"Save Energy for Benefit of Self and Nation"		

Ref. No. DGVCL/CE (O&M)/TECH-1/ 19205

Date: 19-12-2019

To,
The C.E.O.
Surat Diamond bourse,
67, 1st Floor Tapti Exports,
Patel Falia,
Gotalawadi, katargam,
Surat-395004

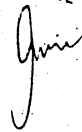
Sub: Approval for proposed infrastructure with utilization of high technology apparatus for
Surat Diamond bourse at khajod, Surat

- Ref: (1) Representation received from Surat Diamond Bourse on dated 02.07.2019
(2) C.E.O. & S.E. (O&M), City circle, Surat letter No: SC City/O&M/Tech-1/19-20/SDB/Opt-2/ 3375 dated on 05.07.2019
(3) This office letter No: DGVCL/CE(O&M)/TECH-1/10571 dated 09.07.2019
(4) GUVNL office letter No: GUVNL/Tech-2/DE-1/HT/2551 dated 03.12.2019

In continuation of approval for the electrification of Surat Diamond bourse, some of the issues are to be approved from the Hon'ble GERC and regarding this, it is kindly bring to your attention that

- (1) For utilization of Dry transformers- Transformers shall have provision of metering arrangements and shall be provided with HT side appropriate protection to ensure safety. Technical specification along with above requirement of dry type transformer intended to be utilized is required by this office. Further, burden due to higher losses of Dry type transformer shall be borne by you so consent for the same is required to submit this office.

Undertaking for accepting the responsibility for maintenance /procurement of the above transformers for life time and making a provision of spare transformer of relevant ratings for replacement in case of failure and replacement shall be done by yourself under consultation with DGVCL




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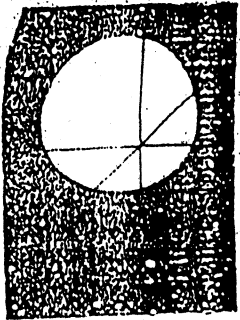
- (2) LT distribution panel: - Undertaking for accepting the responsibility for maintenance /procurement of LT distribution panel with advance protection devices like motorized remotely communicable MCCB/ACB for life time is required. Repair / replacement of such devices shall be done by Surat Diamond Bourse in case of any fault/failure.
- (3) Sandwich type Bus Bar Trunking: - Undertaking regarding accepting responsibility for the maintenance/procurement of bus bar trunking which shall be properly sealed to make it pilfer proof and 100% safe from accident point of view and it will be liability of Surat Diamond Bourse is required to be submitted.
- (4) For installing floor wise meter in meter panel room, the Surat Diamond bourse shall provide a separate room for installation meters on every floor in a safe situation away from the staircase/lift. All meters shall be installed in an enclosed metallic/fiber sealable housing with proper earthing and adequate protection. There shall be a main MCCB as well as circuit wise protection through remotely communicable main motorized MCCB so that main MCCB can be remotely tripped from centralized control room in case of any fault to avoid any hazardous situation. The centralized electric control room shall be maintained by the Surat Diamond bourse throughout the life. Over and above, to monitor and maintain foolproof safety, you shall deploy a full time qualified safety officer.
- (5) To install static meters with communication and software at your own cost as per DGVCL specifications and from our approved vendors so that issues of compatibility of such meters and software with DISCOMs billing system may not arise. You will also maintain stock of spare meters for replacement. During your representative's personal visit, it was verbally informed to submit the technical details of BMS [Building Management System] so that compatibility with DGVCL system can be ensured.

You are therefore requested to submit the technical specifications having above specified requirements and notarized undertaking on stamp paper for further course of action in the matter please.


 12.12.17
 Chief Engineer (O&M /CL),
 DGVCL, Corp. Office, Surat

Copy to:

- (1) The C.E.O. & S.E. (O & M); Surat City Circle office, For necessary action.
- (2) The E.E.(O&M); Piprod Division office, For necessary action.



SDB

SURAT DIAMOND BOURSE

Promoted by SDB DIAMOND BOURSE A Section 8

Company Registered Under The Companies Act, 2013

CIN No.: U74140GJ2014NPL081370 | GST No.: 24AAVCS2416E1ZD

January 20, 2021

Ref: SDB /57

To,
Executive Engineer(O&M), DGVCL
Piplod Division
1st Floor, Opp.E-Space,
Bhagva Mahavir College Road,
New VIP Road, Vesu-Bharthana, Surat

Subject: Incremental losses due to Dry Transformers.

- Reference:
1. GUVNL/Tech-1/DE-1/Transformer/1233 dated 19/06/2020
 2. PIIPD/O&M/DT/TECH/20/2406 dated 27/03/2020
 3. SDB Diamond Bourse L.No. SDB/44/ dated: 03/09/2020
 4. SCC/O&M/Tech-20/4449 dated: 21/09/2020
 5. Corporate Office Letter: DGVCL/CE(O&M/GL)/ACE(O&M)/DE T-1/20/18664 dated: 29/12/2020
 6. DGVCL Letter: SCC/O&M/Tech/20/8128 dated: 29/12/2020

With reference to above SDB is in receipt of DGVCL letter No: SCC/O&M/Tech/20/8128 dated: 29/12/2020 for one-time payment of the incremental losses due to Dry type transformer at SDB Diamond Bourse.

The calculation and amount demanded by DGVCL is not realistic and actual. Also DGVCL and SDB both are not mutually agreed upon the method with which to pay the given amount of Rs. 6,28,41,424.00.

(Tech-I) Based on the Guideline received from GUVNL (ref letter: 2551 on dated: 03/12/2019); Dry Type Transformer: They shall have provision of metering arrangements and shall be provided with HT side appropriate protection to ensure safety.

(Tech-II) Burden due to higher losses with Dry type transformer shall be borne by the applicant. Therefore, mutually agreed methodology/mechanism for allocation of such incremental losses needs to be prescribed / decided.

(Lab) Further as per DGVCL Letter No: DGVCL/CE/ (O&M)/TECH-1/19205 dated: 19/12/2019 approval of Electrification of Surat Diamond Bourse. SDB shall have provision of Metering arrangement on 11 KV HV side of Dry type of transformer. Burden due to higher losses of Dry type transformer shall be borne

by SDB
SDB O&M
Piplod Div

Page 1 of 2

A. Penia

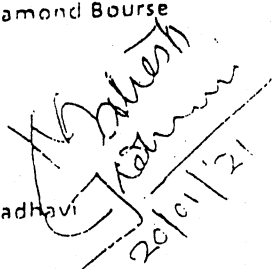
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DGVCL Authority may proceed for GERC approval for the option given as above that DGVCL shall calculate actual difference between Audit meter reading and sum of all the LT Meters reading * Rate of applicable tariff / KWH, which is payable by SDB.

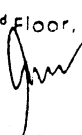
In order to maintaining transparency between DGVCL and SDB, SDB is ready to pay amount on actual basis for the said incremental losses with Dry type transformers by installing Audit Meters.

Thanking you.

For SDB Diamond Bourse


Mahesh Gadhavi
(C.E.O.)
20/01/21

CC to: Supr Engineer, CEO(O&M) DGVCL, 2nd Floor, Surat City Circle.

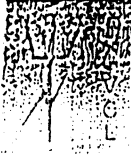


Page 2 of 2

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f. Lewis

	DAKSHIN GUJARAT VIJ COMPANY LIMITED
	CIN U40102GJ2003SGC042909
	Regd. & CORPORATE OFFICE:
	"Urja Sadan" Nana Varachha Road, Kapodra Char Rasta, SURAT-395006
	Telephone: (0261) 2506113/12
	Fax: (0261) 2572636
	Website: www.dgvcl.com
	e-mail: dgvcl@qebmail.com
"Save Energy for Benefit of Self and Nation"	

Ref. No. DGVCL/CE (O&M/GL)/S.E.(O&M)/SDB/21/

No 0 2 6 0 2 Date: 0 9 FEB 2021

To
The C.E.O.
Surat Diamond Bourse,
8th floor, Tapli Exports,
Patel Falia, Gotalawadi,
Katargam,
Surat-395004.

Sub: An undertaking asked by DGVCL for the payment of financial burden against incremental losses due to Dry type transformers.

Ref: 1) DGVCL/CE(O&M)/Tech-1/20/18664 dtd. 19.12.2020.
2) SCC/O&M/Tech/2021/587 dtd. 28.01.2021:
3) SDB letter No.57 dtd. 02.01.2021.

Dear Sir,

With reference to the above subject and above referred letter, as per guideline given by GUVNL regarding recovery of financial burden occurred to DGVCL against the incremental losses due to Dry type transformers as demanded by your firm. You have submitted the specification of Dry type transformers which have huge losses compared to Oil type transformers used by DGVCL as per IS-1180.

Further, you were asked to submit the consent vide letter under reference -1, but this office has not received the same till to date. Hence, you are instructed to submit the undertaking for approval of GERC as well as higher authority. You are also instructed to submit new specification along with purchase of new Transformers which are compatible in losses as compared to IS-1180 otherwise Dry type transformers may not be allowed looking to the financial burden to DGVCL at large.

This is for your information and further necessary action in the matter.

Thanking you,

Yours faithfully,

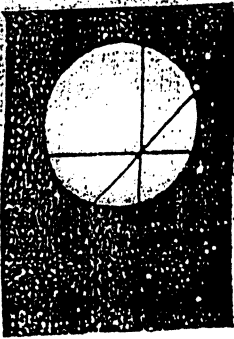
(J. D. Tanna)
Chief Engineer (O&M/GL)
DGVCL, Corp. Office, Surat

[Signature]
O.C. *[Signature]*
10/2/21
BTR
[Signature]

39

[Signature]

71



SDB

SURAT DIAMOND BOURSE

Promoted by SDB DIAMOND BOURSE A Section 8
Company Registered Under The Companies Act, 2013

CIN No.: U74140GJ2014NPL081370 | GST No.: 24AAVCS2416E1ZD

February 25, 2021

Ref: SDB /66

To,
Chief Engineer (O&M / GL)
Urja Sadan, Corporate Office
Dakshin Gujarat Viji Vitran Company Limited
Surat - 395006, Gujarat, India.

Subject: Undertaking asked by DGVCL for the payment of financial burden against incremental losses due to Dry Transformers at SDB, Surat.

Reference:

1. DGVCL/CE(O&M)/Tech-1/20/18664 Dated: 19/12/2020
2. SCC/O&M/Tech/2021/587 Dated: 28/01/2021
3. SDB Letter No 57 Dated: 02/01/2021
4. DGVCL/CE(O&M/GLI)/S.E.(O&M)/SDB/21/02602 Dated: 09/02/2021
5. DGVCL/CE(O&M/GLI)/S.E.(O&M)/SDB/21/02602 Dated: 09/02/2021
6. DGVCL/ORM/SE/GERC/Dry Transformer Charge/02898 Dated: 11/02/2021
7. Estimate Letter: DGVCL/ALT/Tech/Est./1074 on Dated: 15/02/2021

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P&P	Urja Sadan	DIV

Respected Sir,

With reference to the subject, letter above and guide line received from GUVNL to recover the losses due to Dry Type Transformers for LT Connections in SDB premises instead of Oil type Transformer used by DGVCL as per IS - 1180. You are very much aware that IS - 1180 is for Oil type Transformer

The losses of Dry type Transformer with respective IS are not huge but nominal incremental than of oil type transformers used by DGVCL as per IS - 1180

As conveyed, Burden due to higher losses with Dry type transformer shall be borne by the SDB. Therefore, mutually agreed methodology/mechanism for allocation of such incremental losses needs to be prescribed / decided.

With reference to the letter from DGVCL No : DGVCL/CE/ (O&M)/TECH-1/19205 on dated :19/12/2019 in regards of approval of electrification for project " Surat Diamond Bourse"; SDB agreed to have provision of Metering arrangement on 11 KV HV side of Dry type of transformer to borne the actual burden due to higher losses of Dry type transformer.

SDB has requested to allow to ensure and pay the actual amount of incremental losses Due to Dry type transformers by installing Audit Meter. In addition to that DGVCL Authority has already filed the petition in Honorable GERC for the approval of their method and respondent's request.

On order and approved methodology from Hon'ble GERC, SDB Authority is hereby confide to pay the amount for incremental losses Due to Dry type transformers.

Thanking you,

For, SDB DIAMOND BOURSE

Amit Barot
Project Manager - MEP.

EE(HSE)	DE(T-4)
DE(T-1)	DE(T-5)
DE(T-2)	DE(T-6)
DE(T-3)	DE(HSE)
DE(T-4)	JE(HT)
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AC 2/13
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Phone : +91 261 253 5400 | E-mail : info@sdbbourse.com | Website : suratdiamondbourse.in

R. Lewis

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	Gujarat Urja Vikas Nigam Limited (An ISO 9001:2015 certified Company) Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390007 (CIN U40109GJ2004SGC045195)	
	cetech.guvnl@gebmail.com	Tele (DI): (0265) 2340205 PBX: (0265) 2310582 to 86 FAX: (0265) 2337918, 2338164
No. GUVNL/Tech-3/DE-1/Transformer/1233		Date: 19/06/20

By Fax

To,
 The Managing Director
 DGVCL/ MGVCL/ PGVCL/ UGVCL
 Corporate Office,
Surat/ Vadodara/ Rajkot/ Mehsana

M.D.	D.G.V.C.L.	HR.
F&A		GEKC.
O&M	14417	SO&P
IT&C&R	01 JUL 2020	C&R
C.S.		VIG
G.L.	Corporate Office	PROJ.
P&P	Urja Sadan.	CIVIL
	Surat.	

Sub: Methodology to recover amount from the developer/ applicant for incremental losses in case of utilization of Dry type Distribution Transformer in place of oil cooled Distribution Transformer

Ref: 1. GUVNL's letter No. GUVNL/COM/Misc/550 dated 07/06/2017
 2. GUVNL's letter No. GUVNL/Tech-2/DE-1/HT/2551 dated 03/12/2019 (addressed to DGVCL)

Respected Sir,

GUVNL vide letter No. GUVNL/COM/Misc/550 dated 07/06/2017 had issued guidelines for allowing to develop private HT/ LT underground distribution network by developer and acquiring privately developed existing distribution network for release of connections.

Further, with reference to DGVCL's letter No.10571 dated 09/07/2019, this office vide letter dated 03/12/2019 had issued guidelines to DGVCL for releasing connections at "Surat Diamond Bourse", wherein for dry type transformer, DGVCL was requested to approach Hon'ble GERC to get suitable amendment/ incorporation in the relevant clause of Notification. Copy of the same is enclosed herewith.

Nowadays, developers/ applicants desire to install own Dry type Distribution Transformer in place of Oil Cooled Distribution Transformer for LT

Page 1 of 6

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Connections. These all fall under LT category of consumers, wherein transformer losses in case of LT consumers is borne by DISCOMs.

Dry type transformer may have comparatively higher losses than Oil Cooled transformer. Gujarat DISCOMs are utilizing Oil Cooled transformers. So, if we permit to use dry type transformer, then burden due to higher losses of Dry type transformer shall have to borne by the developer/ applicant.

In view of this, methodology to recover amount from the developer/ applicant for incremental losses in case of utilization of Dry Type Transformer in place of Oil cooled Distribution Transformer for LT Connections is devised as under.

1. DISCOM may allow developer/ applicant to procure/ install Dry type transformer as per relevant standard.

Developer/ Applicant 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 by its own under consultation with respective DISCOM.

2. Developer/ Applicant has to give undertaking to pay amount for incremental losses.

3. Developer/ applicant has to intimate DISCOM for testing and measurement of Dry type transformer losses at supplier's works before dispatch at site.

4. Transformer losses to be measured jointly by representative from DISCOM and representative from Developer/ applicant at supplier's works and same to be considered for calculation. [In case of transformer having Tap, losses to be measured at maximum current Tap].

5. For calculation of difference of losses; losses of oil cooled transformer for the identical capacity to dry type transformer are to be considered as per respective BIS level/ BEE Star rating as being procured by DISCOMs.

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Presently, DISCOMs are procuring oil cooled distribution transformers of various ratings as per requirement as per Bureau of Indian Standard (BIS) Level-2/ Bureau of Energy Efficiency (BEE) Star 1 transformer. However, at the time of evaluation of losses, prevailing level/ star rating to be considered.

6. Calculation is 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) =
$$\{ [(\text{DRY_NL} - \text{OIL_NL}) + \{ (\text{DRY_LL} - \text{OIL_LL}) \times \text{LLF} \}] \times \text{Hr.} \}$$
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.) (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

Page 3 of 6

[Signature]

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LLF = Loss Load Factor = $0.3 LF + 0.7 LF^2$
 $= (0.3 \times 0.7) + (0.7 \times 0.7 \times 0.7) = 0.553$
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.

7. Calculated amount as per above Sr. No. (6) per transformer of respective rating is to be collected from the developer/ applicant for incremental losses on account of installation of dry type transformer in lieu of oil cooled distribution transformer.

Considering above formula, illustrative calculation prepared for 1000 KVA Distribution Transformer is enclosed as Annexure - 1.

In view of uniform implementation across all DISCOMs, all DISCOMs are requested to file petition/ approach jointly at Hon'ble GERC to get approval for above methodology to recover amount from the developer/ applicant for incremental losses in case of utilization of Dry Type Transformer in place of Oil cooled Distribution Transformer for LT Connections.

Thanking you.

Yours faithfully,

(R B Patel)

I/c Chief Engineer (Tech.)

Encl:- As above

Cfwcs to:-

- The MD, GUVNL, Vadodara
- The Dy. Secretary, E&P Department, Block No.5, 5th Floor, Sachivalaya, Gandhinagar

Copy to:-

- The GM (Comm.), GUVNL, Vadodara

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Annexure - I

Illustrative example for Onetime Payment (OP) required to compensate losses amount in case of utilization of dry type transformer in place of oil-cooled type transformer

Transformer Capacity : 1000 KVA (Procured by applicant/ developer)

DRY_NL = Measured maximum No load losses of Dry type Distribution transformer, procured by applicant/ developer (in KW) = 2.000 KW

DRY_LL = Measured maximum load losses of Dry type Distribution transformer, procured by applicant/ developer (in KW) at 75° C = 10.000 KW (at maximum current Tap)

OIL_NL = Calculated maximum No load losses of Oil Cooled Distribution transformer of identical capacity to Dry type transformer, for BIS Level-2/ BEE Star-1 Rating as being procured by DISCOMs (in KW) = 1.153 KW

OIL_LL = Calculated maximum load losses of Oil Cooled Distribution transformer of identical capacity to Dry type transformer, for BIS Level-2/ BEE Star-1 Rating as being procured by DISCOMs (in KW) = 6.547 KW

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

LF = Load Factor = 0.7

LLF = Loss Load Factor = $0.3 LF + 0.7 LF^2$
= $(0.3 \times 0.7) + (0.7 \times 0.7 \times 0.7) = \underline{0.553}$

R = Prevailing Rate of Interest (%) p.a. on Consumer Deposit = 6.25% (2019-20)

Ec = Prevailing Cost to serve (Rs./ Kwh) at HT level = Rs. 5.64 (2018-19)

CAGR = Compound Annual Growth Rate (%) in Cost to Serve at HT level = 1.60%

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.

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

$$\begin{aligned} & \{ [(\text{DRY_NL} - \text{OIL_NL}) + \{ (\text{DRY_LL} - \text{OIL_LL}) \times \text{LLF} \}] \times \text{HL} \} \\ &= \{ (2.000 - 1.153) + \{ (10.000 - 6.547) \times 0.957 \} \times 8760 \} \\ &= \{ 2.757 \times 8760 \} \\ &= \underline{24151.32 \text{ Kwh}} \end{aligned}$$

2. Onetime payment required to compensate losses amount in case of utilization of dry type transformer in place of oil cooled type

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

$$= [(24151.32 \times 5.64) / (6.25 - 1.60)] \times 100$$

$$= [(136213.44) / (4.65)] \times 100$$

$$= \text{Rs. } \underline{2929321.29}$$

$$\equiv \underline{\text{Rs. } 29,29,321/-}$$

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CIN NO. U74140GJ2014NPL081370

તા. ૧૪/૦૮/૨૦૧૯

પ્રતિ શ્રી,

મેનેજિંગ ડિરેક્ટર,

દક્ષિણ ગુજરાત વીજ કંપની લિમિટેડ (DGVC).

સુરત.

વિષય : ઇલેક્ટ્રિસિટી ડિસ્ટ્રિબ્યુશન સ્કીમમાં મીટરના લોકેશન બાબતે સ્પષ્ટીકરણ થઈ ગયા બાબતની

જાણકારી.

માત્ર અમારા જ નહીં પરંતુ સમગ્ર ગુજરાતના ગૌરવસમાન સુરતના ડીમસીટી સ્થિત આંતરરાષ્ટ્રીય કક્ષાના ડીમ પ્રોજેક્ટ સુરત ડાયમંડ બુર્સમાં ઇલેક્ટ્રિસિટીને લગતા કેટલાક પ્રશ્નો બાબત તા. ૩૧/૦૭/૨૦૧૯ ના રોજ ગુજરાત રાજ્યના માનનીય ઉર્જા મંત્રીશ્રી સૌરભભાઈ પટેલની અધ્યક્ષતામાં ગાંધીનગરમાં થયેલ મિટિંગમાં કેટલીક ચર્ચા વિચારણા થયેલ. ઉપરોક્ત બેઠકમાં માનનીય મંત્રીશ્રી અને ઇલેક્ટ્રિકલ બોર્ડના અધિકારીઓના હકારાત્મક અભિગમના કારણે એક સિવાય બાકીના પ્રશ્નોનું સંતોષકારક નિવારણ થયેલ તે માટે અમે આપના આભારી છીએ.

ઉપરોક્ત મિટિંગમાં એક મુદ્દાની વધારે સ્પષ્ટતાની જરૂર હતી તે હતો અમારા પ્રોજેક્ટમાં પ્રત્યેક ટાવરમાં જે-તે માળ પર આવેલ ઓડિસના ઇલેક્ટ્રિકલ (એનર્જી) મીટરને તે જ માળ પર મુકવાના અમારા આયોજન બાબત. આ બાબત પર ઇલેક્ટ્રિકલ બોર્ડના અધિકારીઓનો અભિપ્રાય હતો કે રેગ્યુલેટરી નોર્મસ મુજબ દરેક મીટર ગાઉન્ડ ફ્લોર સિવાય બીજે ક્યાંય મૂકી શકાય નહીં. અધિકારીઓના અભિપ્રાય સાથે અસહમતી વ્યક્ત કરતા અમે સપ્લાય કોડની કલમ ૬.૧૦ વાંચીને કહેલ કે બહુમાળી બિલ્ડીંગના સંદર્ભમાં ભોયતળિયે/જમીનથી ઉપર ઉઠેલ મેઇન્સ પર મીટર સ્થાપિત કરી શકાય. તેમજ આંતરરાષ્ટ્રીય કક્ષાએ અને અન્ય રાજ્યોમાં પણ બહુમાળી ઇમારતોમાં સલામતીના કારણોસર આ જ રીતે દરેક માળ પર મીટર આમવામાં આવે છે આટલો સ્પષ્ટ ઉલ્લેખ હોવા છતાં મિટિંગમાં આ મુદ્દા બાબત સહમતિ ન થતા GERC નો અભિપ્રાય લેવાનું નક્કી થયું.

દરેક માળ પર મીટર આમવાના સંદર્ભે અભિપ્રાય લેવા તા. ૦૫/૦૮/૨૦૧૯ ના રોજ અમે GERC ઓડિસની મુલાકાત લઈ તમારા ઉચ્ચ અધિકારીશ્રી સાથે સદર બાબતે અભિપ્રાય પૂછેલ.

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DE (Lab)
JE (Tech-I)
JE (Tech-II)
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JE (IT)
SA (Engg)
SA (Proc)
Dy. Supr. (HR)
Inward No.

Page 1 | 2

E.E. (O&M)
Piping Engg

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Phone: +91-261-6051130 • E-Mail: info@sdbbourse.com • Website: www.sdbbourse.com
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Phone: +91 22 26533764

72270 34502 / 0261-2535400

SDB DIAMOND BOURSE
GST No. 24AAVCS2416E1ZD

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R. Barua



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CIN NO. U74140GJ2014NPL081370

અમારી રજૂઆતના સંદર્ભે GERC ના ઉચ્ચ (સિનિયર) અધિકારીશ્રીએ સપ્તાય કોર્ટમાં ઇલેક્ટ્રિકલ મીટર ગ્રાઉન્ડ ક્લોર પર આપવામાં કોઈ જ અવરોધ ન હોવાનું જણાવી કલમ ૬.૧૦ નો ચેક ચેક શબ્દ જુદો પાડી પ્રત્યેક શબ્દનું સ્પષ્ટ અર્થઘટન કરીને અમને જણાવેલ કે, "સદર કલમમાં લખાયેલ ભોચતળિયે શબ્દ પછી ઓબ્લીકમાં લખાયેલ શબ્દ જમીનથી ઉપર ઊઠેલી મેઇન્સનો અર્થ સ્વાયંસ્પષ્ટ છે કે ભોચતળિયાના ક્લોર પછી મેઇન્સ જ્યાં જાય તે ક્લોર છે." તેનો અર્થ એ કે ભોચતળિયા ઉપરનો ક્લોર. તેઓએ વધારે સ્પષ્ટ કરતાં કહ્યું કે જો આવો અર્થ ના થતો હોય તો પછી ભોચતળિયે શબ્દ લખ્યા પછી ઓબ્લીક કરવાની કોઈ જરૂર જ રહેતી નથી. તદુપરાંત તેમણે આ બાબતનું ઉદાહરણ આપતા કહ્યું કે ગિફ્ટ સિટીમાં 'ગિફ્ટવન ટાવર' જેમાં GERC ની ઓડિસ પણ આવેલી છે. તેમાં બધા જ ક્લોર મિટર આપવામાં આવેલ છે.

ઉપરોક્ત બાબતે તા. ૩૧/૦૭/૨૦૧૯ ના રોજ થયેલી મીટીંગ માં જણાવ્યા અનુસાર અમોને GERC દ્વારા અપાયેલા સ્પષ્ટીકરણ મુજબ અમો દરેક માળ પર મીટર હોય તે પ્રમાણે કામગીરી શરૂ કરવા જઈ રહ્યા છીએ. આ બાબતે આપ માહિતગાર રહો એવા શુભ પ્રયત્નના ભાગરૂપે આ પત્ર પાઠવું છું આ બાબતે માનનીય મુખ્યમંત્રીશ્રીને માહિતગાર કરેલ છે. આપનું માર્ગદર્શન અને સહયોગ આજદિન સુધી અમને મળતો રહ્યો છે અને હજી પણ મળતો રહેશે તેવી અપેક્ષા સહ....

લી.

આપનો વિશ્વાસુ.

મથુરભાઈ માધાભાઈ સવાણી

ડાયરેક્ટર - SDB ડાયમંડ બુર્સ.

નકલ રવાના -

૧. ગુજરાત ઉર્જા વિકાસ નિગમ લિમિટેડ. (GUVNL). વડોદરા - ૩૯૦૦૦૭.

૨. દક્ષિણ ગુજરાત વીજ કંપની લિમિટેડ (DGVC). પિપલોદ ડિવિઝન. સુરત-૩૯૫૦૦૭.

Page 2 | 2

Surat Office : 67, 1st Floor Tapti Exports, Patel Falia, Nr. Dharmanandan Diamonds, Opp. HVK, Gotalawadi, Katargam, Surat-395004. (Gujarat) INDIA
Phone : +91 261 5051130 • E-Mail : info@sdbbourse.com • Website : www.sdbbourse.com

Mumbai Office : 11B, 2nd Floor, A Wing, Laxmi Tower, Near ICICI Bank, Bandra Kurla Complex (BKC), Bandra (East), Mumbai - 400051.
Phone : +91 22 26533764

72270 34502 / 0261-2535400

SDB DIAMOND BOURSE
GST No. 24AAVCS2416E1ZD

72270 34502 / 0261-2535400

80



SURAT DIAMOND BOURSE

Promoted by SDB DIAMOND BOURSE A Section 8 Company Registered Under The Companies Act, 2013
CIN NO. U74140GJ2014NPL081370

02nd, July - 2019

To,
Executive Engineer,
D.G.V.C.L.,
Piplod Division,
Vesar, Surat

Subject: for doing Network Work of EHT / HT and LT work of our project in option - 2

Reference: As per our discussion in meeting with Chief Engineer (Technical) and D.G.V.C.L. officers at G.U.V.N.L. office Vadodara on dated 27.06.2019.

Dear Sir,

As per above subject we let you know that our on-going project at Dream city, Khajod Village, Surat in the Name of Surat Diamond Bourse, for this project we want to build up Electrical network as per our requirement for this requirement all details given in this file. For office s we want Single Phase and Three Phase meter for offices and 66kv EHT connection for Common utilities.

[Handwritten signature]

SDB DIAMOND BOURSE

Authorized Signatory

Copy to:-

1) M.D. G.U.V.N.L., Baroda.

DE (Tech-I)
DE (Tech-II)
DE (Lab)
JE (Tech-I)
JE (Tech-II)
JE (Lab)
JE (IT)
SA (Exp)
SA (Rev)
Dy. Secy (H&M)
In-charge

4343
4.7.19

F. D&M
F. On

Surat Office : 67, 1st Floor Tapti Exports, Patel Falia, Nr. Dharmnandan Diamonds, Opp. HVK, Gotalawadi, Katargam, Surat-395004, (Gujarat) INDIA
Phone : +91-261-6051130 • E-Mail : info@sdbbourse.com • Website : www.sdbbourse.com
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Phone : +91 22 26533764

SDB DIAMOND BOURSE
GST No. 24AAVCS2416E1ZD

72270 34502 / 0261-2535400

[Handwritten signature]

[Handwritten signature]



Office of The Electrical Inspector

Block C, 8th Floor, Govt. Multi Storied Building, Vangam, Surat.

No. EISRT/Plan/

568
Date 05 OCT 2020

2020

(0261) 2472053

To: SDB

M/s. Diamond Bourse, Tower-A,
Block No.177/Paiky, Dream City,
Khajod, Tal:Surat City, Dist:Surat.Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi storied
Building.

Reference:- Your letter Ref No...Nil..., dated-28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. 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 operate on all phases except neutral in the 3 phase 4 wire circuit and fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation (wired) inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
3. No other service pipes and cables shall be taken along with the ducts provided for laying power cables. And all ducts provided for power cable and other services shall be provided with fire barriers at each floor crossing.
4. If in actual practice any installation work is found defective, such as additions or alterations as may be considered necessary by the Electrical Inspector or Asst. Electrical Inspector, Surat shall have to be carried out by authorized person.
5. The work shall be carried out through the licensed electrical Contractor of Gujarat state in accordance with the approved plan.
6. The report of commencement of work and prescribed test certificate shall be submitted to the concerned Assistant Electrical Inspector as soon as the work is completed and the electrical installation is ready for inspection shall be reported.
7. Electrical Supervisor of the contractor shall remain present at the time of inspection.
8. All separate earthing wires of adequate capacity shall be provided for each service and the same shall be connected with the main earthing strip at ground floor and the same shall be double earthed.
9. This approval does not absolve you from 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.
10. The electrical installation shall be installed as per Reg. 12 (4). If it is installed in the basement.
11. The permission for fire fighting system as per the provisions of fire rules of fire department.
12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copy for The Asst. Electrical Inspector, Surat for information and necessary action.

R. Peris

82



Office of The Electrical Inspector
Block C, 8th Floor, Govt. Multi Storied Building, Nanpura, Surat.

R2

No. E/SRT/Plan	/2020	(0261) 2472053
Date:	05 OCT 2020	

To: SDB
M/s. Diamond Bourse, Tower-B,
Block No.177/Paiky, Dream City,
Khajod, Tal:Surat City, Dist:Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building

Reference: Your letter No. Nil., dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. 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 operate on all phases except neutral in the 3 phase 4 wire circuit and fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation (work inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
3. No other service pipes and cables shall be taken along with the ducts provided for laying power cables. And all ducts provided for power cable and other services shall be provided with fire barriers at each floor crossing.
4. If in actual practice any installation work is found defective, such as additions or alterations as may be considered necessary by the Electrical Inspector or Asstt. Electrical Inspector, Surat shall have to be carried out by authorized person.
5. The work shall be carried out through the licensed Electrical Contractor of Gujarat state in accordance with the approved plan.
6. The report of commencement of work and prescribed test certificate shall be submitted to the concerned Assistant Electrical Inspector as soon as the work is completed and the electrical installation is ready for inspection shall be reported.
7. Electrical Supervisor of the contractor shall remain present at the time of inspection.
8. All separate earthing wires of adequate capacity shall be provided for each service and the same shall be connected with the main earthing strip at ground floor and the same shall be double earthed.
9. This approval does not absolve you from 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.
10. The electrical installation shall be installed as per Reg.12 (4). If it is installed in the basement.
11. The permission for firefighting system as per the provisions of fire rules of fire department.
12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electric Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action.

A. Perin

83

54



Office of The Electrical Inspector

Block C, 8th Floor, Govt. Multi Storied Building, Nanpura, Surat.

R3

No. E/MSRT/Plan/
Date:

1522
05 OCT 2020

2020

(0261) 2472053

To, SDB
M/s

Diamond Bourse, Tower-C,
Block No.177/Paiky, Dream City,
Khajod, Tal:Surat City, Dist:Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building.

Reference:- Your letter Ref No... Nil... dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. 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 operate on all phases except neutral in the 3 phase 4 wire circuit and fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation (work inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
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11. The permission for firefighting system as per the provisions of fire rules of fire department.
12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action.

R. Lewis

84

52

R4

Office of The Electrical Inspector
Block C, 8th Floor, Govt. Multi Storied Building, Nanpura, Surat.

No. EI/SRT/Plan/

/2020

(0261) 2472053

Date:

05 OCT 2020

To, SDB

M/s. Diamond Bourse, Tower-D,

Block No. 177/Paiky, Dream City,

Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building.

Reference: Your letter Ref No. Nil., dated 28-09-2020.

Sir

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. 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 operate on all phases except neutral in the 3 phase 4 wire system and fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation work inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
3. No other service pipes and cables shall be taken along with the ducts provided for laying power cables. And all ducts provided for power cable and other services shall be provided with fire barriers at each floor crossing.
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12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action.

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R. Verin

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R5

Office of The Electrical Inspector

Block C, 8th Floor, Govt. Multi Storied Building, Nanpura, Surat.

PROPERTY MARK

No. EISRT/111

2020

102611/2472053

Date

05 OCT 2020

To: SDB

M/s. Diamond Bourse, Tower-E.

Block No. 177/Paiky, Dream City,

Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied Building.

Reference - Your letter Ref No. Nil., dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

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12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copies to: The Asst. Electrical Inspector, Surat for information and necessary action.

R. Peria

86

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R6

Office of The Electrical Inspector

Block C, S. T. Road, Multi Storied Building, Sampurnanagar, Surat.

(0261) 2472053

No. EI/SRT/Plan/

2020

Date:

05 OCT 2020

To, SDB

M/s. Diamond Bourse, Tower-F,

Block No. 177/Paiky, Dream City,

Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No-36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building.

Reference: Your letter Ref No. Nil., dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

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10. The electrical installation shall be installed as per Reg. 12 (4) If it is installed in the basement.
11. The permission for firefighting system as per the provisions of fire rules of fire department.
12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Each As Above

Electrical Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action

R. Kumar

87

53

Office of The Electrical Inspector
Block C, 8th Floor, Govt. Multi Storied Building, Sampara, Surat.

1580

(0261) 2472053

No. EISRT/Plan

2020

Date

05 OCT 2020

To: SDB
M/s. : Diamond Bourse, Tower-G,
Block No. 177/Paiky, Dream City,
Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building.

Reference: Your letter Ref No. / dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. 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 operate on all phases except neutral in the 3 phase 4 wire system and fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation (work inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
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12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action.

R8

Office of The Electrical Inspector

Block C, 8th Floor, Govt. Multi Storied Building, 7, Sardar Patel Street

No. EI/SRT/Plan/

Date:

(0261) 2472053

To, SDB

M/s. Diamond Bourse, Tower-H,
Block No. 177/Paiky, Dream City,
Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority
(Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied
Building.

Reference: Your letter Ref No. Nil dated 28-09-2020.

Sir,

With reference to the above, it is stated that the duly approved plan showing the above mentioned electrical installation is returned herewith subject to the following conditions as required under the provisions of Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010.

1. The Supplier or Owner of the installation shall provide at the point of delivery of supply a suitable isolating device with cut out or breaker to isolate on all phases except neutral. The device shall be fixed in a conspicuous position at not more than 1.7 meters above the ground so as to completely isolate the supply to the building in case of emergency.
2. The owner or occupier of a multi-storied building shall ensure that the electrical installation or work inside the building is carried out and maintained in such a manner as to prevent danger due to shock and fire hazard and the installation is carried out in accordance with the relevant codes of practice.
3. No other service pipes and cables shall be taken along with the ducts provided for laying power cables. And all ducts provided for power cable and other services shall be provided with fire barriers at each floor crossing.
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12. This permission is valid subject to condition that you have to clear the necessary permissions required from any other department.

Encl: As Above

Electrical Inspector
Surat

Copy to the Asst. Electrical Inspector, Surat for information and necessary action

22

89

R. Lewis

54



Office of The Electrical Inspector

Block C, 8th Floor, Govt. Multi Storied Building, Nanpura, Surat.

No. EI/SRT/Plan/

2020

(0261) 2472053

Date:

05 OCT 2020

To: S28
M/s. Diamond Bourse, Tower-J,
Block No. 177/Paiky, Dream City,
Khajod, Tal: Surat City, Dist: Surat.

Subject: Approval of plan under Regulation No. 36 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010 for multi Storied Building.

Reference: Your letter Ref No. Nil., dated 28-09-2020.

Sir,

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Encl: As Above

Electrical Inspector
Surat

Copy to: The Asst. Electrical Inspector, Surat for information and necessary action.