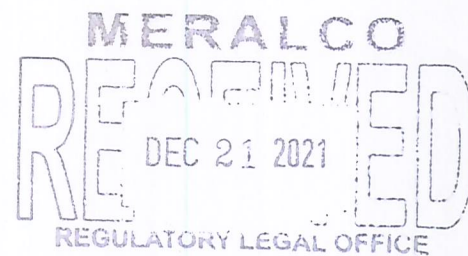


Republic of the Philippines
ENERGY REGULATORY COMMISSION
Pasig City

**IN THE MATTER OF THE
APPLICATION FOR
APPROVAL OF THE
EMERGENCY
REPLACEMENT OF ONE (1)
83-MVA POWER
TRANSFORMER AT
URDANETA SUBSTATION**



By: *JOHANNY - AL* Time: *10:22 AM*

ERC CASE NO. 2021-100 RC

**MANILA ELECTRIC
COMPANY (MERALCO)**

Applicant.

**Promulgated:
December 20, 2021**

X-----X

NOTICE OF VIRTUAL HEARING

TO ALL INTERESTED PARTIES:

Notice is hereby given that on 02 December 2021, Manila Electric Company (MERALCO) filed an *Application* dated 15 November 2021, seeking the Commission's approval for the emergency replacement of one (1) 83 MVA power transformer at Urdaneta Substation.

The pertinent allegations of the *Application* are hereunder quoted as follows:

1. Applicant is a private corporation duly organized and existing under the laws of the Republic of the Philippines, with principal office located at Lopez Building, Ortigas Avenue, Barangay Ugong, Pasig City. It may be served with notices and other processes of this Honorable Commission through its undersigned counsel at the address indicated herein.
2. Applicant has a legislative franchise to construct, operate and maintain an electric power distribution system for the conveyance of electric power to the end-users in the cities and municipalities of Metro Manila, Bulacan, Cavite and Rizal, and certain cities/municipalities/barangays in Batangas, Laguna, Quezon and Pampanga, pursuant to Republic Act No. 9209.

3. Applicant seeks the Honorable Commission's approval of its emergency installation of one (1) 83 MVA, 115 kV–34.5 kV, three (3)-phase power transformer with On-Load Tap Changer (OLTC) to replace Applicant's Urdaneta Substation's defective Power Transformer Bank No. 3.
4. The Application is filed pursuant to the Honorable Commission's Resolution No. 26, Series of 2009, entitled: "*Resolution Amending the Rules for Approval of Regulated Entities' Capital Expenditure Projects*". Emergency Capital Expenditure projects are those that require immediate implementation during an event that is not a force majeure or fortuitous event in order to maintain safe, reliable, secure and efficient operation of the power system.
5. However, for purposes of recovering the capital cost of the said emergency project through Applicant's rates, the same will go through the process of evaluation by the Honorable Commission during the regulatory reset, unless there is basis for a rate-reopening in the current regulatory period, in accordance with the Rules for the Setting of Distribution Wheeling Rates (RDWR) for Distribution Utilities (DUs).

BACKGROUND

6. The Urdaneta Substation is located at EDSA cor. Recoletos Circle St., Brgy. Urdaneta Village, Makati City, Metro Manila. The said substation serves the power requirements of customers in Makati City and portions of Taguig City. The Urdaneta Substation has three (3) 115kV-34.5kV power transformer banks.
7. On 09 June 2021 at 1903H, the Urdaneta Power Transformer Bank No. 3 was tripped out by transformer differential relay with the actuation of Buchholz and pressure relief devices due to internal fault. Based on the retrieved relay data, it showed that the fault occurred in the transformer Phase A and B primary winding with a fault magnitude of 1.58kA and 1.40kA, respectively. Furthermore, the operation of Transformer Bank No. 3's Pressure Relief Device, Buchholz Relays of Main Tank, and Turrets validated the occurrence of an internal fault. Power Transformer Bank No. 3, a Siemens 83MVA 115-34.5kV, was first energized last 10 December 2017.
8. On 09 June 2021 and 10 June 2021, the Urdaneta Power Transformer No. 3 was subjected to a series of tests to determine its condition after the incident. The test results of said power transformer showed that it was no longer safe to be re-energized and was declared for replacement due to the following significant findings: Gas accumulated at the Buchholz relay showed high level of combustible gases including Hydrogen, Acetylene, Ethylene, and Methane. The same gases were also evident in the extracted oil from the transformer main tank and transformer turret which were indicative of a high energy fault sustained by the transformer.

9. Furthermore, Transformer electrical tests showed that the ratio for all taps on all phases was no longer within the expected tolerance based on MERALCO standards. Winding resistance for all taps on all phases obtained was also relatively low compared to the initial commissioning values. High excitation current was also observed on all phases causing the Insulation Power Factor test equipment to trip at relatively low voltage of less than 1 kV which indicates the possibility of turn-to-turn short.
10. Given these adverse test results, Applicant was constrained not to re-energize the defective Urdaneta Power Transformer Bank No. 3, and to temporarily transfer all its loads to the adjacent Urdaneta Bank No. 2 only since it was not technically feasible to transfer any load of Power Transformer Bank No. 3 to Power Transformer Bank No. 1 due to the limitation of configuration set-up.
11. As a result of accommodating the loads of the defective transformer, Urdaneta Power Transformer Bank No. 2 operated at 64% loading level. It is well to note that this loading level happened during the Covid-19 pandemic condition wherein the power demand is lower than usual. Under normal conditions where the demand is at its peak, Urdaneta Power Transformer Bank No. 2 would have operated critically at 89% if the loads of the Urdaneta Bank No. 3 will be transferred to it.

Pre-COVID (2019) Bank Loading		COVID (2021) Bank Loading	
Bank 2	Bank 3	Bank 2	Bank 3
40.86%	47.76%	26.00%	37.94%
89%		64%	

12. The critical loading of Power Transformer Bank No. 2 may result to an outage which will cause prolonged and massive interruption in the affected areas thereby affecting the supply of electricity of customers in Makati City, such as, but not limited to: Ayala Land Inc., Citi Tower Condominium Corp., Citi Center Condominium Corp., Philippine Long Distance Telephone Co., Tower One and Exchange Plaza Condominium Corp., The World Centre Condominium, Makati Shangrila Hotel, Department of Trade and Industry and Asian Institute of Management; and portions of Taguig City, such as, but not limited to, Enderun Colleges and Bonifacio Water Corporation.
13. Considering the imminent risks posed by shifting the loads to the adjacent power transformer Bank No. 2, MERALCO was constrained to replace the defective Urdaneta Power Transformer No. 3 with an available 83 MVA, 115 kV-34.5 kV Power Transformer and was energized on 25 September 2021.

14. Shown below are the projected loadings of the affected power transformers with and without the replacement of Urdaneta Power Transformer Bank No. 3.

Table 1: Without Project

Parameter Under Consideration	
Loading of Urdaneta 83-MVA Bank No. 2	64%

Table 2: With Project

Parameter Under Consideration	
Loading of Urdaneta 83-MVA Bank No. 3	38%
Loading of Urdaneta 83-MVA Bank No. 2	26%

15. In the event of another outage of the adjacent power transformer, coupled with the non-replacement of the Urdaneta Bank No. 3, there will be massive power interruptions to the detriment of customers in the affected. Thus, it was crucial that the new power transformer be immediately installed at the Urdaneta Substation.
16. The total cost of the emergency replacement of the power transformer with OLTC at the Urdaneta Substation is Fifty-Six Million Seven Hundred Ninety-Two Thousand Six Hundred Ninety-Six Pesos and Fifty-Nine Centavos (PhP56,792,696.59).
17. In further support of the Application, attached hereto are the following documents:
- Annex “A” – Emergency CAPEX Project Information Summary with supporting documents: (i) Technical and Economic Analysis, (ii) Cost Estimates; (c) Expenditure Summary; (iii) Cost Benefit Analysis Calculation; and (iv) Gantt Chart;
 - Annex “B” – Documents showing the results of tests conducted on Power Transformer Bank No. 3; and
 - Annex “C” – Judicial Affidavit of Engr. Bienvenido H. De Guzman Jr., Manager and Head of Applicant’s Substation Services Asset Management Office.

PRAYER

WHEREFORE, it is respectfully prayed to this Honorable Commission that the Applicant’s emergency replacement of the power transformer at the Urdaneta Substation be APPROVED.

Other relief just and equitable under the premises are likewise prayed for.

The Commission has set the instant *Application* for determination of compliance with the jurisdictional requirements, expository presentation, Pre-trial Conference, and presentation of evidence on the following dates and online platform for the conduct thereof, pursuant to Resolution No. 09, Series of 2020¹ dated 24 September 2020 and Resolution No. 01, Series of 2021 dated 17 December 2020 (ERC Revised Rules of Practice and Procedure):²

Date	Platform	Activity
02 February 2022 (Wednesday) at two o'clock in the afternoon (2:00 PM)	Microsoft Teams	Determination of compliance with the jurisdictional requirements and expository presentation
09 February 2022 (Wednesday) at two o'clock in the afternoon (2:00 PM)	Microsoft Teams	Pre-trial Conference and presentation of evidence

Any interested stakeholder may submit its comments and/or clarifications at least one (1) calendar day prior to the scheduled initial virtual hearing, via electronic mail (e-mail) at doCKET@erc.ph, copy furnish the Legal Service through legal@erc.ph. The Commission shall give priority to the stakeholders who have duly submitted their respective comments and/or clarifications, to discuss the same and propound questions during the course of the expository presentation.

Moreover, any persons who have an interest in the subject matter of the instant case may become a party by filing with the Commission via e-mail at doCKET@erc.ph, copy furnish the Legal Service through legal@erc.ph, a verified Petition to Intervene at least five (5) calendar days prior to the date of the initial virtual hearing and subject to the requirements under Rule 9 of the ERC Revised Rules of Practice and Procedure, indicating therein the docket number and title of the case and stating the following:

- 1) The petitioner’s name, mailing address, and e-mail address;
- 2) The nature of petitioner’s interest in the subject matter of the proceeding and the way and manner in which such interest is affected by the issues involved in the proceeding; and

¹ A Resolution Adopting the Guidelines Governing Electronic Applications, Filings and Virtual Hearings Before the Energy Regulatory Commission.
² A Resolution Adopting the Revised Rules of Practice and Procedure of the Energy Regulatory Commission.

- 3) A statement of the relief desired.

Likewise, all other persons who may want their views known to the Commission with respect to the subject matter of the case may file through e-mail at doCKET@erc.ph, copy furnish the Legal Service through legal@erc.ph, their Opposition or Comment thereon at least five (5) calendar days prior to the initial virtual hearing and subject to the requirements under Rule 9 of the ERC Revised Rules of Practice and Procedure. No particular form of Opposition or Comment is required, but the document, letter, or writing should contain the following:

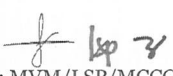
- 1) The name, mailing address, and e-mail address of such person;
- 2) A concise statement of the Opposition or Comment; and
- 3) The grounds relied upon.

Any of the persons mentioned in the preceding paragraphs may access the copy of the *Application* on the Commission's official website at www.erc.gov.ph.

Finally, all interested persons may be allowed to join the scheduled initial virtual hearings by providing the Commission, thru legal.virtualhearings@erc.ph, with their respective e-mail addresses and indicating therein the case number of the instant *Application*. The Commission will send the access link/s to the aforementioned hearing platform within five (5) working days prior to the scheduled hearings.

WITNESS, the Honorable Commissioners **ALEXIS M. LUMBATAN**, **CATHERINE P. MACEDA**, **FLORESINDA G. BALDO-DIGAL** and **MARKO ROMEO L. FUENTES**, Energy Regulatory Commission, this 13th day of December 2021 in Pasig City.


AGNES VST DEVANADERA
Chairperson and CEO


LS: MVM/LSP/MCCG





NOTICE

Sirs/Mesdames:

Please take notice that the Commission issued an **Order** and a **Notice of Virtual Hearing** both dated **13 December 2021** in the following case:

ERC CASE NO. 2021-100 RC, IN THE MATTER OF THE APPLICATION FOR APPROVAL OF THE EMERGENCY REPLACEMENT OF ONE (1) 83-MVA POWER TRANSFORMER AT URDANETA SUBSTATION – MANILA ELECTRIC COMPANY (MERALCO) Applicant.

Attached are electronic copies.

Please be reminded of the Commission's existing rules on electronic service of orders and decisions provided under **Rule VI of Resolution No. 9, Series of 2020**, which became effective on 17 November 2020.

Thank you.

Very truly yours,

Digitally signed by
Heiddi Venecia R. Barrozo

Atty. HEIDDI VENECIA RAYOS BARROZO
General Counsel and Commission Secretary