Republic of the Philippines
ENERGY REGULATORY COMMISSION
Pasig City

IN THE MATTER OF THE APPLICATION FOR APPROVAL OF THE EMERGENCY CAPITAL EXPENDITURE TO: A.) TEMPORARILY INSTALL ONE (1) 12.5-MVA POWER TRANSFORMER; AND B.) THE EMERGENCY REPLACEMENT OF ONE (1) 33-MVA POWER TRANSFORMER AT BATANGAS SUBSTATION

ERC CASE NO. 2024-007 RC

MANILA ELECTRIC COMPANY (MERALCO),
Applicant.
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Promulgated:
January 19, 2024

NOTICE OF VIRTUAL HEARING

TO ALL INTERESTED PARTIES:

Notice is hereby given that, on 10 January 2024, Manila Electric Company (MERALCO) filed an *Application*, dated 01 December 2023, seeking the Commission's approval of its Emergency Capital Expenditure for the a) temporary installation of one (1) 12.5-MVA power transformer, and b) emergency replacement of one (1) 33-MVA power transformer at the Batangas 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: a) temporary installation of one (1) 12.5 MVA, 69kV-13.8kV power transformer with On-Load Tap Changer (OLTC); and b) emergency installation of one (1) 33 MVA, 69 kV–13.8 kV, three (3)-phase power transformer with OLTC at its Batangas Substation to replace the defective Power Transformer Bank No. 1.

4. The Application is filed pursuant to Section 10 of Republic Act No. 11659, otherwise known as "An Act Amending Commonwealth Act No. 146 Otherwise Known as the Public Service Act, as Amended", which provides:

> "Section 10. Section 20 of Commonwealth Act No. 146, as amended, is hereby further amended to read as follows:
>
> xxx
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> (b) To establish, construct, maintain, or otherwise operate new units or extend existing facilities or make any other addition to or general extension of the service: Provided, That only assets that are useful and necessary for the provision of the public service shall form part of the rate base as determined and approved by the Administrative Agency: Provided, further, That construction of such asset and implementation of such project may be allowed for emergency and other extraordinary cases: Provided, finally, That the public service provider files for approval of such extension or construction of facilities within sixty (60) days from implementation of the project, and without prejudice to the final determination by the Administrative Agency if the said asset is useful and necessary for inclusion in the rate base."

5. Moreover, the instant Application is consistent with 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.

6. 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 process, 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), as modified.

BACKGROUND

7. The Batangas Substation is located at Diversion Road, Brgy. Bolboc, Batangas City, within MERALCO's franchise area. It serves the power requirements of customers in Batangas City and the Municipality of San Pascual. The Batangas Substation has two (2) 33MVA 69kV-13.8kV power transformer banks.

8. The Batangas Power Transformer Bank No.1, an ABB 33MVA 69kV-13.8kV power transformer, was first energized last 28 December 2005. On 22 September 2023, the Batangas Power Transformer Bank No. 1 was tripped out due to an internal fault which was manifested first by the activation of the transformer differential relay, and then by the Buchholz relay when it tripped again on the same day. Upon tripping, MERALCO was constrained to temporarily transfer all its loads to the adjacent banks, namely: Batangas Bank No. 2 and Bolboc Banks No. 1 and 2.

9. From 22 to 23 September 2023, the transformer was subjected to a series of tests to determine its condition after the incident. The test results on the power transformer showed that it was no longer safe to be re-energized and was declared for replacement due to the following significant findings: 1) Abrupt decrease in insulation resistance (CL-G); Clamp to Ground declined to 2.54Mega-ohms from 9720 Mega-ohms 2) The percent ratio on winding connection H1H2-X0X2 connection is beyond allowable 1% limit; 3) High excitation current detected during excitation at H1H2 & H2H3 winding; and 4) Accumulation of high level combustible gases (i.e. Hydrogen, Ethylene, Acetylene, and Methane).

10. As a result of accommodating the loads of the defective transformer, the Batangas Bank No. 2 and Bolboc Substation operated at critical levels of 96.25% and 97.28% respectively.

11. The critical loading of the Batangas Bank No. 2 and the Bolboc Substation may result to an outage which will cause prolonged and massive interruption in said areas, thereby affecting the supply of electricity of customers in Batangas City and the Municipality of San Pascual, such as, but not limited to, the San Pascual Municipal Hall, Batangas Country Club, San Miguel Brewery, Inc., United Doctors of St. Camillus de Lellis Hospital and Medical Center, Ports of Batangas, Batangas City Convention Center, Batangas State University, Batangas Mega Heights Subdivision and Union Galvasteel Corporation.

12. Considering the imminent risks posed by the prolonged critical loading of the adjacent power transformers, namely: the Batangas Bank No. 2 and Bolboc Substation, MERALCO was constrained to temporarily install a retired 12.5 MVA, 69 kV-13.8 kV Power Transformer from the Calumpit Substation, pending the replacement of the defective Batangas Power Transformer Bank No. 1. The said 12.5 MVA, 69kV-13.8kV Power Transformer was energized on 16 October 2023.

13. The projected loadings of the affected power transformers with and without the replacement of the Batangas Power Transformer Bank No. 1, as well as the loadings with the temporary installation, are as follows:

Parameter Under Consideration	Parameters		
	Without Project	With temporary 12.5MVA PXF	With Project
Loading of permanent 33 MVA Batangas Bank No. 1	-	-	81%
Loading of interim 12.5 MVA Batangas Bank No. 1	-	62%	-
Loading of existing 33-MVA Batangas Bank No. 2	96.25%	97%	77%
Loading of Bolboc Substation Banks (53MVA)	97.28%	83%	60%
Annual System Loss	13,720,749 kWh	13,450,537 kWh	13,120,752 kWh

14. It is well to highlight that an outage of the Batangas Bank No. 2 and Bolboc Substation will cause widespread power interruptions to the detriment of customers in the affected areas served by these power transformers. Considering the imminent risks posed by shifting the loads to the adjacent power transformers and substation (Batangas Bank No. 2 and Bolboc Substation), MERALCO was constrained to undertake an immediate temporary solution. Thus, MERALCO temporarily replaced the defective Batangas Power Transformer Bank No. 1 with a retired 12.5 MVA, 69kV-13.8kV Power Transformer with OLTC for conventional substation from the Calumpit Substation.

15. Notably, there is still an imperative need to replace the temporary 12.5 MVA Power Transformer with a new 33 MVA Power Transformer considering that the current loading of the temporary tying facilities, Batangas Bank No. 2 and Bolboc Substation, are still at critical loading levels of 97% and 83%, respectively. Hence, the immediate installation of a new 33 MVA Power Transformer is necessary to ensure adequate capacity and better reliability in the area.

16. The total cost of the emergency replacement of the power transformer with OLTC at the Batangas Substation including the temporary installation of the retired 12.5 MVA Power Transformer as a temporary solution is Sixty-One Million Five Hundred One Thousand Three Hundred Nineteen and 62/100 (PhP61,501,319.62) Pesos, broken down as follows:

Project	Labor Cost	Material Cost	Other Cost	Sub-Total
Temporary Installation	1,136,814.92	176,164.89	2,686.66	1,315,666.47
New Installation	3,008,796.48	57,133,107.94	43,748.73	60,185,653.15
Total (PhP)	4,145,611.40	57,309,272.83	46,435.39	61,501,319.62

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. 1; 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 Batangas Substation be APPROVED.

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

The Commission hereby sets the instant *Application* for determination of compliance with the jurisdictional requirements and 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 2020[1] and Resolution No. 01, Series of 2021[2] (ERC Revised Rules of Practice and Procedure):

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

Date	Platform	Activity
13 March 2024 (Wednesday) at nine o'clock in the morning (9:00 A.M.)	**Microsoft Teams Application**	Determination of compliance with jurisdictional requirements and expository presentation
20 March 2024 (Wednesday) at nine o'clock in the morning (9:00 A.M.)		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, and 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, all 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, and copy furnishing 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. The verified Petition to Intervene must follow the requirements under Rule 9 of the ERC Revised Rules of Practice and Procedure, indicate therein the docket number and title of the case, and state 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

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, and copy furnish the Legal Service through legal@erc.ph, their Opposition or Comment **at least five (5) calendar days** prior to the initial virtual hearing. Rule 9 of the ERC Revised Rules of Practice and Procedure shall govern. 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.

All interested parties filing their Petition to Intervene, Opposition or Comment are required to submit the hard copies thereof through personal service, registered mail or ordinary mail/private courier, **within five (5) working days** from the date that the same were electronically submitted, as reflected in the acknowledgment receipt e-mail sent by the Commission.

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, 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 19th day of January 2024 in Pasig City.

MONALISA C. DIMALANTA
Chairperson and CEO

ERC
Office of the Chairperson and CEO
MCD2024-014123

LS: ECI/MVM/LSP