



MANILA ELECTRIC COMPANY (MERALCO)
Ortigas Center, Brgy. Ugong, Pasig City

REQUEST FOR INFORMATION
(SCM RFI NO. IT0924-0288-1)

LONG-TERM LOAD FORECASTING SOFTWARE

As part of MERALCO's vision to be a world-class energy solutions provider, MERALCO invites interested vendors to provide general information regarding the potential requirement for **Long-Term Load Forecasting Software**. MERALCO is seeking technological solutions in the market that meet the required purpose and assess accessibility to vendors in case of a possible procurement.

Load Forecasting is a critical business process, following global practices, that helps utilities like MERALCO to accurately project customer load growth of the electric distribution system within its franchise area. In line with this, MERALCO is exploring the market for a replacement of its long-term load forecasting software that will enable the organization to forecast customer load growth in the electric distribution system and generate long-range load forecasts which is crucial for developing and expanding substation plans.

In addition to Long-Term Load Forecasting, MERALCO is also interested in solutions for planning and conducting distribution impact studies for Distributed Energy Resources (DER). These tools will be essential for evaluating the integration of renewable energy sources, such as rooftop solar and electric vehicle (EV) charging, into the distribution network. The objective of this initiative is to enhance the efficiency and reliability of MERALCO's distribution network, supporting its commitment to providing continuous and uninterrupted service.

DETAILS
Long-Term Load Forecasting software serves as a strategic planning tool, designed to accurately predict future load growth. This ensures the development of adequate infrastructure to meet growing demand and prevent service interruptions. The software should be capable of building an electric network model, guaranteeing that an accurate representation of MERALCO's network is integrated within a singular platform. Furthermore, this tool is crucial for the effective planning and scheduling of substation and distribution facilities to accommodate anticipated demand. It will provide critical insights into spatial load patterns and long-term trends to make well-informed decisions about network expansion and enhancements.
The presented solution should have the following basic functionalities:
<div>1. Geographic Modeling and Forecasting<ul style="list-style-type: none">Ability to model the geographic location of substations and their coverage using land-use-based forecasting algorithms.Small area-based load forecasting that involves modeling the franchise as a grid made of small square areas by a GIS or satellite photomaps of the MERALCO franchise area using local customer characteristics that influence electric load forecasts for an area or substation.Capability to designate the small area as light residential, medium residential, heavy residential, commercial-retail, commercial offices, commercial high-rise, light industrial, medium industrial, heavy industrial, neighborhood mix, commercial mix, and industrial mix.</div> <div>2. Substation Siting and Load Forecasting<ul style="list-style-type: none">Automatic substation siting, sizing, and area coverage simulation.Capability for a 10-year forecast, including the base case year for the substation/power transformer.Ability to model single-large load data or spot loads.Capability to capture/save a specific period or year for special studies.</div> <div>3. Modeling Effects of Geographic and Demographic Factors<ul style="list-style-type: none">Ability to model the effects of land use zoning/preference factors, including the impact of land use zoning, major road networks, waterways, and other geographic/demographic factors and barriers on customer and demand growth.Capability to scale or modify/modulate growth rate(s) for a specific power transformer/substation based on small area or zoning preferences of the substation service area.</div> <div>4. Distributed Energy Resources and Multi-Scenario Forecasting<ul style="list-style-type: none">Multi-scenario forecasts of distributed energy resources (DER) penetration and gross load to support understanding of the effects of DERs on a distribution system, considering the proliferation of embedded generation (EG), renewable energy resources, and other energy systems within the MERALCO franchise.</div> <div>5. Data Extraction and Integration<ul style="list-style-type: none">Ability to extract the output into “.csv” or equivalent delimited formats.Integration with GIS for relevant data.Integration with other planning and distribution impact study tools.</div>

CALENDAR OF ACTIVITIES:

ACTIVITY	DATE	TIME
Submission of Letter of Intent	October 1 – 8, 2024	Until 11:59 PM of October 8, 2024
Submission of Non-Disclosure Agreement	October 8 – 22, 2024	Until 11:59 PM of October 22, 2024
Release of RFI documents to Vendors	November 5, 2024	Until 11:59 PM of November 5, 2024

- Interested vendors are requested to submit the following:
- Manufacturer’s Certificate of Distributorship (for Traders)
 - Letter of intent to participate in the information presentation.

- Supplemental Information:
- This RFI is non-binding and does not constitute a commitment to acquire vendor’s products or services.
 - Vendors shall shoulder all costs associated in the preparation of their responses (e.g., preparation of budgetary quotation, conduct of Proof of Concept/ Product Demo, among others).
 - Responses received are to be used solely for informational and benchmarking purposes only.
 - Documents or information provided with the responses shall become property of MERALCO.
 - No bid fees are to be imposed in relation to this RFI.
 - Non-Disclosure Agreement (NDA) is required prior the release of RFI document, and confidential data to the vendors.

- MERALCO reserves the right to:
- Issue an addendum to the RFI at any time as a result of questions, change in submission schedule, or other matters; and
 - To cancel or reissue the RFI on a reasonable basis.

Submitted Letter of Intent (LOI) should be in portable document format (PDF) with the required supporting document, send via email to Mark Limuel Patulot (group.category.mgmt.ict@meralco.com.ph) not later than **11:59PM, October 8, 2024**. For inquiries or clarifications prior to the submission deadline, respondents may communicate directly to the assigned buyer.

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GLEN N. SAN PEDRO
Head, Supply Chain Management