

30 October 2020

**MEMORANDUM NO. 2020-053** 

TO

ALL ELECTRIC COOPERATIVES

SUBJECT : ECs Submission of Comprehensive Electrification Masterplan

In line with NEA's Vision of "a dynamic and responsive agency that is a vanguard of sustainable rural development in partnership with globally-competitive electric cooperatives and empowered electricity consumers" and in compliance with the Department of Energy's (DOE) directive for all Electric Cooperatives to have a Comprehensive Electrification Masterplan, the ECs should submit the said plan based on NEA's e-ICPM model.

The initially required 2021-2022 Workplan will be part of the Comprehensive Electrification Masterplan. It should also include an Executive Summary (as attached) integrating all Programs and Projects (PaPs) in hard copy. The Executive Summary should reflect the four (4) major components namely: Load Forecast, Technical, Financial and Institutional aspects of the e-ICPM.

Accordingly, submit the said requirement on or before 30 November 2020.

For your strict compliance.

EDGARDO R. MASONGSONG

Administrator

NATIONAL ELECTRIFICATION **ADMINISTRATION** of the Administra

NEALOA265800

11/5/20

# **EXECUTIVE SUMMARY**

# Comprehensive Electrification Plan/Business Plan

# I. Background

- a. The Company
  - 1. Vision and Mission Statements
  - 2. Date registered and covering documents or decrees

# b. Operational Milestones

- 1 Start of actual operation
- 2. History
- 3. Awards/Recognition
- 4 Classification

# c. Description of the Service Area

- 1. Coverage area: total number of barangays, land area, boundaries, topography etc
- 2. Energization status
- 3. Division into districts
- 4. SPUG area

#### d. Facilities

- 1. Addresses of main and sub-offices
- 2. Existing substation facilities and total capacity
- 3. Distribution lines constructed
- 4. System map

#### e. Consumer Profile

- 1. Type
- 2. Composition
- 3. Demand per type

# f. Sources of Power Supply

- i. Power plant source/kind of energy
- ii. Average power requirement/growth rate

#### g. Status of Operations

- i. Technical
  - 1. % of energized customer vs potential
  - 2. Reclassification (size)
  - 3. Payment status to power suppliers
  - 4. Status of existing loans to NEA and other institutions
  - 5. Average monthly consumption per customer per month
  - 6. Power factor
  - 7. System loss

- 8. Peak demand
- 9. Overall substation loading
- ii. Financial
  - 1. Nature and registration
  - 2. Historical Financial Highlights/Ratios (5 years)
  - 3. Profitability, Liquidity, Leverage, Debt Service
  - 4. Tariff: Average per type/consumer
- h. Management
  - 1. Board of Directors: write-up about the Board President
  - 2. Management Team: write-up about the General Manager
  - 3. Personnel complement: no. of technical and non-technical staff
- i. Institutional Scorecard Accomplishments per Department

# II. The Proposed Projects

- a. Project description, scope and content: (Distribution Dev. Projects)
  - i. Groupings
    - 1. Projects with direct system loss reduction
    - 2. Projects with indirect system loss reduction
    - 3. Service expansion
    - 4. Other projects
  - ii. Description, scope and content
    - 1. Summary of Investment Requirements (10 years)
  - iii. Justification for the Proposed Projects
  - iv. Projects Benefits and Impacts
    - 1. Tangible Benefits
    - 2. Intangible Benefits
  - v. Alternative considered in lieu of the Proposed Projects

### III. Five-Year Historical and Forecast Planning Data

- a. Consistent with the Distribution Development Plan
  - i. Electrification level
  - ii. Energy requirement
  - iii. Infrastructure requirement

#### IV. Technical Analysis

- a. Key Historical Status Data
- b. Load Forecast (SALF)
- c. Technical Project Benefits

# V. Financial and Economic Analysis

- a. Projected Financial Highlights and Ratios
- b. Projected Financial Statements
  - i. Revenue
  - ii. Profitability
- iii. Liquidity
- iv. Debt Service Cover
- v. Leverage
- vi. Tariff
- c. Impact on Rate Base of the Proposed Projects
- d. Cost-Benefit Ratio Analysis
- e. Sensitivity Analysis
  - i. Minimum tariff increase requirements
  - ii. Minimum system loss reduction
- iii. Minimum demand growth
- VI. Conceptual Engineering Design
- VII. Project Cost Estimates
- VIII. Project Financing Plan
  - a. Financing Requirement
  - b. Sources of Funds
    - i. NEA
    - ii. Commercial Banks
  - iii. Other Institutions

# IX. Proposed Gantt Chart/Implementation Plan

- X. Risks/Threats
  - a. Technical Risks
  - b. Business/Industry Risk
  - c. Credit Risk
  - d. Management Risk

#### XI. Conclusion/Recommendation