



Republic of the Philippines
National Electrification Administration

July 20, 2006

NEA MEMORANDUM No. 2006-020

TO : ALL ELECTRIC COOPERATIVES

SUBJECT : SYSTEM LOSS REDUCTION THROUGH AREA ENGINEERING CONCEPT

A recent review of the electric cooperatives' (ECs) performance reveals that system loss remains to be a major concern. In 2005 alone, a total of 1,755,058,000 KWH losses were recorded resulting to a national average system loss of 14.27% or an equivalent estimated revenue loss of P7 Billion.

NEA, in its effort to assist the ECs, conducted further studies and consultation with selected ECs to complement the existing programs in order to address this problem. One of the strategies identified is the Area Engineering Concept which has been found to be effective in ECs such as PENELCO, CEBECO I, II and III.

The Area Engineering Concept is based on the idea of shared management wherein the EC's coverage area is sub-divided into area offices which shall function as business or responsibility centers. This concept will be used to promote an environment of healthy competition within the EC through a reward system.

Attached for your reference is a more detailed discussion of the Area Engineering Concept. You are hereby advised to implement this concept in your respective cooperatives. NEA shall provide the necessary assistance in order to attain the objectives of this concept.


EDITA S. BUENO
Administrator

NATIONAL ELECTRIFICATION
ADMINISTRATION

IN REPLYING, PLS. ITE: #0R008952



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gwc
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SYSTEM LOSS REDUCTION PROGRAM THROUGH AREA ENGINEERING CONCEPT

I. RATIONALE

The Electric Power Industry Reform Act of 2001 or R.A. 9136 demands efficiency from the electric cooperatives (ECs) in terms of sound and viable operations that is dominantly ideal for a highly competitive industry. To cope with this challenge and to strengthen the technical capability of the ECs, NEA has developed the Single Digit System Loss Program in 2004 to assist the ECs in the reduction of their system losses to a single digit before 2010.

NEA and ECs efforts in the reduction of system loss, however, were not enough to attain significant improvements. In 2005, the system loss of the ECs at the national level is 14.27%, a slight improvement from 14.43% in 2004. Further evaluation indicates that a 1% reduction in system loss at the national level will generate savings of about P444 Million. This prompted NEA to design other strategies to enhance the implementation of the program. As a result of the studies and consultations made with the ECs, one of the strategies identified is the Area Engineering Concept.

II. OBJECTIVES

1. To encourage competition among EC engineers through reward system;
2. To achieve significant and sustained energy efficiency improvement;
3. To lower the retail cost of electricity; and
4. To achieve delivery of reliable and good quality of electricity.

III. DETAILS OF THE AREA ENGINEERING CONCEPT

1. This concept is a shared management approach wherein the EC's coverage area is sub-divided into different area offices to be headed by an Area Manager. The EC's coverage area maybe sub-divided into area offices based on the following:
 - a. Land area
 - b. Circuit kms. of line
 - c. Consumers served
 - d. Substation
 - e. Feeder

2. The area offices should function as "mini-ECs" with complete manpower complement for engineering, finance and administration.
3. The idea of this concept is to allow the different area offices to function as business or responsibility centers. The EC can utilize its existing organizational structure, if applicable.
4. Each area office should develop its annual workplan including funding requirements and targets subject to review and approval of the EC's main office.
5. The EC's main office should consolidate the individual workplans of the area offices, which will form part of its overall workplan and the ICPM.
6. Assessment of the area offices' annual performance should be conducted on the following:
 - a. Reduction in System Loss;
 - b. Improvement of Power Quality;
 - c. Reliability of Service;
 - d. Collection Efficiency; and
 - e. Other measurable Parameters
7. The ECs should develop a reward mechanism to motivate employees to perform better and to encourage healthy competition among area offices.

IV. NEA'S ASSISTANCE

A. Technical and Institutional Support

The following activities and timeline will be undertaken by NEA, through the Engineering Department, to ensure the successful implementation of this concept:

ACTIVITIES	TIMETABLE	REMARKS
1. Check EC's readiness to implement this concept <ul style="list-style-type: none"> - Review existing organizational and functional structures - Interview of the GMs, TSD Mgrs. - Assessment of the electric system 	August 2006	Initial check on the organizational and functional charts of the ECs maybe done in the Office utilizing the submitted DDP, ICPM, etc.

ACTIVITIES	TIMETABLE	REMARKS
2. Conduct Consultation Workshop with selected ECs by Area.	August 2006	Three (3) schools: One (1) each for Luzon, Visayas and Mindanao.
3. Monitor ECs' implementation of the concept.	Starting September 2006	NEA shall assign an engineer to specific ECs. ECs will be requested to submit implementation report.
4. Conduct EC visitation to assess effectiveness of the concept for ECs with installed Area Engineering Concept.	October 2006	Prepare Effectiveness Assessment Form.
5. Prepare reports/ recommendations and advise ECs accordingly.	October 2006	The EC GM and Area Managers will be advised to report to NEA for discussion, if necessary.
6. Undertake the same process (Activities 1-5) to other ECs.	November 2006	
7. Closely monitor and make recommendations to ensure effective implementation of the concept.	Continuous activity	

B. Financial Support

Several lending windows shall be provided by NEA to partially support the EC's funding requirements as follows:

Lending Window	Available Funds
1. Single Digit System Loss Before 2010	P 300 M
2. Equity Financing Scheme	P 100 M
3. Credit Facility for the acquisition of 69 kV lines	P 100 M (Initial)
Total	P 500 M

V. MODEL ECs FOR AREA ENGINEERING CONCEPT

1. PENELCO MODEL

- Each town is considered as one area office headed by an Area Engineer.
- Each area office is served by dedicated substation/s.
- Each area office renders autonomous operations in terms of meter reading, line operation and maintenance, collection and consumer service

2. CEBECO I, II and III MODEL

- Sub-offices are strategically located in the coverage area.
- Each sub-office is comprised of one or more engineering area offices.
- Each engineering area covers one or more municipalities.
- A Supervisor leads the sub-office while an Area Engineer supervises the Engineering Area. The Sub-office Supervisor and the Area Engineer are equal in rank.
- The sub-office supervisor is in-charge of office operations; i.e. collections, customer services, personnel administration and office maintenance.
- The Area Engineer is in-charge of the line operations and maintenance.
- Sub-office Supervisor is under the ISD Manager while the Area Engineer is under the Engineering Manager.