

Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

IN THE MATTER OF THE APPLICATION  
FOR APPROVAL OF THE UNBUNDLED  
RATES PURSUANT TO THE PROVISIONS  
OF REPUBLIC ACT NO. 9136

**ERC CASE NO. 2001-954**

MARINDUQUE ELECTRIC COOPERATIVE,  
INC. (MARELCO),

*Applicant.*

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## **DECISION**

Before this Commission for resolution is the application filed on December 21, 2001 by Marinduque Electric Cooperative, Inc. (MARELCO) for the approval of its unbundled rates pursuant to the provisions of Republic Act No. 9136 (RA 9136).

Having found said application sufficient in form and substance with the required fees having been paid, an Order and a Notice of Public Hearing both dated April 22, 2002 were issued setting the same for hearing on June 13, 2002.

MARELCO was directed to cause the publication of the Notice of Public Hearing, at its own expense twice (2x) for two (2) successive weeks in two (2) newspapers of general circulation in the country, the last date of publication to be made not later than two (2) weeks before the scheduled date of initial hearing. In compliance with the said directive, MARELCO had the Notice of Public Hearing published in the *“Malaya”* and *“Balita”* both on May 9 and 16, 2002.

The Office of the Solicitor General (OSG), the Commission on Audit (COA) and the Committees on Energy of both Houses of Congress were furnished with copies of the Order and the Notice of Public Hearing and were requested to have their respective duly authorized representatives present at the aforesaid initial hearing.

Likewise, the Municipal Mayors of Boac, Buenavista, Gasan, Mogpog, Sta. Cruz and Torrijos, all in the Province of Marinduque, were furnished with copies of the Order and the Notice of Public Hearing for the appropriate posting thereof on their respective bulletin boards.

On March 7, 2002, MARELCO submitted its “Second Additional Compliance”, attaching therewith documents that show the effect of the tariff adjustments applied for as a result of the unbundling of its rates to all types of customers, and praying that the same be admitted and

approved together with the other submitted documents as a result of the unbundled rates, which reflect its true cost of service.

During the initial hearing on June 13, 2002, only MARELCO was present. No oppositor appeared nor was there any opposition registered. At the said hearing, MARELCO submitted proofs of compliance with the Commission's publication and posting of notice requirements, which were duly marked as Exhibits "A" to "C-5", inclusive. Thereafter, MARELCO presented its two (2) witnesses. The first witness, Ms. Thelma Mayangitan, MARELCO's Finance Manager, testified on MARELCO's financial reports and schedules attached to the application, accordingly marked as Exhibits "D" to "U", inclusive. After said witness' direct examination, the Commission propounded some clarificatory questions and directed MARELCO to submit several documents.

The second witness, Engr. Carlito L. Mistal, MARELCO's Technical Services Department Manager, testified on the system loss reduction program and other technical aspects of the application. He further testified on MARELCO's Summary of Capital Expenditures/System Loss Reduction Plan for five (5) years duly marked as Exhibit "V". At the termination of the said witness' direct examination, the Commission again propounded clarificatory questions and directed MARELCO to submit a summary of power interruptions.

Relative thereto, MARELCO manifested that said documents would be submitted on or before June 30, 2002, while its "Formal Offer of Evidence" would be submitted within five (5) days thereafter.

On July 18, 2002, MARELCO submitted its "Post Hearing Compliance".

In the Commission's letter dated August 09, 2002, MARELCO was directed anew to submit various documents for the proper evaluation of the instant application.

On August 30, 2002, MARELCO submitted its "Second Post Hearing Compliance".

In the Commission's letter dated September 18, 2002, MARELCO was given until September 30, 2002 within which to submit the required data/documents.

In another letter dated October 16, 2002, the Commission acknowledged receipt of Resolution No. 289 s. 2002 passed by the Sangguniang Panlalawigan of Marinduque, requesting the Energy Regulatory Commission to reconsider its Resolution No. 2002-02 exempting small island grids from lowering the Purchased Power Cost Adjustment (PPCA) of the National Power Corporation (NPC) to PhP 0.40

per kilowatt-hour uniform rate. In the said letter, the Commission clarified that there is nothing to reduce for Bohol and the Small Island Grids as presently, they have no PPCA charges.

On March 25, 2003, MARELCO submitted its “Formal Offer of Evidence” consisting of Exhibits “A” to “U”, inclusive, which was admitted for the purposes for which they were being offered.

## I. SUMMARY OF MARELCO’S APPLICATION

### I.A. REVENUE REQUIREMENT

MARELCO’s revenue requirement per unbundled application based on historical test year 2000 was as follows:

ACCOUNT NAME	TEST YEAR
kWh Sales	18,893,356
Purchased Power	PhP 56,311,492
Payroll	14,970,093
Operation and Maintenance (less Purchased Power & Payroll)	12,193,983
Debt Service	10,758,880
Revenue Requirement	PhP 94,234,448
Reinvestment Fund (4%) <sup>1</sup>	4,001,557
<b>TOTAL REVENUE REQUIREMENT</b>	<b>PhP 98,236,005</b>

<sup>1</sup> In the UFR, this item is reflected as Plus Percentage for Cooperative Investment.

MARELCO's proposed revenue requirement was PhP 98,236,005 based on historical costs for the year 2000. The Overall Average Tariff Adjustment (OATA) published was PhP 0.2082/kWh. The same OATA was stated by witness Mayangitan, in her testimony on June 13, 2002 (Transcript of Stenographic Notes (TSN), June 13, 2002, page 14).

MARELCO also submitted Audited Financial Statements for the year 2000.

#### **I.B. RATE STRUCTURE/DESIGN**

The unbundled rates proposed by MARELCO are as follows:

##### Residential Retail Service

Generation Charge	PhP	4.4976/kWh
Supply Charges		
Retail Customer Charge		29.39/customer/month
Metering Charge		20.61/customer/month

##### Commercial / Small Industrial

Generation Charge		4.0168/kWh
Supply Charges		
Retail Customer Charge		30.88/customer/month
Metering Charge		24.12/customer/month

##### Industrial w/ Demand Meter

Demand Charge		127.92/kW
Generation Charge		3.4195/kWh
Supply Charges		
Retail Customer Charge		29.28/customer/month
Metering Charge		25.72 /customer/month

## Public Buildings

Generation Charge	PhP	3.9875/kWh
Supply Charges		
Retail Customer Charge		29.74/customer/month
Metering Charge		25.26/customer/month

## Water System

Generation Charge		3.9113/kWh
Supply Charges		
Retail Customer Charge		26.90/customer/month
Metering Charge		28.10/customer/month

## Street Lights

Distribution Facilities Charge		55.00/customer/month
Generation Charge		4.1968/kWh

**I.B.1. FUNCTIONALIZATION, CLASSIFICATION and ALLOCATION**

All of the functionalization and the allocation factors used by MARELCO were default factors provided in the Uniform Filing Requirements (UFR) prescribed by the Commission. These were adopted by MARELCO as applicable to its operations.

However, for certain distribution costs, MARELCO developed its own classification factors for its demand- and customer-related costs using the Minimum Plant Method.

### I.B.2. SYSTEM LOSS

Witness Mayangitan, in her testimony, stated that the average system loss for the year 2000 was 16.23% (June 13, 2002, TSN, page 21).

The system loss reflected in MARELCO's unbundling application, particularly Schedule J: System Loss, was 16.31%.

### I.B.3. INTER-CLASS CROSS SUBSIDY

MARELCO provided the amounts of cross subsidies for each customer type, as well as a program for the removal thereof.

<b>CUSTOMER TYPE</b>	<b>ADJUSTED EXISTING (PhP)</b>	<b>PROPOSED EXISTING (PhP)</b>	<b>INTER-CLASS CROSS SUBSIDIES (PhP)</b>
Residential	67,416,422	73,373,881	5,957,459
Small Commercial	17,336,009	14,136,400	(3,199,609)
Large Commercial	1,858,454	1,437,467	(420,987)
Industrial	9,400,715	7,473,447	(1,927,268)
Public Buildings	1,007,575	779,805	(227,770)
Street Lights	1,216,830	1,035,005	(181,825)
<b>TOTAL</b>	<b>98,236,005</b>	<b>98,236,005</b>	<b>0</b>

**I.B.4. LIFELINE RATE and LEVEL**

MARELCO proposed the following level and rate for marginalized end-users:

	<b>Option 1 (At Existing Rates)</b>	<b>Option 2 (At Proposed Customer Charges)</b>
<b>Level</b>	10 kWh	10 kWh
<b>Rate</b>	PhP 4.9099/kWh	PhP 50.00/customer/month

**I.C. OTHER CHARGES**

MARELCO, in its subsequent submission, provided this Commission with information on its existing other charges as shown below. MARELCO did not propose any adjustment to these charges.

<u>PARTICULARS</u>	<u>RATES</u>
Standard Fees	
1. Connection Fees	<b>PhP</b> 65,216
2. Meter Installation	1,877,544
3. Cost of Wires / Grounding Materials	2,346,774
4. Membership Fees	17,572
5. Guarantee Payment / Deposit	446,307
6. Others	
- Coop Share	252,280
- Penalty / Surcharge for Delinquent Consumers	25,915

## **II. COMMISSION DISCUSSIONS and CONCLUSIONS**

### **II.A. DETERMINATION OF TOTAL REVENUE REQUIREMENT**

#### **II.A.1. TEST YEAR**

The Commission finds MARELCO's proposal to use the test year 2000 in its unbundled rate application acceptable since it is consistent with Rule 15 Section 6 (c) of the Implementing Rules and Regulations (IRR) of the Act. Therefore, the discussions and conclusions that follow are based on Schedule A, adjusted to audited financial statement figures for historical test year 2000.

#### **II.A.2. GENERATION COST**

At present, MARELCO is buying power only from the National Power Corporation – Small Power Utilities Group (NPC – SPUG).

The Generation charge shall reflect the NPC-SPUG's generation charge as approved in ERC Order dated December 20, 2002, Case No. 2002-01 [In the Matter of the Application for the Approval of Unbundled Power Rates and Basic Rate Increase in the Small Island Grids, National Power Corporation (NPC) – Applicant]. A separate charge to account for the allowable system loss shall likewise be provided in the bill to end-users

(please refer to Section II.B.2.b. for details). Hence, a distribution utility with system loss that is within the allowable cap can recover from its end-users the total cost of generation. *Annualization*<sup>2</sup> of billing determinants was applied.

Adjustment to Purchased Power Cost	PhP	29,444,213
Adjustment to System Loss		(439,975)
<b>Total Adjustments</b>	<b>PhP</b>	<b>29,004,238</b>

The adjustment made by the Commission to Purchased Power of PhP 29,444,213 pertains to the difference between the proposed purchased power of MARELCO amounting to PhP 56,311,492 and the purchased power cost based on the new rates of NPC-SPUG amounting to PhP 85,755,705.

Records show that MARELCO's average system loss (excluding cooperative's own use) for the years 2000, 2001 and 2002 was 15.41%. The Commission allowed a system loss of 14% in the calculation of MARELCO's revenue requirement as discussed in Section II.B.2.b. of this Decision. Thus, the Commission made an adjustment to system loss of PhP 439,975 to exclude the excess of actual system loss over the allowable recoverable cap of PhP 13,503,903.

<sup>2</sup> The annualization of kWh sales is calculated by multiplying the average kWh consumption of a specific customer class by the year-end number of customers.

Based on the new NPC-SPUG generation charge, as well as the allowable system loss, the Commission sets MARELCO's unbundled Generation Charge and Recoverable System Loss as follows:

Generation Charge	PhP	71,811,827
Recoverable System Loss		13,503,903
<b>Total</b>	<b>PhP</b>	<b>85,315,730</b>

MARELCO's approved generation charge shall remain fixed until changes in NPC-SPUG's generation rate are approved and authorized by the Commission pursuant to its Orders dated February 24, 2003 and May 15, 2003, Case Nos. 2003-44 [In the Matter of the Adoption of the Generation Rate Adjustment Mechanism (GRAM) and Incremental Currency Exchange Recovery Adjustment (ICERA)] and 2003-156 [In the Matter of the Application for the Recovery of Fuel and Independent Power Producer Costs under the Generation Rate Adjustment Mechanism (GRAM)]. In which case, MARELCO shall bill its end-users the new generation rate charged by NPC-SPUG. In the meantime, MARELCO shall discontinue charging the Purchased Power Adjustment (PPA) upon effectivity of the unbundled rates.

### **II.A.3. PAYROLL**

The Commission made an upward adjustment in MARELCO's payroll by PhP 2,064,125. The adjustment is due to updating the salary levels to 2002.

The Commission reviewed the Wage Adjustment Clause (WAC) Formula authorized by the then Energy Regulatory Board through ERB Case Nos. 94-25 and 94-96. The then Board allowed the implementation of the WAC Formula based on three (3) established criteria for it to be classified under automatic adjustment clauses. These are: 1) when such costs are extremely volatile, changing rapidly over a short period of time; 2) when such volatile cost changes represent significant portions of total utility operating expenses; and 3) when such volatile cost changes are beyond the ability of the utility to control.

Analysis shows that the wage adjustments do not warrant an automatic recovery clause. The Commission therefore rules that the application of the WAC Formula be discontinued. The growth in kWh sales will be sufficient for the electric cooperatives to absorb increases in salaries/wages mandated by the wage orders.

#### **II.A.4. OPERATION and MAINTENANCE (less Purchased Power and Payroll)**

In general, operating expenses allowed are those which are reasonably incurred in connection with business operations to yield revenue or income. These should be required or necessary in the operation of a utility, are recurring, and should redound to the service or benefit of end-users.

The Commission enjoins MARELCO to incur only “prudent and reasonable costs” for inclusion in the determination of retail rates. While a distribution utility is allowed to pass through its costs of purchased power and other reasonable costs to the end-users, it is obligated as a public utility to ensure that its costs of operations, including payroll, are kept at a minimum. The distribution utility must bear in mind that its very nature is that of a service company for its end-users, with a mandate to advocate and transact judiciously for and in their behalf.

“Reasonable costs” may be defined as the cost of those goods and services which, while may not be the lowest in price, need to be incurred with consideration of quality, efficiency, reliability, and security, which are characteristics of the service that should be delivered by the distribution utility. “Prudent costs” demand that the utility ensures that its purchases of goods and services are at their minimum, without sacrificing the foregoing

characteristics. When making a purchase or executing a contract, it cannot simply rely on its right to pass on its costs to its end-users.

As such, the Commission, in fulfillment of the policy of R.A. 9136 to establish a regime of free and fair competition and full public accountability to achieve greater operational and economic efficiency, enjoins MARELCO to institute and report to the Commission its respective policies and procedures for cost-cutting and for the transparent and competitive procurement of goods and services.

MARELCO's end-users have a right to receive safe, reliable, and adequate service at a reasonable rate. On the other hand, these end-users should pay their power bills on time to ensure MARELCO's viability. To this end, MARELCO should view a petition for an increase in rates to be the last recourse. In future filings, MARELCO should be reminded that it has the burden of proving that all reasonable and appropriate cost-cutting measures have been taken before resorting to a petition to increase rates.

The Commission made a downward adjustment of PhP 505,000 on MARELCO's Operation and Maintenance Expenses as follows:

**Excluded Expenses:**

Amounts in the UFR that exceed what are allowed under NEA Guidelines on Benefits, Allowances and Other Incentives to EC Officers and Employees

Incentive Pay	PhP	123, 000
Anniversary Bonus for Officers/Employees		382,000
		<hr/>
<b>Total Excluded Expenses</b>	<b>PhP</b>	<b><u>505,000</u></b>

The said expenses were excluded for revenue requirement determination. These expenses translate to PhP 0.0261/kWh which the Commission considers material.

For future rate cases, MARELCO will continue to be required to make full disclosure of all its O & M expenses and be responsible in providing documentation to prove the reasonableness and prudence of all its expenditures. MARELCO should ensure that procedures are put in place so that all expenditures that are included in the determination of revenue requirement are adequately documented and that such documentation is reasonably accessible to the ERC.

## **II.A.5. OTHER REVENUES**

The Commission defines Other Revenue Items (ORI) as revenue earned (net of other expenses) by the electric utilities from activity other than sale of electricity.

The Commission encourages MARELCO to improve its financial operations through the development of other related sources of revenue. In order to balance the interests of MARELCO and its end-users, and in recognition of the fact that some of the costs incurred in rendering services under ORI have already been included in the determination of revenue requirements, the Commission has adopted the following policy. The ORI that arises from activities not related to the business of the cooperative nor involves the use of its assets will not be deducted from the revenue requirement of the cooperative. The ORI that arises out of related business activities or is asset based will be shared by the cooperative and the end-users by including 50% in revenue requirement.

The total non-asset based ORI, which were not deducted from the total revenue requirement, amount to PhP 2,586,593.

The ORI subjected to the 50% rule was computed as follows.

**Other Revenue Items**

Prompt Payment Discount	PhP <u>1,689,345</u>
Rent from Electricity Property	<u>388,128</u>
<b>TOTAL</b>	<b>PhP <u>2,077,473</u></b>
<b>50% of the Above</b>	<b>PhP <u>1,038,737</u></b>

The Commission also rules that any interest/dividend income earned will be retained 100% by MARELCO. However, such income should form part of the reinvestment fund and will be used solely for rehabilitation/expansion programs of MARELCO.

**II.A.6. DEBT SERVICE**

The Commission made an upward adjustment of PhP 555,863 to assure that the debt service included in MARELCO's revenue requirement is consistent with NEA's records. The Commission disallowed the interest cost associated with cash working capital as calculated by MARELCO due to lack of justification. The details of the adjustment are shown below.

<b>LOAN PROFILE</b>			
<b>LOANS</b>	<b>PER NEA (PhP)</b>	<b>PER MARELCO (PhP)</b>	<b>DIFFERENCE (PhP)</b>
Rural Electrification:			
A	926,722	927,877	(1,155)
B	755,484	756,897	(1,413)
C	220,504	220,865	(361)
D	3,699,516	3,699,516	-
OEFC:			
Construction	1,542,208	1,542,208	-
Logistical	568,460	471,866	96,594
Emergency Loan:			
Typhoon Sisang	959,488	963,674	(4,186)
Concessional – A	162,212	162,515	(303)
Concessional – B	123,072	30,768	92,304
World Bank RERP	133,152	133,152	-
Restructured	1,775,012	1,788,288	(13,276)
RWS Janagdong	1,703	1,722	(19)
Solar Energy Power A	47,844	47,844	-
Solar Energy Power B	46,752	11,688	35,064
Dendro Thermal	352,614	-	352,614
<b>TOTAL</b>	<b>11,314,743</b>	<b>10,758,880</b>	<b>555,863</b>

Pursuant to Section 60 of R.A. 9136 and E.O. 119, savings realized by electric cooperatives (ECs) due to the assumption of certain loans by the Power Sector Assets and Liabilities Management Corporation (PSALM Corp.) shall be passed on to MARELCO's end-users. MARELCO applied for a rate reduction under the Guidelines for the Implementation of the Reduction in Rates of the Electric Cooperatives due to Condonation of Debts issued by the Commission on October 21, 2002, as amended on November 15, 2002.

The Commission, in its Order dated July 21, 2003, granted MARELCO a Provisional Authority to reduce its rates by PhP 0.1944/kWh

effective on the next billing cycle after receipt of the said Order. The said reduction in rates is likewise shown on the rate schedule provided in the Disposition of this Decision.

#### **II.A.7. REINVESTMENT FUND**

MARELCO made a proposal for the provision for reinvestment fund in its unbundling of rates application in the amount of PhP 4,001,557.

The Commission permits a reinvestment fund equivalent to 5% of MARELCO's Gross Revenue to finance expansion and rehabilitation/upgrading of its existing electric power system in accordance with the submitted System Rehabilitation/Upgrading and/or System Loss Reduction Plan. This resulted in an upward adjustment of PhP 1,830,603 in the reinvestment fund account, to bring it to the 5% allowable amount of PhP 5,832,160.

One of the main purposes of providing the 5% Reinvestment Fund is for the end-users of MARELCO to shoulder part of their increasing capitalization requirements, as outside sources of funding are getting scarce.

The Reinvestment Fund is authorized subject to the following conditions:

- a) This reinvestment fund shall not be used, even temporarily, for any purpose other than for those projects specified in the submitted plan;

- b) The amounts collected for the reinvestment fund, including interest income (as discussed in Section II.A.5.) shall be placed in a separate account and shall be disbursed in accordance with the plan submitted by MARELCO;
  
- c) MARELCO is further required to submit a progress report no later than one (1) year after the date of this Decision and every year thereafter using the format prescribed by the Commission. The progress report shall include detailed accounting itemizing total collections, the actual use of all disbursements, and actual current system losses.

Upon review of the progress report, the Commission may issue an order for MARELCO to appear and show cause why it should continue collection of the reinvestment fund; and

- d) MARELCO shall submit a new System Rehabilitation/Upgrading and/or System Loss Reduction Plan covering the period 2004 to 2008, one (1) year after the date of this Decision using the format to be prescribed by the Commission.

## II.A.8. REVENUE REQUIREMENT SUMMARY

The table provided below is the comparison of the approved revenue requirement with that proposed by MARELCO:

	<b>MARELCO Proposal</b>	<b>Adjustments</b>	<b>ERC Approval</b>
Purchased Power      PhP	56,311,492	29,004,238	85,315,730
Payroll	14,970,093	2,064,125	17,034,218
O & M (less PP & Payroll)	12,193,983	(505,000)	11,688,983
Debt Service	10,758,880	555,863	11,314,743
Reinvestment Fund <sup>3</sup>	4,001,557	1,830,603	5,832,160
Other Revenue Items	0	(1,038,737)	(1,038,737)
<b>Total Revenue Requirement PhP</b>	<b>98,236,005</b>	<b>31,911,092</b>	<b>130,147,097</b>

MARELCO proposed an OATA of PhP 0.2082/kWh . The OATA is a measurement tool based on the formula: [(Total Revenue Requirement less Existing Revenue divided by kWh sales)]. This measurement is not meant to refer to any specific customer class.

The Commission, after considering adjustments of PhP 31,911,092 approves a Total Revenue Requirement of PhP 130,147,097 equivalent to an OATA of PhP 0.0444/kWh The actual impact to end-users will depend on the level of rates currently being charged. This impact is illustrated in Section II.B.6. of this Decision.

<sup>3</sup> In the UFR, this item is reflected as "Plus Percentage for Cooperative Investment".

## **II.B. RATE STRUCTURE/DESIGN DETERMINATION**

### **II.B.1 FUNCTIONALIZATION, CLASSIFICATION and ALLOCATION**

The functionalization and allocation factors used by MARELCO were the default factors provided for in the UFR issued by the Commission on October 30, 2001. In the case of MARELCO, a number of the default factors were found not to represent the best alternative among possible factors. Thus, the following three (3) default factors used by MARELCO for functionalization and allocation were modified, to wit:

First, the use of Net Plant in Service (PLTSVC-N) as a factor to functionalize and allocate Maintenance for Office and General Plant will cause skewed results by allocating these maintenance costs toward assets not part of such activity. The Commission, therefore, adopted a factor based on Net General Plant (GP-N) as a more reasonable method to allocate maintenance expense associated with general plant.

Second, the factor "Total Operation and Maintenance, Net of Fuel and Purchased Power" (TOMXFP), which was used as a default factor to functionalize costs under outside services, was replaced with "Total Payroll Excluding Administrative and General Salaries" (PAYXAG) in order to

remove the possibility of allocating a portion of outside services costs to the transmission function.

Third, since the Commission considered Other Revenue Items (ORI) not included by MARELCO in the calculation of its revenue requirement, it was necessary to functionalize and allocate these amounts. The functionalization factors for ORI which were determined based on direct assignment are as follows:

Factor Name	Functionalization Factor Description	Total Check	Generation	Transmission	Distribution	Supply	Metering
ORI	Other Revenue Items	1.0000	0.0000	0.0000	1.0000	0.0000	0.0000

MARELCO adopted a demand-customer allocation of 88% - 12%. The Commission required MARELCO to submit data and information for more reasonable calculations using the Minimum Plant Method. This method resulted to a 30% - 70% demand-customer allocation on the average.

## **II.B.2. DESIGN and CALCULATION OF CHARGES**

### **II.B.2.a. GENERATION CHARGE**

Consistent with the decision in ERC Case No. 2002-01, In the Matter of the Application for Approval of the Unbundled Power Rates and Basic Rate Increase in the Small Island Grids, National Power Corporation -

Applicant, dated December 20, 2002, and the Commission's Orders dated May 15, 2003 under ERC Case No. 2003-156, In the Matter of the Application for the Recovery of Fuel and Independent Power Producer Costs under the Generation Rate Adjustment Mechanism (GRAM), the generation charge to be billed to end-users shall be the approved rate per kilowatt-hour including Basic Rate, Fuel Cost Adjustment (FCA) and Foreign Exchange Rate (FOREX). The NPC-SPUG's approved rate will remain fixed until changes are authorized by the Commission pursuant to its Order dated February 24, 2003 as discussed in Section II.A.2. of this Decision. This allows MARELCO's Generation Charge to remain fixed until such time that NPC-SPUG's approved rate is adjusted, thus, eliminating the need for future Purchased Power Adjustment (PPA).

#### **II.B.2.b. SYSTEM LOSS CHARGE**

The Commission defines system loss for utilities to include technical loss, non-technical loss, and administrative loss or the utility's use of power for its own operations.

The Commission approves the recovery of allowed system loss through the establishment of a separate System Loss Charge in the bill to end-users. The System Loss Charge shall vary from one customer class to another depending on their respective contributions to the system loss. However, due

to limited information, the Commission is constrained to adopt a uniform allowable System Loss Charge for all end-users of MARELCO.

The allowed system loss is equal to the average system loss for the years 2000, 2001 and 2002 or the system loss cap, whichever is lower. In arriving at this decision, the Commission recognizes that the distribution utility faces some risk of over- or under-recovery in the event its load characteristics change through time. The System Loss Charge results in additional unbundled generation costs to be paid by end-users. When system loss is within the allowable cap, the distribution utility shall recover from the end-users all generation and transmission costs. Thus, system loss in excess of the allowable cap shall not be recovered as calculated in Section II.A.2. of this Decision.

On December 8, 1994, Republic Act No. 7832, otherwise known as the Anti-Pilferage Law, was enacted. In July 1995, the ERB promulgated Implementing Rules and Regulations (IRR) under ERB Case No. 95-05, to implement said law. Section 10 of R.A. 7832 and Rule IX, Section 1 of its IRR provide that the recoverable Technical and Non-Technical System Loss should not exceed the fourteen percent (14%) ceiling allowed for year 2000.

The Commission notes that MARELCO's witnesses presented two (2) different system loss rates: 16.23% and 16.31% (as discussed in Section I.B.2. of this Decision). The Commission believes that the present

cap on Technical and Non-Technical System Loss of 14% should be used in the calculation of revenue requirements at this time. This would, however, be subject to change upon the approval of a new policy by the Commission. The actual System Loss or cap of 14% plus 1% cooperative own use (which should not include personal consumption of MARELCO's Board of Directors, officers and staff), whichever is lower, shall be deducted from total power cost and to be billed separately as System Loss Charge.

The Commission found that MARELCO's 2000 to 2002 average system loss (excluding cooperative's own use) was 15.41%, which is higher than the aforementioned cap of 14%. Hence, the Commission used the system loss cap of 14% in the calculation of MARELCO's revenue requirement.

#### **II.B.2.c. DISTRIBUTION CHARGE**

The distribution charge shall be billed on a fixed rate per kilowatt-hour for all end-users. For end-users with demand meters, the distribution charge shall be billed using a combination of a fixed rate per kilowatt (kW) and fixed rate per kilowatt-hour (kWh).

MARELCO did not propose for distribution wheeling rates. The Commission believes that wheeling rates are parallel to the cost of service functionalized under Distribution. Thus, the Commission orders that the

Distribution Charge provided on Rate Schedules be likewise utilized as Distribution Wheeling Charges available to the future contestable market. However, other distribution utilities requesting to wheel power across MARELCO's facilities shall pay wheeling charges equivalent to Distribution Wheeling Charges for Industrial customers.

The Commission's decision to allow a distribution utility to avail of the Distribution Wheeling Charges of another distribution utility is based on the general intent of R.A. 9136 to promote a competitive generation market. Distribution utilities that currently or in the future shall rely in full or in part on the distribution facilities of another distribution utility should not be held captive by the other distribution utility in the purchase of the unbundled generation. Therefore, distribution utilities are prohibited from bundling or tying the sale of generation or purchased power with the sale of unbundled distribution wheeling service.

#### **II.B.2.d. METERING and SUPPLY CHARGES**

The Commission acknowledges that cost-causation rate design principle suggests the recovery of customer-related costs associated with the metering and supply functions through fixed monthly charges. Along with this cost-of-service principle, however, the Commission also considers rate design impacts across the spectrum of customers within each rate class. Although R.A. 9136 requires the removal of inter-class cross subsidies, the law does not require removal of revenue flows that may be characterized as intra-class

cross subsidies. The Commission has the flexibility to consider other factors in determining rate design for a particular class of end-users. Therefore, to mitigate the impact on below-average consumption of residential end-users, the Commission orders MARELCO to use a combination of PhP 5.00 per meter per month and a PhP 0.4468 per kWh rate for the metering function. On the other hand, the Commission orders MARELCO to use a PhP per kWh rate for the supply function. For other end-users, the metering and supply charges shall be billed on a fixed rate per meter per month and a rate per customer per month, respectively.

### II.B.3. INTER-CLASS CROSS SUBSIDY

#### II.B.3.a. CROSS SUBSIDY RATE CALCULATION

The inter-class cross subsidies in existing rates are as follows:

	<b>Total</b>	Residential	Commercial	Industrial	Comm. H2O Sys.	Public Bldgs.	Street Lights
New Cost-Based Rev. Req.	130,147,097	96,347,519	19,054,921	1,986,213	1,099,854	10,178,129	1,480,461
Existing Rates Revenue	129,286,153	89,473,045	22,359,686	2,453,136	1,364,013	11,950,847	1,685,426
Total Change in Revenue	860,944	6,874,474	(3,304,765)	(466,923)	(264,159)	(1,772,718)	(204,965)
Percentage Change in Revenue	0.67%						
Normalized Existing Revenue	130,147,097	90,068,866	22,508,584	2,469,471	1,373,096	12,030,431	1,696,649
Inter-Class Cross - Subsidy Amounts (PhP)	0	(6,278,653)	3,453,663	483,258	273,242	1,852,302	216,188
Class Billing Determinants (in kWh)	19,375,088	13,542,626	3,237,357	355,178	203,682	1,784,568	251,677
Inter-Class Cross Subsidy Rates (PhP / kWh)		(0.4636)	1.0668	1.3606	1.3415	1.0380	0.8590

### **II.B.3.b. CROSS SUBSIDY REMOVAL**

Section 74 of R.A. 9136 and Rule 16, Section 5 of its Implementing Rules and Regulations provide that the ERC shall issue a scheme for phasing out all cross subsidies including subsidies within Grids, between Grids, and between classes of end-users. The phasing out period shall not exceed three (3) years from the establishment of the Universal Charge which may be extended for a maximum period of one (1) year subject to certain conditions.

In the instant case, the Commission will order the cross subsidy removal process at a later date following the establishment of the Universal Charge. Until such time, MARELCO will continue to charge the inter-class cross subsidy rates set forth in Section II.B.3.a. above.

### **II.B.4. LIFELINE RATE and LEVEL**

Section 4 (hh) of the R.A. 9136 defines Lifeline Rate as the subsidized rate given to low-income captive market end-users who cannot afford to pay at full cost. Pursuant to Section 73 of R.A. 9136, the Commission hereby sets the level of lifeline consumption and rate.

In determining the lifeline level of consumption to be provided to the marginalized end-users, the Commission calculated the probable load

requirement of typical low-income end-users by considering two (2) lighting facilities at 20 watts each and a 50-watt radio that are being used for a reasonable number of hours. The Commission considers the impact that the subsidized Lifeline Rates will have on other end-users who must carry the costs associated with such subsidy. This fact, combined with the desire to maximize the benefit to as many marginalized end-users as possible, has led the Commission to adopt the following graduated scale for lifeline discount for MARELCO. The graduated scale is also based on the recognition that individual end-user consumption may likely vary from month to month.

15 kWh	-	50%
16 kWh	-	40%
17 kWh	-	30%
18 kWh	-	20%
19 kWh	-	10%
20 kWh	-	5%

MARELCO shall apply these discounts to the following residential charges: Generation, Distribution, Supply, Metering and System Loss. In a given billing period, an end-user at any of the above-consumption levels shall be given the specified corresponding discount on each of these rate components. An end-user with a level of consumption exceeding 20 kWh in a particular billing period shall not be entitled to any discounted lifeline rate for said period.

The cost of subsidy to lifeline end-users shall be passed on to all non-lifeline end-users. For MARELCO, the lifeline discounts result in a Lifeline Rate Subsidy by other end-users equal to PhP 0.0661/kWh.

#### **II.B.5. OTHER CHARGES**

MARELCO's additional submission to this Commission of its existing Other Charges as previously presented was considered in the determination of its revenue requirement. The revenues derived from these charges were appropriately deducted from the determination of the revenue requirement allowed to MARELCO.

The Other Charges of MARELCO are hereby pegged at their existing levels until such time that the Commission sets new rates on the same. Further, MARELCO is ordered to make a compliance filing on its Other Charges a year from the date of this Decision using a format to be prescribed by the Commission.

The compliance filing for the approval of Other Charges shall include rates that are cost-based, as well as all supporting cost justifications for the rates, including but not limited to the amount of actual time and wages of employees performing each task encompassed by each type of Other Charges.

## II.B.6. ESTIMATED IMPACT ON AN AVERAGE RESIDENTIAL END-USER

A comparison of the estimated impact of all adjustments on the revenue requirement on the monthly bill of an average residential end-user consuming 48 kWh a month using rates based on MARELCO's actual existing rates as of October 2003 against the unbundled rates approved by the Commission is shown below.

Based on Actual Existing Rates			Based on ERC Approved Unbundled Rates			
	PhP/kWh	Amount (PhP)			PhP/kWh	Amount (PhP)
Basic Rate	4.3160	207.17	Generation Charges:		3.7064	177.91
PPA	2.1207	101.79	Generation System Charge	3.7064		
WAC	0.1222	5.87	Distribution Charge		1.3696	65.74
PAR	(0.3000)	(14.40)	System Loss Charge		0.6970	33.46
Univ. Charge			Supply Charge		0.7906	37.95
Missionary Electrification	0.0373	1.79	Metering Charges: Per Customer Per Month			5.00
Environmental Share	0.0025	0.12	Per kWh		0.4468	21.45
Loan Condonation	(0.1944)	(9.33)	Inter-Class Cross Subsidy		(0.4636)	(22.25)
			Universal Charge			
			Missionary Electrification Charge		0.0373	1.79
			Environmental Share		0.0025	0.12
			Lifeline Rate[(Discount)/Subsidy]		0.0661	3.17
			Power Act Reduction		(0.3000)	(14.40)
			Loan Condonation		(0.1944)	(9.33)
<b>TOTAL BILL</b>		<b>293.01</b>	<b>TOTAL BILL</b>			<b>300.61</b>
<b>PhP/kWh</b>		<b>6.1043</b>	<b>PhP/kWh</b>			<b>6.2627</b>

## DISPOSITION

**WHEREFORE**, the foregoing premises considered, it is hereby decided as follows:

1. To approve the unbundled schedule of rates of MARELCO, to be effective on the first billing cycle thirty (30) days after receipt of this Decision, to wit:

	Residential	Commercial	Industrial	Comm. H2O Sys.	Public Bldgs.	Street Lights
<b>Generation Charges:</b>						
Generation System Charge PhP/kWh	3.7064	3.7064	3.7064	3.7064	3.7064	3.7064
<b>System Loss Charge</b> PhP/kWh	0.6970	0.6970	0.6970	0.6970	0.6970	0.6970
<b>Distribution Charges:</b>						
Demand Charge PhP/kW			17.60			
Distribution System Charge PhP/kWh	1.3696	0.9705	0.8792	0.8086	0.9559	1.1201
<b>Supply Charges:</b>						
Retail Customer Charge PhP/Customer/ Mo.		37.99	37.69	37.69	37.69	37.69
Supply System Charge PhP/kWh	0.7906					
<b>Metering Charges:</b>						
Retail Customer Charge PhP/Meter/ Mo.	5.0000	30.74	36.31	46.22	34.48	33.99
Metering System Charge PhP/kWh	0.4468					
<b>Inter-Class Cross Subsidy Charge</b> PhP/kWh	(0.4636)	1.0668	1.3606	1.3415	1.0380	0.8590
<b>Universal Charge:</b>						
Missionary Elect. Charge PhP/kWh	0.0373	0.0373	0.0373	0.0373	0.0373	0.0373
Environmental Share PhP/kWh	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
<b>Lifeline Rate (Discount)/Subsidy</b> PhP/kWh	0.0661	0.0661	0.0661	0.0661	0.0661	0.0661
<b>Loan Condonation</b> PhP/kWh	(0.1944)	(0.1944)	(0.1944)	(0.1944)	(0.1944)	(0.1944)
<b>Power Act Reduction</b> PhP/kWh	(0.3000)					
<b>Lifeline Rate (Discount) Subsidy</b> to be based on residential rate in a graduated scale as provided in Section II.B.4. of this Decision.						
<b>*Loan Condonation.</b> Pursuant to Order on ERC Case No. 2003 – 323 dated July 21, 2003.						

2. To order MARELCO to comply with the following:
- a) Discontinue charging the PPA upon effectivity of the approved unbundled rates; MARELCO shall automatically bill its end-users the new Generation Rate charged by NPC-SPUG as approved and authorized by the Commission;

- b) Discontinue the application of the Wage Adjustment Clause (WAC) formula upon effectivity of the approved unbundled rates.
- c) Bill PhP 0.0373/kWh representing the Missionary Electrification portion of the Universal Charge in accordance with the Decision of the Commission in ERC Case No. 2002-165 (In the Matter of the Petition for the Availment from the Universal Charge the Share for Missionary Electrification, NPC-SPUG, Applicant);
- d) Bill PhP 0.0025/kWh representing the environmental portion of the Universal Charge in accordance with the Decision of the Commission in ERC Case No. 2002-194 (In the Matter of the Petition for the Availment from the Universal Charge the Environmental Share/Charge for the Rehabilitation and Management of Watershed Areas, NPC-SPUG, Applicant);
- e) Bill its respective end-users using a billing format which contains at least the rate elements provided in Annex A of this Decision upon effectivity of the approved unbundled rates. The rate elements provided in Annex A should appear on the end-users bill even if the rate elements currently have a value of zero or have not yet been determined by the Commission;

- f) Inform the end-users within its franchise area of the said approved unbundled rates not later than thirty (30) days after receipt of this Decision;
- g) Submit for verification and confirmation purposes on or before the twentieth (20<sup>th</sup>) day of the month following the effectivity of the approved unbundled rates and every month thereafter:
  - 1) five (5) sample bills for each end-user class;
  - 2) copy of bills from the generation and transmission companies; and
  - 3) Monthly Financial and Statistical Reports (MFSRs), complete with all related schedules;
- h) Make a formal application with the Commission for the approval of existing or future contracts with any entity for the wholesale purchases of power not yet approved by the Commission;
- i) Make a formal application to continue the use of Other Charges within one (1) year from date of this Decision using a format to be prescribed by the Commission;
- j) File a progress report on the reinvestment fund no later than one (1) year after the date of this Decision and every year thereafter, using the prescribed formats provided in Annexes B & C of this Decision. The report shall include detailed

accounting of actual collections and deposits (including interest/dividend income), specific transactions and withdrawals for all disbursements, and actual current system losses;

- k) Submit a new System Rehabilitation/Upgrading and/or System Loss Reduction Program covering the period 2004 to 2008, no later than one (1) year after the date of this Decision using a format to be prescribed by the Commission; and
- l) Institute policies and procedures for cost-cutting and transparent and competitive procurement of goods and services and submit a report thereon to the Commission within six (6) months from receipt of this Decision.

**SO ORDERED.**

Pasig City, December 29, 2003.

**MANUEL R. SANCHEZ**  
Chairman

**OLIVER B. BUTALID**  
Commissioner

**CARLOS R. ALINDADA**  
Commissioner

**LETICIA V. IBAY**  
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