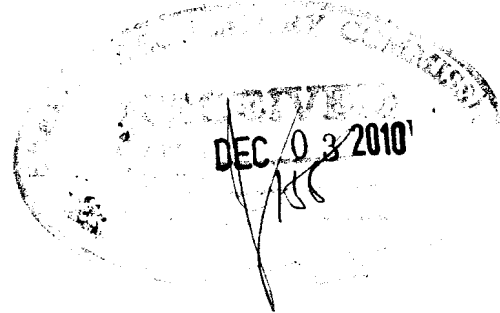


Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City



**IN THE MATTER OF THE
APPLICATION FOR
APPROVAL OF
CAPITAL EXPENDITURE
PROGRAM FOR THE YEAR
2010 to 2014 WITH PRAYER
FOR PROVISIONAL
AUTHORITY**



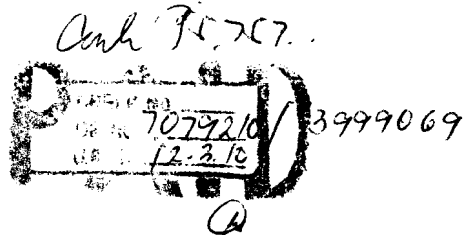
2010-147 *RC*

ERC CASE NO. _____

**ALBAY ELECTRIC
COOPERATIVE, INC.,
(ALECO)**

Applicant.

X - - - - - X



**APPLICATION
(With Prayer for Provisional Authority)**

ALBAY ELECTRIC COOPERATIVE, INC., (ALECO for brevity), through the undersigned counsel, and to this Honorable Commission, most respectfully states that:

1. Applicant is an electric cooperative duly organized and existing under and by virtue of Presidential Decree No. 29 (PD 269) and other laws of the Republic of the Philippines, W. Vinzons Street, Old Albay District, Legazpi City, Albay. It holds a franchise to operate the electric light and power service in the municipalities of Legaspi City, Libon, Pio Duran, Bacacay, Ligao City, Polangui, Camalig, Malilipot, Rapu-Rapu, Daraga City, Malinao, Sto. Domingo, Guinoñatan, Manito,

Tabaco City, Jovellar, Oas and Tiwi, all in the province of Albay (the “Franchise Area”) represented herein by its General Manager, ENGR. ALEX M. REALOZA, as per Board Resolution hereto attached as **Annex “F”**,

2. ALECO’s proposed capital expenditure projects for 2010 to 2014, are summarized and enumerated below;

SUMMARY OF THE PROPOSED CAPEX PROJECTS

PROJECT		Project Type	TOTAL COST
Subtransmission			
1	Acquisition of Subtransmission Assets	Mandatory	40,383,354.13
Substation/Capacity			
2	Uprating/Upgrading of Ligao Substation T1 from 5MVA to 12.5MVA	Capacity & Safety	49,405,581.58
3	Uprating/Upgrading of Tabaco Substation from 11.25MVA to 23.75MVA	Capacity & Safety	47,881,428.00
4	Uprating/Upgrading of Washington Substation from 11.25MVA to 23.75MVA	Capacity & Safety	63,553,963.00
5	Uprating/Upgrading of Ligao Substation T2 from 5/6.25MVA to 12.5MVA		36,536,428.00
6	Uprating/Upgrading of Malinao Substation from 5/6.25MVA to 12.5MVA	Capacity & Safety	26,960,000.00
7	Uprating/Upgrading of Polangui Substation from 12.5MVA to 18.75MVA	Capacity & Safety	27,213,310.01
8	Uprating/Upgrading of Bitano Substation from 32.5MVA to 42.5MVA	Capacity & Safety	61,407,823.00
Primary Line			
1	Installation of Recloser and Disconnect Switch Along Three-Phase Line	Safety	14,240,000.00
2	Refurbishment of Distribution Lines	Safety	22,084,617.75
3	Line Extension/Expansion of Primary Distribution Line	Customer Requirements	5,201,714.37
4	Correction of Metering of Large Load Customers	Safety	3,023,171.00
Reliability Improvement Projects			
1	Installation of 15 unit 15kV Single Phase Recloser	Reliability	8,640,000.00
System Loss Reduction Project			

1	Conversion of Manito 13.2kV Line from Single Phase to Three Phase ACSR#4/0	System Loss	13,674,391.73
2	Conversion of Jovellar 13.2kV Line from Single Phase to Three Phase ACSR#4/0	System Loss	6,625,788.55
3	Clustering of Kilowatt-Hour Meter	System Loss	168,993,770.40
4	Geographical Information System Mapping and Technical Database Build-up	System Loss	2,907,624.40
Rural Electrification			
1	Electrification of Sitios	Rural Electrification	29,968,960.34
Other Network			
1	Distribution Transformers	Customer Requirements	8,352,260.54
2	Secondary Line	Customer Requirements	16,518,510.60
3	Customer Service Drops	Customer Requirements	36,087,041.97
4	Metering Equipment	Customer Requirements	60,333,312.72
Non-Network			
1	ALECO IT Infrastructure		32,333,200.00
2	Test and Laboratory Equipments		23,938,855.44
3	Transporation Equipment		117,750,000.00
4	Tools, Shop, Safety and Garage Equipment		25,385,800.00
5	Communication Equipment		3,876,510.00
6	Construction and Renovation of Buildings		3,814,196.00
		Total	957,091,613.54

3. ALECO's distribution system is made up of seven (6) power substations with eleven (10) power transformers supplying eighteen (16) feeder lines that serve the needs of its coverage area. These substations are strategically distributed at different congressional district location. Branch 1 operates and maintains the Tabaco (2 x 5 MVA) and Malinao (1 x 5 MVA) substations with a combined capacity of 15 MVA. Branch 2 operates and maintains the Bitano (1 x 10 MVA, 1 x 20 MVA), Washington (1 x 5.6 MVA, 1 x 5 MVA), substations with a combined

capacity of 50.60 MVA. Branch 3 operates and maintains the Ligao (2 x 5 MVA) and Polangui (1 x 10 MVA) substations with a combined capacity of 20 MVA;

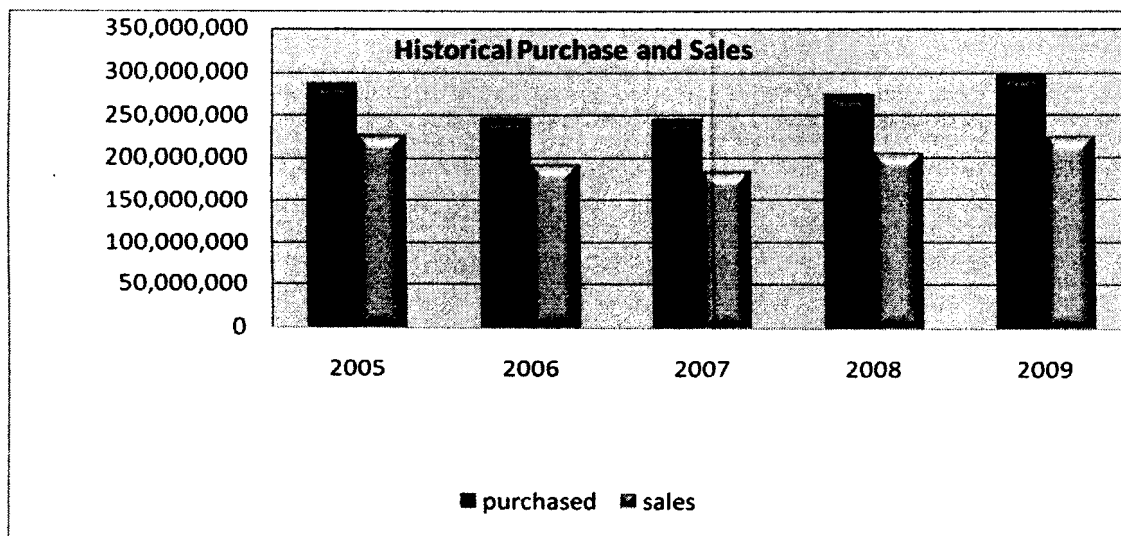
4. In addition, ALECO has 1,440.45 kilometers of overhead distribution line. Table 1 is the presentation of ALECO primary line;

Table 1 Total Distribution Kilometer Line

km lines	
DOUBLE CKT	4.12
THREE PHASE	311.32
TWO PHASE	11.83
SINGLE PHASE	1117.30
SECONDARY	
OS	741.737
UB	356.403

5. ALECO is located in a typhoon prone region and thus, it has a great bearing and impact on the energy purchases and sales of ALECO. However, even though there were typhoons from 2007-2009, the energy purchases and sales of ALECO has been steadily increasing as shown by the graph below;

Table 2.



6. The system loss of ALECO is above 20% for the past years. Specifically, in 2009 the system loss of ALECO is 24.50%, as shown by the table below;

Table 3 2009 Summary of System Loss

PURCHASED (kWh)	SALES (kWh)	SL (kWh)	SL %
297,136,407.10	224,342,783.09	72,793,624.01	24.50%

ALECO’s CAPITAL EXPENDITURE PLAN

7. ALECO’s Capital Expenditures (CAPEX) Plan for the period 2010-2014 is discussed more detailed in **Annex “B”, “C”, “D” and “E”**, which consists of three (3) volume as follows:

Volume 1	
Annex “A”	Operation Map
Annex “B”	Forecasting
Volume 2	

Annex "C"	Technical Assessment
Volume 3	
Annex "D"	Capital Expenditure projects
Annex "E"	Financial Analysis

TECHNICAL ANALYSIS OF THE EXISTING DISTRIBUTION SYSTEM

8. Distribution planning employs technical analysis of the existing distribution system, which helps in identifying and pin-pointing system deficiencies. These system deficiencies are those that do not pass safety, capacity, power quality, reliability, system loss and customer requirements based on Philippine Grid Code (PGC), Philippine Distribution Code (PDC), EPIRA and other laws mandated by the Philippine constitution. Project ideas are formulated and simulated with the use of technical software until feasible solutions are established to address the pin-pointed system deficiencies. Feasible solutions must pass all the technical criteria. Scientific forecasting of loads, customers and demand was conducted and different forecasting models were developed. The forecasting models were tested for validity and those that did not pass were rejected;

9. **Capacity.** Analysis of capacity requirement of substations and distribution line was conducted to determine the year the loading criteria are violated. The findings and analysis are discussed in detailed in the Distribution Development Plan of ALECO;

10. **Safety.** To provide the required protection, the extent of short-circuit current at various points of the distribution system must be determined. This determination requires calculation and analysis of the

existing distribution system with respect to its connection point to the grid. The findings and analysis are discussed in detailed in the Distribution Development Plan of ALECO. The Summary of Safety Assessment is shown by the table below;

Table 4

Substation - Feeder	Protective Device - Category	Interrupting Capacity	Minimum Fault Current(Amp)	Maximum Fault Current (Amp)	Threshold Capacity	Remaks
Bitano F1	Recloser	12000	189	4384	273.72%	Adequate
Bitano F2	Recloser	12000	189	4385	273.66%	Adequate
Bitano F3	Recloser	12000	189	5067	236.83%	Adequate
Bitano F4	Recloser	12000	189	5061	237.11%	Adequate
Washington F2	Recloser	12000	188	2183	549.70%	Adequate
Washington F3	Recloser	12000	188	2183	549.70%	Adequate

11. **Reliability.** The table summarizes the system reliability performance of ALECO for the year 2009. As shown below SAIFI of the feeders of Bitano and Washington Substations were above the set criteria of <20 interruption per customer. Interruptions affected mainly the urbanized areas of Legazpi and Daraga. Momentary interruptions were also frequently experienced in all feeders.

Table 5

S/S	FEEDER	ALL OTHERS			AVERAGE CONSUMERS
		SAIFI	SAIDI	MAIFI	
MALINAO	FEEDER 1	7.03	14.34	36.97	6,261
	FEEDER 2	6.80	12.80	115.53	8,512
TABACO	FEEDER 1	14.32	11.46	65.73	4,401
	FEEDER 2	15.25	11.19	43.78	2,848
	FEEDER 3	16.48	26.53	185.66	15,965
	FEEDER 4	17.12	18.16	163.16	5,096
BITANO	FEEDER 1	24.04	13.59	24.92	4,038
	FEEDER 2	41.35	30.21	50.90	4,913
	FEEDER 3	24.16	14.12	121.33	15,342
	FEEDER 4	35.11	28.87	58.07	12,178
WASHINGTON	FEEDER 2	43.79	23.09	47.51	15,040
	FEEDER 3	36.78	22.27	79.03	9,073
LIGAO	FEEDER 1	7.40	4.00	86.23	18,283
	FEEDER 2	12.03	6.00	33.26	15,293
POLANGUI	FEEDER 1	8.65	3.60	13.52	7,531
	FEEDER 2	2.02	0.34	48.61	7,400

12. **System efficiency.** Based on the 2009 system loss report, it shows that the distribution system has a cumulative system loss of 24.50%. This is above the allowable cap of 13%. Since, the system loss was not yet segregated, the system was assessed based on study conducted by NEA. Accordingly, the three highest contributors of technical losses are: primary distribution line loss, distribution transformer no load loss, and secondary distribution line loss. The table below shows the system loss of ALECO;

Table 6 2009 Summary of System Loss

PURCHASED (kWh)	SALES (kWh)	SL (kWh)	SL %
297,136,407.10	224,342,783.09	72,793,624.01	24.50%

Table 7 System Loss Percentage Per Feeder

SUMMARY	SL (kWh)	%
MALINAO	5,762,481.35	7.93%
TABACO	12,057,990.45	16.60%
BITANO	16,992,057.03	23.39%
WASH	14,944,088.00	20.57%
LIGAO 1	5,971,633.60	8.22%
LIGAO 2	9,509,421.20	13.09%
POL	7,418,866.28	10.21%

FINANCIAL AND ECONOMIC EVALUATION

13. **Financing plan.** The proposed capital investment will be financed by using the coop equity based on existing capex fund generated through the existing approved Member Contribution for Capex; obtaining through borrowings from the National Electrification

Administration; government subsidy for the Rural Electrification; and loan from National Transmission Corporation for the acquisition of sub-transmission line to finance such projects undertaking;

14. The following table summarizes the capex plan financiers to be pursued and the corresponding costs to be financed (at moderate capex project cost inflation factor of 3%):

Table 8

Sources of Fund	Lending Institution	Recommended Financing Period of Implementation					TOTAL
		2010	2011	2012	2013	2014	
Internal	ALECO (Existing MCC)	48,986,129.08	18,020,270.28	12,846,554.14	16,863,803.00	13,382,793.46	110,099,549.96
External	Government Subsidy	30,868,029.15					
External	Transco	40,383,354.13					40,383,354.13
External	NEA	120,146,266.33	228,911,687.63	143,847,488.74	152,575,009.45	210,898,784.63	856,379,236.78
Total		240,383,778.69	246,931,957.92	156,694,042.88	169,438,812.44	224,281,578.09	1,037,730,170.02

15. Borrowing shall be made only when the existing Capex fund will not suffice to cover all of its capital projects. Proceeds from borrowing or loans shall exclusively use for financing the investment facilities, to utilize in procuring the materials, equipments and related services intended for the implementation of the project. This shall also be used in payments on the cost directly attributable to the projects such as payments of permit fees, legal fees and others;

16. **Cash flow.** The cash flow analysis model used in investment evaluation. Operating revenues are come up based on the projected Sales per kilowatt-hour per customer classes. Forecasted number of consumer and kwh demand is based on the forecasted model. Capex Fund is based on the existing approved ERC benchmark rates pursuant to ERC

Resolution No. 20, S.2009, Art. 5, Sec. 5.3-4. The Capex Plan Annual Cash Flow for 5 Years is presented on the following table (with additional revenue requirements rates):

Table 9

CAPEX PLAN ANNUAL CASH FLOW COST AND ADDITIONAL REVENUE REQUIREMENT (per loan amortization)
For the Years 2010 - 2014

Annual Revenue Cash Flow from Existing CAPEX Rate	58,926,568	65,252,892	71,396,853	77,139,662	82,406,123	355,122,099	0.2178
Total Cost of Amortization- TransCo	5,335,866	5,335,866	5,335,866	5,335,866	5,335,866	26,679,331	0.0164
Total Cost of Amortization- NEA	6,480,039	90,826,035	130,878,571	149,857,554	132,381,420	510,423,618	0.3130
Total Cost of Amortization	11,815,905	96,161,901	136,214,437	155,193,420	137,717,286	537,102,949	0.3294
Add: ERC Capex Approval Fees	1,759,188.93	1,761,407.95	1,077,504.35	1,129,081.43	1,451,004.45	7,178,187	0.0044
Amount to be funded by Existing MCC RATE	48,986,129.08	18,020,270.28	12,846,554.14	16,863,803.00	13,382,793.46	110,099,550	
Annual Capex Plan (Revenue Requirement)	62,561,223	115,943,579	150,138,495	173,186,304	152,551,084	654,380,686	0.4013
Balance : Additional Revenue Requirement	(3,634,655)	(50,690,687)	(78,741,642)	(96,046,642)	(70,144,961)	(299,258,587)	(0.1835)

17. **Rate Impact.** The investment project will be incurred at a reasonable cost of operation to be used primarily in the realization of the undertaking. Whereas this cost will be included in the determination of the necessary rates adjustment to enable the cooperative to operate viably. This was form part of the provision that the insufficiency of the revenue necessitates adjustment of retail rates to garner enough the intended revenue requirement to cover the obligation of the cooperative;

18. CAPEX Plan objective is to select and identify priority projects for implementation that have the least rate impact on the member-consumers and yet bring the most value to the consumer at the most reasonable and justifiable electricity rates or at the least cost of service. Therefore, the EC CAPEX Plan is designed to:

- a. Address prudently the evaluated distribution development priority projects in order to comply with RA 9136, Philippine Grid Code (PGC) and Philippine Distribution Code (PDC);

- b. Include the evaluated non-network facility development priority projects in order to bring tangible value and assure the efficiency of the EC's services to its consumers;
- c. Plan priority projects to be financed thru short-term and long-term loans; and
- d. Justify, the proposed priority projects to the Energy Regulatory Commission (ERC) for an adjustment of the EC's electricity rates to cover CAPEX cost.

19. In view of the above considerations, ALECO CAPEX Plan is reasonable as it has an insignificant rate impact to its consumers. To reiterate, the EC's CAPEX Plan includes the debt service of 2009 outstanding loans that were used to fund the past year capital projects. In summary, the 5-year average indicative cost per kWh is Php.4013. The table below is indicative of rate impact:

Table 10

Existing MCC RATE	0.2178	0.2178	0.2178	0.2178	0.2178	0.2178
Add: Additional RevReq per kWh (MCC RATE)	0.0134	0.1692	0.2402	0.2712	0.1854	0.1835
	0.2312	0.3870	0.4580	0.4890	0.4032	0.4013

20. **Conclusion of the Financial Analysis.** The following are ALECO conclusions as regards to the financial analysis and is considered to be an integral part of the 5-year capex approval:

1. All capex projects will have to be financed by term loans to spread and minimize cost impact on cost to the consumers.
2. The Cooperative can viably pursue and implement the capex plan if and only when the corresponding rate per kWh is at least equivalent to the total revenue requirement of the capex plan to cover debt service amortization of outstanding loan obligation.

3. There is no price shock. The average indicative cost of projects based on its annual cash flow cost results to an average indicative additional revenue requirement per kWh of Ph 0.1835 or 2.5% over the aggregate average rate of Ph 7.3704 per kWh.

The approval and realization of the 5-year capex plan therefore is anchored on a foremost consideration that the Cooperative is accordingly and timely afforded by the ERC a corresponding rates adjustment as what the Commission may deem applicable under the circumstances;

21. **Sensitivity Analysis.** Sensitivity analysis gives us a picture how cash flows would look should there be eventualities occurring in the normal course of business that affects revenue and cost. The following scenarios are created to cover these eventualities:

- revenue is 110% and 90% of projections, and
- capital projects identified for loan financing may be obtained with a longer term of repayment of 10 years.
- all capital projects identified for loan financing may be obtained at 9% instead of 10%.

The following two tables present indicative rates and rate impact in these sensitivity scenarios:

22. Compliance with ERC Resolution No. 18, series of 2008. The following are also attached as Annex to this application:

Annex "G" Affidavit of Undertaking / Sworn Statement that an application for approval from the concerned agencies has been filed / shall be filed

Annex "H" Affidavits of Service / Proofs of Public Information Dissemination

Annex "I" Notice

Annex "J" Certifications from the LGUs of receipt of Notice

PRAYER

WHEREFORE, premises considered, it is respectfully prayed that ALECO's application for capital expenditures (including non-network assets) for the period 2010-2014 be **APPROVED** and that **PROVISIONAL AUTHORITY** to implement said projects be **ISSUED**.

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

Pasig City, 05 November 2010.

By:


RAYJEAN D. TAMAYO

Suite 707 / 7th Floor, OMM-CITRA Building
San Miguel Avenue, Ortigas Center, 1605 Pasig City
Tel/Fax No. (02) 910-1256

PTR No. 5906690 / 01-04-10 / Pasig City

IBP No. 085179 / 01-04-10 / Pasig City

Roll No. 56237

MCLE Compliance No. III- 00115467 / May 4, 2010

VERIFICATION AND CERTIFICATION OF NON-FORUM SHOPPING

I, ENGR. ALEX M. REALOZA, of legal age, Filipino, and with office address at Albay Electric Cooperative, Inc., W. Vinzons St., Albay District, Legazpi City, Province of Albay 4500 under oath, do hereby depose and state that:

1. I am the General Manager and duly authorized representative of Albay Electric Cooperative, Inc. (ALECO), the applicant in the above-entitled Application;
2. I have caused the preparation of the foregoing Application and read the contents of the said Application and all the contents therein are true and correct of my own personal knowledge;
3. I certify under oath that I have not commenced any other action, or proceeding involving the same issues before this Honorable Commission, the Supreme Court, the Court of Appeals, or any other tribunal or agency, and to the best of my knowledge, no such action or proceeding has been filed or is pending before this Honorable Commission, the Supreme Court, the Court of Appeals or any Division thereof, or any other tribunal/agency. And if I should learn that a similar action has been filed with this Honorable Commission, the Supreme Court, the Court of Appeals or any tribunal or agency, I undertake to report that fact within five (5) days therefrom to the court or agency wherein the original pleading and sworn certification contemplated therein has been filed.

IN WITNESS WHEREOF, I have hereunto affixed my signature this NOV 18 2010th day of November 2010.

ALEX M. REALOZA
Affiant

SUBSCRIBED AND SWORN to before me this NOV 18 2010th day of November 2010, in the Pasig City. Affiant exhibited to me his Driver's License No. E02-94-026877, as well as CTC No. 21588665 issued at Daraga, Albay on January 21, 2010.

Doc. No. 79 ;
Page No. 17 ;
Book No. 1 ;
Series of 2010.

NOTARY PUBLIC

Ray Jean D. Tamayo
RAY JEAN D. TAMAYO
NOTARY PUBLIC
Appointment No. 94 (2010-2011)
Until December 31, 2010
Attorney's Roll No. 56237
PTR 5906690 / 01-04-10 / Pasig City
IBP 805179 / 01-04-10 / Pasig City