

# Town of Canso Electrical Utility Rate and Regulation Review

## Final Report

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**ISO 9001**  
Registered Company

Prepared for:  
**Town of Canso**

Prepared by:  
A.E. Dominie

On behalf of:



**CBCL LIMITED**

Consulting Engineers

<b>Issued for Review</b>	A. Dominie	<i>N/A</i>	15-Nov-10	R. Thorpe	<i>R. Thorpe</i>	15-Nov-10
<b>Issue or Revision:</b>	<b>Name:</b>	<b>Signature:</b>	<b>Date:</b>	<b>Name:</b>	<b>Signature:</b>	<b>Date:</b>
	<b>Reviewed By:</b>			<b>Issued By:</b>		

**Signed and Sealed:**



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Consulting Engineers

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**Signed and Sealed:**

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## CHAPTER 1 INTRODUCTION

The Town of Canso Electric Utility is a Municipal Electric Utility owned by the Town of Canso. The Utility purchases electricity from Nova Scotia Power Inc. (NSPI), at the 4.16 kV voltage level and distributes in the Town of Canso through a 4.16 kV distribution system. The Utility supplies approximately 485 customers in the Town.

Earlier this year, as part of the town's transition from its current municipal status, the Town requested that work be undertaken that would include:

“Current rate review and, if necessary, application to the Nova Scotia Utility and Review Board.”

The Terms of Reference for this item were:

- D) “Prepare a cost estimate of operating and maintaining the electrical system for the next three years.”
- E) “Prepare an electrical rate study suitable for submission to the NSUARB, including a review of existing rules and regulations to assist in the development of revised needs and regulations.”
- F) “Prepare a rate study for a three-year period with supporting documentation to outline the financial impacts of not applying for rates at this time.”

This report is submitted in response to this request.

## CHAPTER 2 **THE UTILITY**

Financially, the Utility is in a sound position with no debt and an accumulated surplus of some \$150,000. From fiscal 2006 through 2009 the Utility enjoyed a significant return on rate base with surpluses ranging from \$34,000 to \$110,000. While the 2008 position (\$110,584) may not be indicative of normal operations, profits of some \$30,000-\$50,000 were regularly experienced in other years. Fiscal 2010 saw a \$23,000 loss from operations largely due to the decision to operate the Utility on a contract basis rather than with its own workforce. Coupled with this were somewhat abnormal expenses associated with truck repairs (\$10,000) and capital requirements (\$39,000). Absent a large portion of these items, the loss could easily have been eliminated. An additional impact in 2009 for \$20,000 in capital costs further clouded the profit picture.

Fiscals 2011-2013 inclusive should result in basically a break-even or minimal (\$5-10 thousand) loss position if the Utility continues with the practice of flow-through increases as a result of price changes to its purchased power costs. To this extent, a flow through formula proposal is included as part of this report for DSM and FAM impacts. It is noted that this NSUARB provision was not implemented similar to other Municipal Utilities at the January 1, 2010 outset. The proposed formula is based on the same procedure approved for Riverport Electric. It is our understanding that similar circumstances regarding billing program changes (cost, difficulty, etc) and bill formats exist at Canso and therefore make the Riverport formula a reasonable approach for this application. Since Purchase Power amounts to 70% of the overall Utility cost, this form of cost/revenue protection insures considerable financial stability. The existing flow-through formula is for increases to NSP's base rates as a result of General Rate Applications. A separate flow through is required for the DSM and FAM rider increases.

## CHAPTER 3 **RATE STUDY**

The rate study was developed based on results for the last two actual fiscal periods (2009, 2010); budgets for 2011; and projections for 2012, 2013, and 2014 as requested in the RFP. The projections are based on a business-as-usual assumption with regard to revenues and expenses using 2011 as the base operation. The current minimal profit/loss position is therefore extended through the period. Purchase power costs are maintained at current price levels due to the flow-through provisions afforded the Canso Utility.

No new plant additions are forecast and depreciation funds of some \$20,000 per year are available should new plant be required. As well, it is worth noting that significant cash levels are available to the Utility (\$280,000 at March 31, 2009).

The study follows the traditional steps of functionalization, classification, and allocation for the assets and expenses. Various factors are developed based on judgement, utility data, prior studies, industry standards, and personal knowledge and experience.

Exhibits 1 through 4 deal with plant-in-service and rate base. A working capital allowance of \$6,000, as utilized by the Utility, was incorporated in the study. As indicated in previous rate studies, (see D. Kehoe, P.ENG study February 1997 and other UARB approvals for Municipal Utilities) as a significantly higher value may be justified if a General Rate Increase were filed for. Since any allowed earnings level would presumably be regulated based on a Return-on-Rate Base provision, this would enhance the allowed profit levels. An allowance of \$30,000 (similar to Riverport Electric) would provide a rate base of some \$160,000 and at an 8% return, an earnings provision of approximately \$13,000.00. With no debt, a return of some 2% would therefore be available to the owner based on an operating and capital equity level of some \$630,000 (2009).

While this may appear low at the outset, it must be remembered that the Utility has no interest cost and a plant that is almost 75% depreciated.

Exhibits 4 through 7 detail the expense allocation procedure and Exhibit 8 provides a summary of the results from a revenue/cost ratio perspective.

It is noted that energy purchases from NSP are up almost 2% (2050 MWh versus 2015 MWh) over the same period (April to July) last year. Should this increase remain and result from increased sales levels, additional profits of \$10-15 could be experienced relative to budgets. Due to billing lags and scheduling of study preparations, sufficient data to analyze this impact was not available. However, it is recommended that this aspect be monitored further as the current year progresses. Demand impacts should also be considered.

## CHAPTER 4 **PEAK DEMAND**

The Utility's peak demand is weather sensitive. While the current billing peak of 1416 kVa has been maintained for study purposes, we would note that demands as high as 1747 kVa (December 2009), 1462 kVa (January 2009), and 1629 (December 2008) have been experienced in the recent past. An increase of 100 kVa, which does not bring with it significant energy sales levels, would cost the Utility approximately \$12,000 in demand purchase power costs per year.

## CHAPTER 5 **RATE ANALYSIS**

When deciding what to do about rates, the overriding issue is the UARB requirement that rates be based on cost, and in order to avoid any undue discrimination, rate levels should be set so as to return between 95-105% of cost for any proposed test period. A review of the attached study results (see Exhibit 8) reflect that Canso's rates would require some considerable adjustment to meet the Board's provision. It has become the accepted practice in Nova Scotia for rates to be analyzed based on a forward-looking test period. For this reason, we have chosen fiscal 2012 as the period for this study. Any UARB proposal would be predicated on the rate performance during which any changes would be in effect, not past impacts.

A review of Exhibit 8 reveals that all of Canso's rates (ex. Lighting) are considerably outside of the acceptable 95-105 range. Lines 4 and 6 reflect the dollars and percentage changes that would be required to achieve the minimum prescribed levels on an overall revenue neutral basis (no increase in overall revenue requirement).

When the Exhibit 8 results are viewed with the understanding that NSP rates are all within the Board's approved range, the rate differences for Canso customers versus NSP customers for the same usage criteria become more explainable.

### **5.1 Residential**

Canso has a higher base charge and a lower energy charge than the corresponding rate at NSP. Therefore, any percentage advantage Canso rate payers enjoy will grow as consumption increases. Presently, Canso Domestic customers typically pay 10-18% less than NSP customers at the same usage level. As seen from Exhibit 8, a considerable portion of this advantage can be attributed to the fact that Canso's rate is at least 8% below cost. Increasing the Domestic rate by this amount would still allow Canso Residential customers to enjoy a 5-7% advantage on average.

## 5.2 Small General

In this category, it is important to note that in Canso the rate is only available to very small Commercial customers (under 12,000 KWh/year). NSP's availability is up to 32,000 KWh/year. There are a number of reasons for this, but it means that for a number of Canso's demand billed General Customers (those who use from 12,000-32,000 KWh/year) the impacts would be entirely different from those described here, and would depend on what demand level (load factor) was associated with the specific energy level. However, at most levels, the impacts would be less than for the current Small-to-Small comparison. This is due to Canso's General demand-styled rate being lower-priced than the Small category once a reasonable (20% or greater) billing load factor is attained.

Typically, Canso's Small General customers pay 40-50% more than their NSP counterpart. This is primarily attributable to the 70+ percent over cost recovery of Canso's category. An upwards of 40% decrease would be required for the 45 or so customers in their class. This would result in the rates being quite similar.

## 5.3 General

It is suspected that 10-15 of the 35 customers in their class would be applicable to NSP's higher KWh availability Small Category. These customers could see decreases of 20-50% if Canso's Small rate were expanded and reduced to a cost-based level. (Note that this would result in a revenue loss, which would have to be made up by other customers if the revenue requirement were to remain intact.) The remaining customers pay 18-19% higher than their NSP counterpart and this difference would be approximately halved if Canso's rate were cost-based.

## 5.4 Small General

The minimal number of customers (10) and revenue associated with this class make direct comparisons difficult, as a shift of only 2-3 thousand can have as much as a 10% impact on the results. However, this class does enjoy a 6% price advantage over its NSP counterpart. Every assurance should be made that KVa meters are utilized on all billings in this category. While the 30% increase highlighted on Exhibit 8 would bring the rate upwards of 25% above NSP, as noted a minimum change in the costing criteria may significantly alter this impact. Additional load data should be obtained before embarking on anything more than a directional change for the class. Any change should be significantly weighted to the run-off block for these customers. The Utility purchases energy (KWh) at a cost of approximately 6.60¢ after an allowance for losses is provided. They, in turn, sell them in this category for 6.08¢ when the KWh usage does not bring with it a demand increment. For example, a Small Industrial customer who improves his load factor through additional energy use as a result of expanded operation or output rather than load would result in additional KWh sales and revenue at 92% of the Utility incremental cost.

## 5.5 Street Lighting

The Utility data provided indicated that, with the exception of 1-1,000 W HPS (High Pressure Sodium) and some temporary 100 W MV (Mercury Vapour) fixtures for Stanfest, its system consisted of 101-100 W MV and 67-175 W HPS lights. We would note that there are no approved rates for these types of

fixtures in the Street and Area Lighting Rate category. We have estimated an operating cost of 12¢/KWh based on varying rate comparisons (General, Small Loads, NSP benchmark) and a maintenance requirement of \$3 per month per fixture (This equates to the \$6,000 maintenance allocation per the cost study Exhibit 6, Column 6, Line 2) and compares favourably with NSP charges for similar fixtures. Using these ratios and based on a monthly usage of 43 and 73 KWh respectively (4000 hours burning plus 25% for other electrical components per NSP data) for the 100 W and 175 W lights an operating and maintenance charge of \$8.16 and 11.76 can be determined. This would result in revenue of approximately \$19,355, leaving \$7,645 to be recovered as a capital component (total revenue is \$27,000). Given that NSP's capital charge is quite similar for both MV and HPS fixtures (approximately \$5.06/month/light), a Canso charge of \$3.80/light/month can be calculated if the \$7,645 requirement is applied equally for fixtures. This brings us to rates of \$11.96 for the 100 W MV lights and \$15.56 for the HPS fixtures. (Canso's actual charges are unknown at this time). Also, timing and data availability did not allow consideration of the LED street light conversion. However, given it is expected to be revenue neutral, it would not have a major impact on this review.

## **5.6 Changes January 1, 2011**

It must be remembered that this is a point-in-time rate analysis. Planned NSP rate adjustments for January 1, 2011; flow-through approaches for Canso; varying increase levels for different NSP classes; and increase application to the energy and demand values will all have an effect on how this comparison will look after January 1, 2011. No significant changes to the current comparison are anticipated, however.

## CHAPTER 6 **REGULATIONS**

Canso's regulations tend to mirror NSP's and do not appear to require changes. However, the miscellaneous charges have not been updated for some time and should be modified to again bring them in line with those at NSP (original base). As well, the Electrical Inspection Fees should be updated to similar NSP levels (a practice presently followed and approved for other Municipal Utilities). These changes can be included with any future General Rate applications. They are not of a serious enough nature to warrant a separate application at this time. Flow-through applications are limited to impacts associated with price changes to Purchase Power costs and as such cannot include requests for other issues.

## CHAPTER 7 **FLOW THROUGHS**

The most significant impact on Utility operations comes from increases to its purchase power rates. This expense represents some 70% of overall costs. In the past, increases were the result of General Rate Applications (GRA) by NSP and impacts could be flowed through to Canso customers based on a UARB approved formula contained in the rate provision. However, for calendar 2010, changes occurred whereby NSP is able to increase prices through the approval of rate riders for DSM and Fuel expenses. The approach for these increases necessitated a different flow-through formula requirement for municipal Utilities. Canso did not incorporate this into their rates in the inaugural year (calendar 2010). The initial impact was relatively small (DSM plus .249¢/KWh and FAM minus .187¢/KWh) and resulted in additional expenses of some \$4,300 for the Utility, which was not downloaded to its customers (about one-half of one percent on rates).

This picture will change significantly on January 1, 2011. Present indications are that these 2011 increases could approach 12% in total (DSM 2% and FAM 10%) for the municipal purchases. Final levels will be dependent on current UARB deliberations regarding deferrals, but increases of at least 7% in total are expected.

In this regard, Canso should immediately petition the UARB for inclusion of the required flow-through formula in its rates. The necessary documents are provided at the end of this report.

The formula utilizes estimates for the period in which the costs will be effective. It is modeled after a similar approval for Riverport Electric.

The existing GRA flow-through formula should be updated to take into account a forward-looking approach rather than the historic sales basis that presently exists. This would keep the formulas consistent and current. The Utility is directed to a similar request by the Lunenburg Utility, which was recently approved by the UARB. With no GRA by NSP anticipated until next year, at the earliest, this can be scheduled later. A sample proposal is included from the Riverport rates.

## CHAPTER 8 **GENERAL RATE APPLICATIONS**

It is recommended that the Utility not proceed with a GRA at this time. There are a number of reasons for this:

1. Significant increases associated with flow through (5-9%).
2. Customer impacts associated with rate realignment.
3. Limited earnings opportunity due to return-on-rate base limits (Any additional revenue requirement would quite likely be limited to the 2-2.5% range, or about \$20,000).
4. Opportunity for enhanced financial position due to sales increases and/or expense reduction opportunities.
5. Significant domestic impacts.
6. Changing landscape vis-à-vis rate comparisons with NSP.
7. Further potential increases in calendar 2012 as a result of NSP GRA.

## CHAPTER 9 **FUTURE IMPACTS**

It is anticipated that costs pressures at NSP will force a GRA in 2011 for new base rates in calendar 2012 or in 2012 for 2013 at the latest. As well, any deferral associated with the 2011 FAM provisions will further impact increases in this time frame. DSM alone is expected to add another 3-4% or so to prices in 2012, and further increases are anticipated based on capital requirements and depreciation rate changes.

APPENDIX A

# Example of Forward-Looking GRA-Related Flow Through for GRA-Related Increases

**EXAMPLE OF FORWARD-LOOKING GRA-RELATED FLOW THROUGH  
FOR GRA-RELATED INCREASES**

**Flow through for Nova Scotia Power Incorporated (NSPI)  
Municipal Rate Class Increases**

In order to recover increased costs due to NSPI increases and upon notice by the CANSO ELECTRIC UTILITY to the Nova Scotia Utility and Review Board (The Board), the Board may amend the Rates for Domestic Service, Small General Service, General Service, Small Industrial, and Street Lighting, and Yard Lighting based on the following formula, without the necessity of a public hearing.

1)  $A \div B = C$

2)  $C \times D = E$

- A = Forecasted power purchase cost from NSPI for the test year.
- B = Forecasted Electric Rate Revenue from above classes for the test year.
- C = Percent, expressed as 00.00.
- D = NSPI approved increase percent, expressed as 00.00.
- E = Average percentage change required to the Canso Electric Utility rates to recover its purchased power cost.

APPENDIX B

# DSM and FAM Flow Through Filing

**THE TOWN OF CANSO ELECTRIC UTILITY**

Nova Scotia Utility and Review Board  
PO Box 1692  
Unit M  
Halifax, Nova Scotia  
B3J 3S3

**ATTENTION: Ms. Nancy McNeil  
Regulatory Affairs Officer/Clerk**

Dear Ms. McNeil:

The CANSO ELECTRIC UTILITY hereby begs leave to petition the Board for an amendment to its Schedule of Rates for Electric Supply and Services.

The Utility is seeking approval of a flow-through formula for increases associated with the DSM and FAM riders applicable to NSP's Municipal Rate category. Unlike the other Municipal Utilities, Canso chose not to pursue this provision for calendar 2010. The increased costs associated with these items for 2011 made the previous approach no longer viable. Our formula is modeled after that approved for the Riverport Electric Commission.

Canso Electric Utility's Petition, Resolution (Exhibit A), and Affidavit are enclosed.

We would greatly appreciate the Board's timely response with regard to this application.

Yours truly,

CANSO ELECTRIC UTILITY

**PROVINCE OF NOVA SCOTIA**

**NOVA SCOTIA UTILITY AND REVIEW BOARD**

**IN THE MATTER OF THE PUBLIC UTILITIES ACT**

-and-

**IN THE MATTER OF THE APPLICATION OF THE CANSO ELECTRIC UTILITY  
FOR AN AMENDMENT TO ITS SCHEDULE OF RATES FOR ELECTRIC SUPPLY AND SERVICE**

---

The petition of CANSO ELECTRIC UTILITY on behalf of the Utility, the applicant, for an order authorizing and approving a new flow-through formula for impacts associated with NSP's DSM and FAM riders.

1. That CANSO ELECTRIC UTILITY, the Applicant, is a public utility within the meaning of the Public Utilities Act, Chapter 380, Revised Statutes of Nova Scotia, 1989.
2. That the proposed formula is the same as that approved for other Municipal Utilities, namely Riverport.
3. That annexed hereto and marked EXHIBIT A is a copy of the Resolution of the Commissioners of CANSO ELECTRIC UTILITY authorizing the Application and a sworn AFFIDAVIT.

Dated at Canso, Nova Scotia

This \_\_\_\_ day of \_\_\_\_\_, 2010

CANSO ELECTRIC UTILITY

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**AFFIDAVIT**

IN THE MATTER OF AN Application of the CANSO ELECTRIC LIGHT COMMISSION to the Nova Scotia Utility and Review Board for an amendment to its Rates and Regulations for Electric Supply and Services.

I, \_\_\_\_\_ of \_\_\_\_\_ and Province of Nova Scotia, make an oath and say as follows:

1. That I am the \_\_\_\_\_ of the CANSO ELECTRIC UTILITY.
2. That the CANSO ELECTRIC UTILITY did, at a duly constituted meeting held at the Canso Electric Utility office in Canso, Nova Scotia, on the \_\_\_\_\_ Day of \_\_\_\_\_, \_\_\_\_\_, by motion approve an Application to the Nova Scotia Utility and Review Board for an amendment to its Rates and Regulations for Electric Supply and Services for inclusion of a flow-through formula, modeled after that approved for the Riverport Commission, to recover purchase power cost increases associated with NSP increases to the DSM and FAM Riders of the Municipal Rate.

Sworn to before me at \_\_\_\_\_, in the County of \_\_\_\_\_ and Province of Nova Scotia, this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_

\_\_\_\_\_  
A Commissioner of the Supreme Court  
of Nova Scotia

## EXHIBIT A

Resolution of the COMMISSIONERS of CANSO ELECTRIC UTILITY regarding an Application by CANSO ELECTRIC UTILITY for an amendment to its Schedule of Rates and Regulations for Electric Supply and Services, for inclusion of a FAM/DSM flow-through formula modeled after the Riverport approval.

Canso, Nova Scotia

\_\_\_\_\_, 2010

BE IT RESOLVED THAT: Canso Electric Utility make an Application to the Nova Scotia Utility and Review Board for approval of a FAM, DSM flow-through formula similar to that approved for the Riverport approval.

-Moved by \_\_\_\_\_, seconded by \_\_\_\_\_, motion carried.

I, \_\_\_\_\_, certify the foregoing is a True copy of the Resolution passed by the COMMISSIONERS of CANSO ELECTRIC UTILITY at a Meeting held on the \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_

### **Nova Scotia Power Inc. (NSPI) Municipal Rate Class Adjustments due to Demand Side Management (DSM) and Fuel Adjustment Mechanism (FAM)**

In order to recover DSM and FAM adjustments to NSPI-approved DSM and FAM adjustments and upon notice by the Commissioners of Canso Electric Utility to the Nova Scotia Utility and Review Board (the Board), the Board may amend the KWh rates for Domestic Service, Small General, General, Large General, Small Industrial, and Street and Area Lighting based on the following, without the necessity of a public hearing:

For Domestic Service, Small General, General, and Small Industrial, the following formula will apply:

- 1)  $A + B = C$
- 2)  $C \times D / 100 = E$
- 3)  $E / F * 100 = G$

- A = NSPI DSM Rate changes to Municipal Class (cents per kWh)
- B = NSPI FAM Rate changes to Municipal Class (cents per kWh)
- C = Net NSPI adjustment (cents per kWh)
- D = kWh purchases from NSPI for the test period
- E = Total cost adjustment on annual purchases from NSPI for the test period
- F = kWh sold by Municipal Electric Utility for the test period
- G = Adjustment to Municipal Electric Rates as a result of DSM and FAM charges (cents per kWh)

For Street and Yard Lighting Categories, the following formula will apply:

1)  $G * H (4,000 / 1,000 / 12) = I$

- G = Adjustment to Municipal Electric Rates as a result of DSM and FAM charges (cents per kWh)
- H = Rated wattage of Street Light
- I = Adjustment to monthly charges per street light as a result of DSM and FAM charges

APPENDIX C

# Rate Study Exhibits

**TOWN OF CANSO ELECTRIC UTILITY**  
**Plant in Service**

For the Fiscal Years ending March 31, 2009, 2010 (actual), 2011 (projected), 2012, 2013, 2014 (estimated)  
(\$000)

	1	2	3	4	5	6
	2009	2010	2011	2012	2013	2014
	\$	\$	\$	\$	\$	\$
<u>Distribution</u>						
1 Overhead	143	143	143	144	145	146
2 Poles & Fixtures	122	122	122	123	124	125
3 Transformers	99	99	100	102	105	108
4 Services	78	80	82	84	86	88
5 Meters	43	44	45	46	47	48
6 St & Hwy Lighting	27	70	70	70	70	70
7 <u>Total Distribution</u>	<u>512</u>	<u>558</u>	<u>562</u>	<u>569</u>	<u>577</u>	<u>585</u>
<u>General</u>						
8 Land	1	1	1	1	1	1
9 Equipment	49	49	49	49	49	49
10 Eng. & Supt.	14	14	14	14	14	14
11 Computer	13	13	13	13	13	13
12 Tele.	2	2	2	2	2	2
13 <u>Total General</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>	<u>79</u>
14 <u>Total Plant</u>	<u>591</u>	<u>637</u>	<u>641</u>	<u>648</u>	<u>656</u>	<u>664</u>
15 <u>Acc. Dep.</u>	<u>458</u>	<u>478</u>	<u>498</u>	<u>518</u>	<u>539</u>	<u>560</u>
16 <u>Net Plant</u>	<u>133</u>	<u>159</u>	<u>143</u>	<u>130</u>	<u>117</u>	<u>104</u>

**TOWN OF CANSO ELECTRIC UTILITY**  
**Rate Base**  
**For the Test Period Fiscal 2012**  
**(\$000)**

	1	2	3
	Total Plant	Acc. Dep.	Net Rate Base
	\$	\$	\$
<u>Distribution</u>			
1 Overhead	144	127	17
2 Poles & Fixtures	123	108	15
3 Transformers	102	90	12
4 Services	84	74	10
5 Meters	46	40	6
6 <u>St. &amp; Hwy. Lighting</u>	70	10	60
7 <u>Total Distribution</u>	569	449	120
<u>General</u>			
8 <u>Total General</u>	79	69	10
9 Total	648	518	130
10 <u>Working Capital</u>	6	---	6
11 <u>Total</u>	654	518	136

**TOWN OF CANSO ELECTRIC UTILITY**  
**Classification of Rate Base**  
**For the Test Period Fiscal 2012**  
**(\$ 000)**

<u>Distribution</u>	Total Rate Base \$	1 Demand	2 Customer	3 St. Light	4 Factor
1 Overhead	17	12	5	---	A
2 Parts & Fixtures	15	11	4	---	A
3 Transformers	12	12	---	---	B
4 Services	10	---	10	---	B
5 Meters	6	---	6	---	B
6 <u>St. &amp; Hwy. Lighting</u>	60	---	---	60	B
7 <u>Total Distribution</u>	120	35	25	60	
8 General Total	10	3	2	5	C
9 <u>Working Capital</u>	6	2	1	3	C
10 <u>Total Rate Base</u>	136	40	28	68	

Factors

A = 70/30 Demand/Customer

B = Direct

C = Per Total Distribution

**TOWN OF CANSO ELECTRIC UTILITY**  
**Classification of Rate Base**  
**For the Test Period Fiscal 2012**  
**(\$ 000)**

	1	2	3	4	5	6	7
	Total	Res.	Sm. Gen.	General	Sm. Ind.	Lighting	Factor
	\$	\$	\$	\$	\$	\$	\$
1 Demand	40	24	1	13	1	1	A
2 Customer	28	16	2	7	2	1	B
3 <u>Lighting</u>	68	---	---	---	---	68	DIRECT
4 <u>Total</u>	136	40	3	20	3	70	
Factor	1.00	0.29	0.02	0.15	0.02	0.52	
Factor Ex. Light	1.00	0.60	0.05	0.30	0.05	---	
<u>Allocation Factors</u>							
A = Non-coincident demand	1710	1025	35	575	50	25	
Factor	1.00	0.60	0.02	0.34	0.03	0.01	
B = No. of Customers	485	390	45	35	10	5	
<u>Weighting</u>	---	1	1	5	5	1	
<u>Weighted Factor</u>	665	390	45	175	50	5	
Allocation Factor	1.00	0.59	0.07	0.26	0.07	0.01	

**TOWN OF CANSO ELECTRIC UTILITY**  
**Revenue and Expense**

For the Fiscal Years Ending March 31, 2009, 2010 (actual), 2011 (projected), 2012, 2013, 2014 (estimated)

(\$000)

	1	2	3	4	5	6
	2009	2010	2011	2012	2013	2014
	\$	\$	\$	\$	\$	\$
<u>Operating Revenue</u>						
1 Residential	386	417	417	418	419	420
2 Small General	29	31	31	31	31	31
3 General	324	332	332	333	334	335
4 Small Ind.	27	23	23	22	21	20
5 St. Light	28	27	27	27	27	27
6 Misc	25	22	22	22	22	22
7 <u>Total Revenue</u>	<u>819</u>	<u>852</u>	<u>852</u>	<u>853</u>	<u>854</u>	<u>855</u>
<u>Operating Expenses</u>						
8 Purchase Power	561	598	599	600	602	604
9 Oper. & Main	65	94	131	130	132	134
10 Admin. & Gen.	92	107	90	91	92	93
11 Depreciation	19	20	20	20	20	20
12 Taxes	17	16	16	16	16	16
13 <u>Total Operating</u>	<u>754</u>	<u>835</u>	<u>856</u>	<u>857</u>	<u>862</u>	<u>867</u>
14 Operating Profit	65	17	(4)	(4)	(8)	(12)
15 Less: Bank Charges	1	1	1	1	1	1
16 <u>Cap. From Rev.</u>	<u>20</u>	<u>39</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
17 Surplus	44	(23)	(5)	(5)	(9)	(13)
18 <u>Surplus, opening</u>	<u>125</u>	<u>169</u>	<u>146</u>	<u>141</u>	<u>136</u>	<u>127</u>
19 <u>Surplus, closing</u>	<u>169</u>	<u>146</u>	<u>141</u>	<u>136</u>	<u>127</u>	<u>114</u>

**TOWN OF CANSO ELECTRIC UTILITY**  
**Expense Classification**  
**For the Test Period Fiscal 2012**  
**(\$000)**

	1	2	3	4	5	6	7	
	Total	Peak Dem.	Energy	Dist. Dem.	Cust.	Light	Factor	
	\$	\$	\$	\$	\$	\$		
1 Purchase Power	600	172	428	---	---	---		BILL
2 Oper. & Main.	130	---	---	85	39	6		A
3 Admin. & Gen.	91	21	53	11	5	1		B
4 Depreciation	20	10	1	5	1	3		C
5 Taxes	16	8	1	4	1	2		D
6 Return	(4)	(3)	---	(1)	---	---		D
7 Sub Total	853	208	483	104	46	12		
8 Less: Misc. Rev.	22	---	---	11	11	---		DIRECT
9 Rate Requirement	831	208	483	93	35	12		

**FACTORS**

A = 65/30/5 Demand, Customer, Light

B = As per Lines 1 & 2

C = Rate Base from Exhibit 4 Ex. Light and after \$3 Dist. To Light

D = Per Depreciation

**TOWN OF CANSO ELECTRIC UTILITY**  
**Expense Allocation**  
**For the Test period Fiscal 2012**  
**(\$000)**

	1 Total \$	2 Res. \$	3 Sm. Gen. \$	4 General \$	5 Sm. Ind. \$	6 Lighting \$	7 Factor \$
1 Peak Demand	208	125	4	69	6	4	A
2 Energy	483	266	10	178	19	10	B
3 Dist. Demand	93	55	2	32	3	1	C
4 Customer	35	21	2	9	2	1	D
5 Lighting	12	---	---	---	---	12	DIRECT
6 <b>Total</b>	<b>831</b>	<b>467</b>	<b>18</b>	<b>288</b>	<b>30</b>	<b>28</b>	

**Allocation Factors**

A Peak Demand %	1,400 1.00	850 0.60	29 0.02	457 0.33	42 0.03	22 0.02
B Sales (MWh) %	6,540 1.00	3,650 0.55	135 0.02	2,400 0.37	255 0.04	100 0.02

C NC Demand per Exhibit 4

D Weighted Cust. Per Exhibit 4

**TOWN OF CANSO ELECTRIC UTILITY**  
**Rate Impacts**  
**For the Test Period 2012**  
**(\$000)**

	1	2	3	4	5	6
	Total	Res.	Sm. Gen.	Gen.	Sm. Ind.	Lighting
	\$	\$	\$	\$	\$	\$
1 Cost	831	467	18	288	30	28
2 Revenue	831	418	31	333	22	27
3 Rev./Cost Ratio	100.0	89.5	172.2	115.6	73.3	96.4
4 Minimal Adj.	---	34	(12)	(29)	7	---
5 New Revenue	831	452	19	304	29	27
6 % Change	0.0	8.1	(38.7)	(8.7)	31.8	---
7 Revised Ratio	100.0	97.0	105.6	104.9	96.7	96.4