UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

1. *The Coles Associates' updated opinion on probable costs remains based upon a Class "C" estimate. Class C estimates are typically used by industry as ballpark estimates in preliminary discussions of feasibility. The expected precision variance of a Class C estimate can be anywhere from -15% to +25% or more. Please advise if Summerside intends to provide a more precise estimate of the probable costs of construction.*

No.

Based on the industry definition of estimate classes agreed with by MECL {See John D. John D. Gaudet Affidavit, Sept 25, 2009 Exhibit #3} COS considers a Class C estimate to be appropriate for the purposes of this Application. In response to this particular MECL Interrogatory and with reference to most of the remaining 27 MECL Interrogatories, COS reiterates that Class "C" estimates are appropriate for purposes of this type of Application at this stage of the planning and approval process. A Class B estimate would be required to answer some of MECL's Interrogatories, and a Class B estimate has not yet been performed.

After this Application receives IRAC's approval (conditional on the required environmental approvals), COS will commit the human and financial resources associated with the detailed engineering for a Class B estimate.

COS has, through sensitivity analysis, verified that its business case is positive throughout the range of capital cost levels implied by a Class C estimate. An increase of 25% would bring the project cost estimate from $4.3 million in the Coles Associates December 2011 Case (see page 23 of Exhibit SE-1 Rev) to $5.4 million. An increase of 25% would bring the project cost estimate from $5.1 million in the Irving December 2011 Case (see page 24 of Exhibit SE-1 Rev) to $6.4 million. The following two tables recomputed the business case for each of these two Cases, using Coles' and Irving's cost estimates, increased by 25%. The results indicate that the proposed project has a positive net present value in both of these cases at all levels of the Class C estimation range, assuming all other values in the analysis remain the same.

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

City of Summerside Electric Utility									
Transmission Line Economic Feasibility									
(Case: Coles Assoc December 2011)									
Year of Operation				**1**	**2**	**3**	**4**	**5**	
Year of Construction		**1**	**2**						
1. Project Net Present Value									
Capital Expenditure		(2,687,500)	(2,687,500)						
Annual Easement Cost		(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	
Operation and Maintenance, 2% Escalation				(35,000)	(35,700)	(36,414)	(37,142)	(37,885)	
Share of Submarine Cable Operation and Maintenance, and any other Annual Charges				(40,000)	(40,800)	(41,616)	(42,448)	(43,297)	
Incremental Property Taxes				(10,000)	(10,200)	(10,404)	(10,612)	(10,824)	
Transmission Rate Savings, 2% Escalation				387,174	464,609	473,901	483,379	493,047	
Total Annual Cash Flows		(2,689,500)	(2,689,500)	300,174	375,909	383,467	391,176	399,040	
Assumed Discount Rate, LTD	3.85%								
Net Present Value	**$4,339,539**								
2. SE Revenue Requirement Impact									
Interest and Debt Repayment									
Opening Principal				5,375,000	5,316,406	5,255,555	5,192,362	5,126,736	
Interest	3.85%			206,938	204,682	202,339	199,906	197,379	
Principal Repayment				58,594	60,850	63,193	65,626	68,153	
Closing Balance				5,316,406	5,255,555	5,192,362	5,126,736	5,058,583	
Total Annual Payment				265,532	265,532	265,532	265,532	265,532	
SE Revenue Requirement									
Change in Transmission Charges from MECL				(347,174)	(423,809)	(432,285)	(440,931)	(449,749)	
Incremental O&M				35,000	35,700	36,414	37,142	37,885	
Incremental Easement Costs				2,000	2,000	2,000	2,000	2,000	
Incremental Property Taxes				10,000	10,200	10,404	10,612	10,824	
Loan Interest and Principal				265,532	265,532	265,532	265,532	265,532	
Total Revenue Requirement Impact				(34,642)	(110,377)	(117,935)	(125,644)	(133,508)	
SE Total Electricity Sales Revenue				18,022,979	18,455,530	18,898,463	19,352,026	19,816,475	
Percent Impact Overall				-0.2%	-0.6%	-0.6%	-0.6%	-0.7%	

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

City of Summerside Electric Utility									
Transmission Line Economic Feasibility									
(Case: Blaine Irving December 2011)									
Year of Operation					**1**	**2**	**3**	**4**	**5**
Year of Construction		**1**	**2**						
1. Project Net Present Value									
Capital Expenditure		(3,187,500)	(3,187,500)						
Annual Easement Cost		(2,000)	(2,000)		(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Operation and Maintenance, 2% Escalation					(50,000)	(51,000)	(52,020)	(53,060)	(54,122)
Share of Submarine Cable Operation and Maintenance, and any other Annual Charges					(40,000)	(40,800)	(41,616)	(42,448)	(43,297)
Incremental Property Taxes					(10,000)	(10,200)	(10,404)	(10,612)	(10,824)
Transmission Rate Savings, 2% Escalation					387,174	464,609	473,901	483,379	493,047
Total Annual Cash Flows		(3,189,500)	(3,189,500)		285,174	360,609	367,861	375,258	382,803
Assumed Discount Rate, LTD	3.85%								
Net Present Value	**$ 3,008,967**								
2. SE Revenue Requirement Impact									
Interest and Debt Repayment									
Opening Principal					6,375,000	6,305,504	6,233,333	6,158,383	6,080,547
Interest	3.85%				245,438	242,762	239,983	237,098	234,101
Principal Repayment					69,496	72,171	74,950	77,836	80,832
Closing Balance					6,305,504	6,233,333	6,158,383	6,080,547	5,999,715
Total Annual Payment					314,933	314,933	314,933	314,933	314,933
SE Revenue Requirement									
Change in Transmission Charges from MECL					(347,174)	(423,809)	(432,285)	(440,931)	(449,749)
Incremental O&M					50,000	51,000	52,020	53,060	54,122
Incremental Easement Costs					2,000	2,000	2,000	2,000	2,000
Incremental Property Taxes					10,000	10,200	10,404	10,612	10,824
Loan Interest and Principal					314,933	314,933	314,933	314,933	314,933
Total Revenue Requirement Impact					29,759	(45,676)	(52,928)	(60,325)	(67,870)
SE Total Electricity Sales Revenue					18,022,979	18,455,530	18,898,463	19,352,026	19,816,475
Percent Impact Overall					0.2%	-0.2%	-0.3%	-0.3%	-0.3%

2. *Please advise as to whether the "Peer Review" by Mr. Blaine K. Irving is also a Class C estimate.*

---

3. Yes.

3. *Has COS reconciled the differences between the two estimates? If so, please provide the details.*

Yes. Through discussions with the two Consultants we are satisfied with the perceived differences.

Item	Irving Report	Coles Report	Difference	Comment
Project Subtotal	3,714,000	3,498,000	216,000	Within 10%
Environmental	262,500	157,500	275,860	Coles developed their estimate based on conversations with staff responsible for the revised environmental requirements. Mr. Irving adopted the estimate provided by MECL.
Engineering	443,360	105,000	338,360	Although there were some minor differences between the two estimates in terms of the scope of work, the key difference is that Mr. Irving assumed all of the work would be costs at consultants' rates, while the Coles estimate assumes that a substantial portion would be done by COS staff or contractors hired for the duration of the project.

Contingency	594,600	524,700	69,900	Insignificant difference

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

4. Please provide a copy of all quotations, pricings and correspondence relevant to the estimation of the proposed facilities by Coles Associates and Mr. Blaine Irving as well as any draft opinions provided by them.

Please find attached the following quotations for the major items:

- Power Transformer – Schedule "A"
- Insulators – Schedule "B"
- Conductor – Schedule "C"

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

5. Please provide an up to date site plan for the COS substation and details regarding the placement of the proposed facilities.

An updated concept site plan for the COS substation showing a location on the south side of the substation for the new power transformer and associated devices is attached as Schedule "D". If required, the City also owns land to the north that could be utilized. Following IRAC's approval of COS' Application, the detailed engineering and a final site plan would be completed.

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

6. Please provide an updated single line diagram of the proposed facilities, including the interconnections at the Bedeque and COS substations that shows the planned breakers, switches, transformers, revenue metering and protection and control equipment.

Please find attached as Schedule "E-1" an updated conceptual single line diagram of the COS substation and attached as Schedule E-2 a copy of the previously supplied Exhibit SE-3, filed in September, 2009, which is a conceptual single line diagram of the interconnections at the Bedeque terminal station. Following IRAC's approval of COS' Application, the detailed engineering and a final plan would be completed. If necessary, a System Impact Study on either or both substations could be done at that time.

7. *Mr. Irving's estimate does not include 138 kV metering equipment requirements. Why is that? Was there no consultation as to these requirements between COS and Mr. Irving?*

In consultation with COS & Coles Assocs. Mr. Irving concluded that existing metering could be used with minimal modification, therefore no costs were included in the this Class C estimate.

8. Please provide the supporting calculations for Mr. Irving's $80,000/km average cost for 138 kV transmission line construction including joint use construction. Please identify the conductor used in the transmission line estimates.

Based on a site visit and reviewing potential route it was estimated that 20% of the transmission line would not involve any Joint Use facilities, 60% would involve minimal Joint Use and 20% would be considered as major joint use facilities. The material costs were considered the same per km. The following table summarizes the results.

Estimated Component of Joint Use	Percentage of Total Line	Material Cost Per Kilometer	Labour and Equipment Cost per kilometer	Total Estimated Cost per kilometer
No joint use	20%	$30,000	$40,000	$70,000
Light joint use	60%	$30,000	$50,000	$80,000
Heavy joint use	20%	$30,000	$60,000	$90,000

9. With respect to the proposed transmission line, are joint use construction standards (shorter distances between poles and taller poles for clearance purposes) intended? Is COS planning to attach a fibre optic cable to this line to facilitate the required protection, teleprotection and control communication functions?

Please refer to COS' response to Question #8.

No, COS is not currently planning to attach a fiber optic cable. COS has several communication options, which include:

- Use of existing fiber optic cable, including its own cable from its system to the MECL Sherbrooke Substation and MECL's cable from Sherbrooke substation to the Bedeque Terminal station (assuming permission from MECL);
- Obtaining communications services from a third party; and
- Utilizing the infrastructure of Route 2 Wireless.

After IRAC's approval and during the detailed engineering design portion of the proposed project, COS will determine the optimal approach from the evaluated options.

UE30402
IN THE MATTER of an application
by Summerside Electric for approval of
proposed transmission services connecting
Summerside Electric Ottawa Street substation to
Maritime Electric Company Limited's Bedeque
substation.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

10. Please confirm that COS is not intending to install a 138 kV circuit breaker in the Ottawa Street Substation and that the existing 69 kV circuit breaker at the Ottawa Street Substation would be used to clear any faults associated with the new 30/40/50 MVA transformer or on the new transmission line.

It is confirmed that COS is ***not*** intending to install a 138 kV circuit breaker in the Ottawa Street Substation.

.

As previously submitted in Exhibit SE-3 filed July 15, 2009, COS is intending to install a 138 kV circuit breaker in the Bedeque terminal station to be used to clear any faults associated with the new 30/40/50 MVA transformer or on the new transmission line.

As for the second part of the Interrogatory, and the premise of using the existing 69 kV circuit breaker at the Ottawa Street Substation to clear any faults associated with the new 30/40/50 MVA transformer or on the new 138kV transmission line, it is common knowledge that this premise would *not* be a technically viable approach, as its location is on the wrong side.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

11. The revised cost estimate does not reference equipment spares, specifically for the proposed 30/40/50 MVA transformer which references only spare parts. Please confirm that the loss of the 30/40/50 MVA transformer would be COS' largest outage contingency. As COS would no longer be a transmission customer, reliance on MECL and the continued use of transmission line T11 would not be appropriate as MECL would be under no obligation to reserve the required transmission capacity for COS. That said, MECL would continue to assist COS whenever requested and to the degree possible. Please advise what COS would do in the event of a failure of this unit.

COS is pleased to hear that MECL would continue to assist COS whenever requested and to the degree possible.

After IRAC approval and once the detailed engineering design portion of the proposed project is underway, COS will be addressing this point via at least these three (3) approaches:

- COS would look for MECL's co-operation in structuring an Utility Mutual Assistance Agreement to have the transmission line T-11 be available as a back-up source. As COS's energy would already be scheduled through the government owned submarine cable interconnection facilities, the only transmission capacity require would be from Bedeque to Sherbrooke substation.
- COS would continue its dialog with neighbouring utilities and structure a Utility Mutual Assistance agreement to include mobile power transformers.
- COS would evaluate the use of their backup generators to assist as a contingency.

As an alternative to backup arrangements on the T-11 line for a fee, MECL could sell the T-11 line to COS for a fee determined on a reasonable basis.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

12. Mr. Irving has identified the need for equipment, spares, vehicles and training relating to the maintenance of transmission facilities. Has the revised Coles estimate factored this into its estimates? If yes, please provide the details. If not, why not?

Yes, COS will utilize their existing utility forces, existing preventative maintenance contracts and shall augment with contractor forces as the workload requires.

The Coles estimate has factored this into its estimates based on the raw actual 11 year historical data, a copy of which is Appendix "A" to Coles Associates December 2011 Revised Cost Update and is also annexed as Sch. "F", which data includes instances of extraordinary conditions.

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

13. The proposed facilities would add to the workload of COS electrical department staff. Does COS anticipate that additional staff/expertise would be required?

COS does not anticipate the addition of staff.

There are presently 4,574 poles within the boundaries of the City of Summerside, of which 3,390 are COS-owned utility poles, and the remainder of which, although owned by others, involve some degree of management by COS. COS presently has 10 power transformers on its system.

To this asset base, COS will be adding fewer than 300 poles and one power transformer, thereby incrementing the assets under its management by less than ten percent. COS considers this increment to be fully manageable by the existing COS electrical department staff.

14. What experience does COS staff have with 138 kV equipment?

COS is a fully functional utility that currently includes generation (wind and diesel), transmission and distribution components. The utility has a qualified and competent staff in place to efficiently operate the plant in response to the needs of the Utility. COS' staff includes several power line technicians and a supervisor that are familiar with transmission line construction of this nature and two (2) electrical engineers with over 30 years' experience.

Currently, where COS does not have the in-house experience required to complete work, COS outsources this work. As an example of this outsourcing work where required, recently the City of Summerside embarked on a wind farm development of 12MW's and completed this project on time and under budget. This installation has successfully contributed to the energy system for over two (2) years.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

15. According to the revised proposal the land acquired for the original project proposal is no longer needed. Is it not reasonable to assume that the original cost of this property ($70,000?) had been paid for by COS customers and that the proceeds from the future sale of this property would be an offset rather than a credit to COS customers?

Please refer to page 29 of Exhibit SE-1 Rev regarding land matters whereat COS previously explained that this land was no longer needed for COS proposed project with the 138kV line now being planned. The land being no longer required, the land cost of $70,000 becomes redundant to the project. The land is now surplus to project needs; and *may* be sold to recoup the $70,000. Since the land is not any longer required by the project, it would not be appropriate to debit it to the project.

16. In the updated evidence, COS advises that environmental studies have not yet been undertaken. What is the basis for the cost estimate provided by COS for environmental approval?

The estimate is based on:

- Coles' discussions with the Department of the Environment and on the introduction of the Department's new more onerous guidelines which , among other things, also required an environmental review for a 69kV line; and,

- An increase to the estimate originally provided on or about July 15, 2009 in COS's Pre Filed Evidence, Exhibit SE-1, based in part upon the previously filed evidence of MECL (See: John D. Gaudet Affidavit, Sept 25, 2009 Page 7).

17. COS' Application has been outstanding for some time and has involved extensive legal proceedings both at IRAC and the Court of Appeal. Expert evidence has also been required. All of these "soft costs" are part of the overall cost of the proposed project. As such, please provide a detailed breakdown of all of these soft costs incurred to date.

COS will not provide this information for the following three (3) reasons:

- For accounting purposes, the soft costs of the legal proceedings are now (or will by the time the project is finally approved) be "sunk" costs – already incurred - *whether the transmission line is constructed or not*. The incurrence of these costs is therefore not dependent on COS' Application before IRAC. With hopefully all or most all of MECL's technical preliminary legal objections now out of the way of COS' Application, the matter now before IRAC is to determine the merits of the business case for the transmission line on a go-forward basis, and it would be inappropriate to include previously incurred "sunk costs" in the analysis.

- In COS' view, only the costs of those proceedings before IRAC on the merits of its Application ought legitimately be attributed to the proposed project. This has not yet occurred. Virtually all of the previous legal proceedings at IRAC and in the Court of Appeal, and all of the resulting efforts, delays, and incurrence of costs, have been as a result of MECL's attempts to in effect prevent IRAC from considering the merits of COS's Application.

- If the costs of these preliminary point proceedings were required to be considered as integral project costs, this would have the perverse effect of allowing legal challenges that are unsuccessful to nonetheless negatively impact the merits of the applicant's case. IRAC ought not equitably countenance such by adding such costs to the project.

- In any event, aside from their relevance, if any, legal (and related expert) costs are a matter of solicitor-client and litigation privilege and thus are not compellable evidence in these adversarial proceedings.

18. According to COS, the proposed facilities result in future revenue requirement reductions for its electricity customers. Please provide a detailed description as to how those reductions would be passed on to COS electricity customers. Is COS still intending to implement MECL rates in the future?

Essentially the same questions have been asked earlier and answered, but to clarify further:

Within the boundaries of the City of Summerside there are certain customers (800+/) that receive service from MECL as well as customers receiving service from the City owned public utility, Summerside Electric (6,889). This is an historical anomaly triggered by amalgamation in 1995.

The City of Summerside has at present a policy that the same electricity rates should apply to all similar customers within the City (i.e., all residential, all general service, all small industrial), regardless of which utility serves them. To enable this, SE has maintained the same rate tariff as MECL over the last number of years.

As well SE serves some customers (82) outside the boundaries of the City of Summerside and the rates for these customers will generally tend to have to be the same as those of the MECL customers that are located in the City because of the *City of Summerside Electric Utility Exemption Regulations* which stipulate in part as follows:

> **2.** The utility is exempted from sections 10, 11, 12, 13, 15, 17, 19, 20, 21, 21.1, 22, 23, 24, and 25 of the Act if the utility complies with the following terms and conditions:
>
> (b) the utility shall, before charging new rates, tolls and charges, file with the Commission a copy of the new rates, tolls and charges;
> (c) the utility shall not charge outside customers any rates, tolls and charges that exceed the rates, tolls and charges that the utility charges customers located inside the boundaries of the City of Summerside;
> (d) the utility shall, within 30 days of the coming into force of this section, file with the Commission all of the rules and regulations relating to the kind of service to be supplied to outside customers and the manner by which the service shall be supplied;
> (e) the utility shall, before changing the rules and regulations relating to the kind of service to be supplied to outside customers and the manner by which the service shall be supplied, file with the Commission all of the new rules and regulations;

(f) the utility shall file with the Commission only rules and regulations for outside customers that are the same as those that apply to customers located inside the boundaries of the City of Summerside;
(g) the utility shall comply with the rules and regulations most recently filed with the Commission in accordance with clause (d) or (e). (EC85/04)

19. Please provide all documentation relating to the determination of the discount rate of 3.85%.

The approach taken to estimate a discount rate for the updated business case is the same approach taken in the original business case. Please see SE's response to MECL Interrogatory # 27 in October, 2009.

In updating its evidence, SE again considered two (2) sources of information:

a) The rates at which financing for a period of five (5) years or more was actually offered to the City of Summerside within the past 12 months

On or about October 26, 2011 the City completed a term financing in the amount of $2 million. The lowest quoted rates (20 year amortization) locked in for 5 years was 2.57%; and, locked in for 10 years the lowest rate was 3.57%. The City did not ask for a fixed 20 year rate, but assumed, on the basis of the attached extract from the Bloomberg website, that a longer term rate might be 50-80 basis points higher, i.e. between 4% and 4.5%.

An alternative approach would be to start with the rate of 4.28%, at which COS was recently able to obtain financing for 20 years for its wind farm project. This took place early in 2010, at which time the Government of Canada 10-year rate was 3.56%. In September, 2011, the most recently reported quarter, the Government of Canada 10-year rate was 2.19%. While COS considers it over-optimistic to apply the reduction in the Government of Canada rate (more than a full percentage point) in estimating the loan rate that might be available to COS, especially since the program under which COS borrowed at that time has now closed, COS believes that this supports an estimate of somewhat less than 4% as a rate at which long term funding for such an infrastructure project would be available.

b) Rates available to similar organizations (municipalities or municipal utilities) for relatively similar projects, or projects of relatively similar risk:

For this approach, reference was made to public source data, in this case to the website of Infrastructure Ontario, which loans funds for infrastructure projects to municipalities in Ontario. As of December, 2011, the rate for a comparable municipal project at a 40-year term was 3.65%.

Based on these considerations, SE concluded that an appropriate range of values for the cost of capital for the financial analysis would be 3.65% to 4.5%, and chose a

value within that range for the analysis as recently updated. *A positive business case would result from all values within the range, in both the Coles and the Irving scenarios, assuming no changes to other variables.*

For illustration purposes, the following two (2) tables update the schedules at pages 23 and 24 of SE-1 Rev to apply a discount rate of 4.5%, instead of 3.85%. The computations show that there would continue to be a positive business case under either the Coles or the Irving scenarios.

City of Summerside Electric Utility									
Transmission Line Economic Feasibility									
(Case: Coles Assoc December 2011)									
Year of Operation				**1**	**2**	**3**	**4**	**5**
Year of Construction		**1**	**2**					
1. Project Net Present Value			(4,300,000)					
Capital Expenditure		(2,150,000)	(2,150,000)					
Annual Easement Cost		(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Operation and Maintenance, 2% Escalation				(35,000)	(35,700)	(36,414)	(37,142)	(37,885)
Share of Submarine Cable Operation and Maintenance, and any other Annual Charges				(40,000)	(40,800)	(41,616)	(42,448)	(43,297)
Incremental Property Taxes				(10,000)	(10,200)	(10,404)	(10,612)	(10,824)
Transmission Rate Savings, 2% Escalation				387,174	464,609	473,901	483,379	493,047
Total Annual Cash Flows		(2,152,000)	(2,152,000)	300,174	375,909	383,467	391,176	399,040
Assumed Discount Rate, LTD	4.50%							
Net Present Value	**$4,295,595**							
2. SE Revenue Requirement Impact								
Interest and Debt Repayment								
Opening Principal				4,300,000	4,259,824	4,217,841	4,173,968	4,128,121
Interest	4.50%			193,500	191,692	189,803	187,829	185,765
Principal Repayment				40,176	41,983	43,873	45,847	47,910
Closing Balance				4,259,824	4,217,841	4,173,968	4,128,121	4,080,211
Total Annual Payment				233,676	233,676	233,676	233,676	233,676
SE Revenue Requirement								
Change in Transmission Charges from MECL				(347,174)	(423,809)	(432,285)	(440,931)	(449,749)
Incremental O&M				35,000	35,700	36,414	37,142	37,885
Incremental Easement Costs				2,000	2,000	2,000	2,000	2,000
Incremental Property Taxes				10,000	10,200	10,404	10,612	10,824
Loan Interest and Principal				233,676	233,676	233,676	233,676	233,676
Total Revenue Requirement Impact				(66,498)	(142,233)	(149,791)	(157,501)	(165,364)
SE Total Electricity Sales Revenue				18,022,979	18,455,530	18,898,463	19,352,026	19,816,475
Percent Impact Overall				-0.4%	-0.8%	-0.8%	-0.8%	-0.8%

City of Summerside Electric Utility									
Transmission Line Economic Feasibility									
(Case: Blaine Irving December 2011)									
Year of Operation					**1**	**2**	**3**	**4**	**5**
Year of Construction		**1**	**2**						
1. Project Net Present Value									
Capital Expenditure		(2,550,000)	(2,550,000)						
Annual Easement Cost		(2,000)	(2,000)		(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Operation and Maintenance, 2% Escalation					(50,000)	(51,000)	(52,020)	(53,060)	(54,122)
Share of Submarine Cable Operation and Maintenance, and any other Annual Charges					(40,000)	(40,800)	(41,616)	(42,448)	(43,297)
Incremental Property Taxes					(10,000)	(10,200)	(10,404)	(10,612)	(10,824)
Transmission Rate Savings, 2% Escalation					387,174	464,609	473,901	483,379	493,047
Total Annual Cash Flows		(2,552,000)	(2,552,000)		285,174	360,609	367,861	375,258	382,803
Assumed Discount Rate, LTD	4.50%								
Net Present Value	**$ 3,205,670**								
2. SE Revenue Requirement Impact									
Interest and Debt Repayment									
Opening Principal					5,100,000	5,052,350	5,002,556	4,950,521	4,896,144
Interest	4.50%				229,500	227,356	225,115	222,773	220,326
Principal Repayment					47,650	49,794	52,035	54,377	56,824
Closing Balance					5,052,350	5,002,556	4,950,521	4,896,144	4,839,320
Total Annual Payment					277,150	277,150	277,150	277,150	277,150
SE Revenue Requirement									
Change in Transmission Charges from MECL					(347,174)	(423,809)	(432,285)	(440,931)	(449,749)
Incremental O&M					50,000	51,000	52,020	53,060	54,122
Incremental Easement Costs					2,000	2,000	2,000	2,000	2,000
Incremental Property Taxes					10,000	10,200	10,404	10,612	10,824
Loan Interest and Principal					277,150	277,150	277,150	277,150	277,150
Total Revenue Requirement Impact					(8,024)	(83,459)	(90,711)	(98,108)	(105,653)
SE Total Electricity Sales Revenue					18,022,979	18,455,530	18,898,463	19,352,026	19,816,475
Percent Impact Overall					0.0%	-0.5%	-0.5%	-0.5%	-0.5%

The relevant pages of the Bloomberg and Infrastructure Ontario websites are attached as Schedules "G" and "H", respectively.

20. Why did COS not obtain a quote for a 40 year financing term?

It is not the policy of the City of Summerside to borrow on such a long term basis. As is typical for municipalities, COS would plan to repay the loan as quickly as possible.

21. What is the City of Summerside's credit rating?

As is typically the case for small municipalities, the City of Summerside has not obtained a credit rating. The process is costly and complex, and the absence of a credit rating has not prevented the City from obtaining financing for its needs on reasonable terms.

22. The risk of curtailment has been stated as an issue which requires COS to take either Network Service or Long Term Firm transmission service, yet COS' actions have been to take a combination of monthly firm and hourly non-firm transmission service rather than to use Network or Long Term Firm Transmission Service. Please confirm that COS has been taking a combination of firm and non-firm transmission service from MECL since March 2002. Please explain COS' rationale for its current usage of transmission service. Does COS generation provide a backstop for curtailment?

We confirm that SE has been taking a combination of firm and non-firm transmission service since 2002. The use of some component of non-firm service is the most economical for COS.

COS does use its own generation assets for curtailment risk mitigation.

To elaborate, from 2002 to date, the use of some non-firm service by COS has been made possible by the fact that in the event of capacity issues on the submarine cables, MECL has voluntarily, as a matter of past practice, curtailed COS' load on a proportionate basis with MECL's own loads. However, under the terms of the interimly approved OATT, non-firm loads would be curtailed before firm or network integration service. Therefore, while COS's curtailment risk with non-firm service is presently acceptable, COS has assumed that once the OATT provisions are in effect, non-firm service would no longer be a viable option for it.

Possible developments that would allow COS to continue to use non-firm transmission service would be:

- An agreement with MECL that would continue the proportionate allocation of capacity on the submarine cables; or
- Changes to the system that would eliminate the current capacity constraints (such as increased on-Island generation for on-Island use (eg. wind), or construction of a third cable).

To date, COS has not been able to negotiate an agreement with MECL as to a set allocation of the current two (2) cables cable capacity and is subject to MECL's sole discretion. COS does not have access to any legally binding planning process(es) (if indeed any are plausible due to the federal governments exclusive jurisdiction (as yet unexercised) over the submarine cables that could lawfully address the capacity constraints.

UE30402
IN THE MATTER of an application
by Summerside Electric for approval of
proposed transmission services connecting
Summerside Electric Ottawa Street substation to
Maritime Electric Company Limited's Bedeque
substation.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

COS' concerns with respect to MECL's (interimly approved) OATT not including a FERC compliant open system planning process were previously expressed in the submissions of COS with respect to MECL's pending OATT application and are reiterated here. Since MECL's OATT Application and COS' Application have been filed with the Commission, MECL and/or the Province have both undertaken major initiatives with new transmission and wind energy generation. Regrettably, there was no consultation with COS as would have been mandatory if MECL's interimly approved OATT included a FERC compliant planning process.

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

23. If COS were to be assigned a share of the government owned submarine cable interconnection facilities, would COS' concern regarding curtailment on these facilities be substantively addressed? If so, would the rationale for basing its economic feasibility on network service no longer apply?

This Interrogatory is entirely hypothetical and "what if" questions are inherently difficult to answer.

To answer this question would require COS to make certain assumptions about the share that might be assigned. Any hypothetical share for COS would currently be at MECL's sole discretion. Notwithstanding the express intent expressed in the 1976 documentation that the cables equally benefit all electricity consumers in the Province, the Province leased the cables solely to MECL. There is federal jurisdiction over these inter-provincial submarine cables but there are no federal regulations enacted. COS is thus in a vulnerable position vis a vis negotiating an equitable share of the two (2) existing cables capacity. In addition, certain assumptions would be required as to the related costs, obligations, terms and conditions that might be attainable in any negotiation with MECL.

Without a specific proposal from MECL to evaluate, this question cannot be intelligently answered.

Nonetheless, COS has previously indicated that it is interested in such an arrangement; and, that COS was and is willing to enter into confidential discussions with MECL preferably with the owner of the cables, the Province, also involved. COS continues to be interested discussions of any and all arrangement(s) that would potentially reduce the probability of curtailment of COS' loads, while reducing transmission costs for COS.

Over three (3) years have passed since COS made application in November, 2008 to IRAC for approval to build the proposed transmission line. Over that period, COS has repeatedly made known its interest in having the issues addressed through Mediation—which would be without prejudice and confidential, and which would provide all parties with an opportunity for constructive dialogue. MECL has repeatedly rejected these suggestions, and has instead conducted its intervention in COS' Application in a manner which has delayed IRAC's review of the merits of COS' application through multiple preliminary legal challenges. The Province has also suggested Mediation in its earlier submissions to the Commission.

Therefore, while COS remains interested in specific alternative proposals to meet its customer's needs as economically as possible, and would welcome discussion of such proposals, either in parallel with, or, following this proceeding before IRAC, COS will not now support any request or motion by MECL to delay a hearing by IRAC of the merits of COS' Application in order to allow such discussions to take place.

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

24. Please provide a schedule that lists the date, time and duration of transmission service curtailments by MECL and highlight those that could have been avoided if network or long-term transmission service had been chosen by COS.

Please refer to Schedules I-1 to I-4 attached. These were previously filed (April 15, 2008) as Exhibits GEG-4, GEG-5, GEG-9 and GEG-11 to COS' (SE's) evidence under Docket UE20935 (MECL's OATT Application), but are being provided again so that they are entered as evidence in this proceeding.

UE30402
IN THE MATTER of an application by Summerside Electric for approval of proposed transmission services connecting Summerside Electric Ottawa Street substation to Maritime Electric Company Limited's Bedeque substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

25. Has COS anticipated the continued operation of T-11 in its plans? If yes, please provide the details and costs associated with the continued operation of T11?

It seems passing strange that MECL are posing this Interrogatory to COS, since this asset does not belong to COS and COS does not own, operate or maintain T-11. MECL alone has the answers to its own question. MECL's Interrogatory responses in the pending OATT Application and in COS's within Application are COS' only source of information.

MECL's OATT submission had a direct charge for this asset in it. According to Item 6.13, page 85, of Responses to Questions Collected by Maritime Electric at the January 18, 2007 OATT Stakeholder Technical Session, which was filed with IRAC as an attachment to MECL's Second OATT Application dated October 3, 2007, MECL's estimate of the total annual cost including both maintenance and capital related costs is $5,000.

However, reference is also made to COS' Interrogatories 7.1 – 7.5 herein made in October, 2009 and MECL's responses. MECL state they do not have the O & M data, but rather estimated in their OATT Application responses.

These MECL Interrogatory responses are the only information available to COS on this subject. The appropriate amount would presumably become an actual cost at such time as this provision of the OATT is approved by IRAC.

As alluded to in COS's Interrogatories herein # 7.1 – 7.5 and despite MECL's October, 2009 response that it is not interested in selling T-11, COS would definitely be open to negotiating with MECL for purchase of the T-11 line at a reasonable price.

26. The table on page 4 of the revised cost update lists 11 years of operating expense data from 2000 to 2010. The values presented increase substantially with time. Maintenance requirements typically increase as assets age. Why does COS project its operating expenses to effectively decrease from its 2005 – 2010 levels? Would it not be a more realistic approach to trend the data for a 40 year period, escalating to reflect aging assets, and then use those values in determining representative maintenance percentages? Please confirm that the majority of COS' current assets are contained within a concentrated geographic area and that the proposed facilities would be more costly to maintain due to travel time and longer troubleshooting time.

COS perceives this question as having two parts, and will address it on that basis.

(a) *The table on page 4 of the revised cost update lists 11 years of operating expense data from 2000 to 2010. The values presented increase substantially with time. Maintenance requirements typically increase as assets age. Why does COS project its operating expenses to effectively decrease from its 2005 – 2010 levels? Would it not be a more realistic approach to trend the data for a 40 year period, escalating to reflect aging assets, and then use those values in determining representative maintenance percentages?*

Transmission and distribution assets have a very long life—typically 25-50 years. While it is true that maintenance requirements on average increase as assets age, it is also true that maintenance work is not carried out at the same level in each year. A utility's schedule of maintenance has, except in unusual circumstances, a fair degree of flexibility since the requirements of, for instance, a 15-year-old pole, are not significantly different from the requirements of a 14-year-old pole or a 16-year-old pole. This enables the utility to schedule maintenance to accommodate other requirements: for example to concentrate maintenance activities in years when there is a lesser degree of capital work, and to defer maintenance of some assets if there is urgency to do maintenance on other assets. Also, some maintenance (for example work in a substation) is generally not carried out in small annual amounts, but is carried out in concentrated efforts every few years. The result is that over a period of years, the level of maintenance expenses will be considerably different year over year, going up and down significantly, rather than ramping up in a predictable fashion. This would particularly be true for a small utility like COS, that does not have a wide service territory over which the maintenance requirements would be more likely to average out from year to year.

To reflect the variability of levels of maintenance over time, COS used the data for the 11 most recent years. This period includes years of relatively low levels of maintenance and years when considerably more maintenance activity was required. These years include the ice storm of 2008, damage due to equipment failure and the introduction of a preventative maintenance program. Thus, the higher levels of maintenance expenses in the most recent several years are not primarily due to the effects of aging of the assets, but are due to the combination of factors affecting COS' requirements to schedule maintenance activity. COS concludes that the average of a period of at least a decade is therefore the correct value to use to estimate the costs of maintenance on a new facility.

In the business case, the average value has then been escalated for inflation and assumed to be incurred annually, because no specific forecast could be made of the timing of maintenance requirements. However, as MECL points out through this question, it might have been more accurate to use a value below average for the first few years, and increase that figure annually at a steeper rate so that maintenance costs toward the end of the analysis period are assumed to be higher than average. *Moving costs into the future would actually have the effect of improving the business case for the project*.

COS and Coles have reconsidered this calculation carefully since receiving this question from MECL. We now consider that it would have been more appropriate to escalate each year's maintenance cost value for inflation, to an estimated current level – i.e. year 2000 costs by 11 years, year 2001 costs by 10 years, etc. The following table shows this revised computation. *The effect is to increase the estimate of annual maintenance cost from $35,000 to $38,000*.

Basis of Estimate of Annual Maintenance Costs for Proposed Transmission Line						
	Actual Maintenance Costs Incurred in the Year					
	Substation	Poles and Fixtures	O/H Conductors	Total	Years	Adjusted for Inflation at 2% Annually
2000	$ 8,886	$ 14,592	$ 61,295	$ 84,773	11	$ 105,405
2001	$ 8,588	$ 13,299	$ 42,894	$ 64,781	10	$ 78,968
2002	$ 9,805	$ 16,270	$ 42,369	$ 68,443	9	$ 81,796
2003	$ 1,382	$ 17,460	$ 70,599	$ 89,441	8	$ 104,794
2004	$ 48,781	$ 32,038	$ 66,107	$ 146,927	7	$ 168,773
2005	$ 74,342	$ 22,406	$ 64,781	$ 161,529	6	$ 181,908
2006	$ 52,324	$ 29,651	$ 74,212	$ 156,187	5	$ 172,443
2007	$ 56,079	$ 40,955	$ 88,058	$ 185,091	4	$ 200,348
2008	$ 43,769	$ 58,088	$ 168,440	$ 270,297	3	$ 286,841
2009	$ 4,476	$ 66,975	$ 85,387	$ 156,838	2	$ 163,175
2010	$ 91,680	$ 90,993	$ 90,490	$ 273,163	1	$ 278,627
Average	**$ 36,374**	**$ 36,612**	**$ 77,694**	**$ 150,679**		$ 165,734
Estimated Value of Assets at Replacement Cost				$ 14,800,000		$ 14,800,000
Average Annual Maintenance as a Percentage of Assets				1.0181%		1.1198%
New Assets to While Maintenance Applies				$ 3,400,000		$ 3,400,000
Estimated Average Annual Cost of Maintenance				**$ 34,615**		**$ 38,074**

The following table shows the Coles Case recomputed to reflect this higher level of maintenance expenses. It can be seen, by comparison with the table at page 23 of SE-1 REV, that the impact is negligible.

City of Summerside Electric Utility								
Transmission Line Economic Feasibility								
(Case: Coles Assoc December 2011)								
Year of Operation				**1**	**2**	**3**	**4**	**5**
Year of Construction		**1**	**2**					
1. Project Net Present Value								
Capital Expenditure		(2,150,000)	(2,150,000)					
Annual Easement Cost		(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Operation and Maintenance, 2% Escalation				(38,000)	(38,760)	(39,535)	(40,326)	(41,132)
Share of Submarine Cable Operation and Maintenance, and any other Annual Charges				(40,000)	(40,800)	(41,616)	(42,448)	(43,297)
Incremental Property Taxes				(10,000)	(10,200)	(10,404)	(10,612)	(10,824)
Transmission Rate Savings, 2% Escalation				387,174	464,609	473,901	483,379	493,047
Total Annual Cash Flows		(2,152,000)	(2,152,000)	297,174	372,849	380,346	387,993	395,793
Assumed Discount Rate, LTD	3.85%							
Net Present Value	**$5,278,399**							
2. SE Revenue Requirement Impact								
Interest and Debt Repayment								
Opening Principal				4,300,000	4,253,124	4,204,444	4,153,890	4,101,389
Interest	3.85%			165,550	163,745	161,871	159,925	157,903
Principal Repayment				46,876	48,680	50,554	52,501	54,522
Closing Balance				4,253,124	4,204,444	4,153,890	4,101,389	4,046,867
Total Annual Payment				212,426	212,426	212,426	212,426	212,426
SE Revenue Requirement								
Change in Transmission Charges from MECL				(347,174)	(423,809)	(432,285)	(440,931)	(449,749)
Incremental O&M				38,000	38,760	39,535	40,326	41,132
Incremental Easement Costs				2,000	2,000	2,000	2,000	2,000
Incremental Property Taxes				10,000	10,200	10,404	10,612	10,824
Loan Interest and Principal				212,426	212,426	212,426	212,426	212,426
Total Revenue Requirement Impact				(84,748)	(160,423)	(167,920)	(175,567)	(183,367)
SE Total Electricity Sales Revenue				18,022,979	18,455,530	18,898,463	19,352,026	19,816,475
Percent Impact Overall				-0.5%	-0.9%	-0.9%	-0.9%	-0.9%

(b) *Please confirm that the majority of COS' current assets are contained within a concentrated geographic area and that the proposed facilities would be more costly to maintain due to travel time and longer troubleshooting time.*

COS' current assets are contained within the area of the City of Summerside, except for those assets serving the 82 COS customers outside the City limits. As compared with MECL's service territory, this is a concentrated geographic area, and does provide certain efficiencies in terms of time to reach a work site for maintenance and/or troubleshooting, as suggested by the question.

However, COS does not expect travel time to add significant cost to maintenance on the proposed new line, as compared with maintenance costs on COS' existing system, for the following reasons:

- Travel to work or inspection sites along the line would be a relatively infrequent activity;

- The line is only 20 km long. Therefore, all work sites would be within 20 km, and half would be within 10 km – only minutes away.
- Since the line is proposed to be constructed following an existing roadway, any point along the line should be reachable by truck quickly traveling at posted highway speed limits.
- The travel time from one end of the transmission line to the other end would take no more time then traveling from one side of the City's boundary to the other side.

UE30402
IN THE MATTER of an application
by Summerside Electric for approval of
proposed transmission services connecting
Summerside Electric Ottawa Street substation to
Maritime Electric Company Limited's Bedeque
substation.

City of Summerside
Responses to Interrogatories of MECL
Filed: January 13, 2012

City of Summerside
Responses to Interrogatories of
MECL
Filed: January 13, 2012

27. The updated Coles estimate states that the incremental operation and maintenance expenses for the proposed facilities will be $35,000 per year, yet the table on page 24 states the incremental operation and maintenance expenses to be $50,000. Please specify which amount is being used in the business case.

Both.

The updated business case has been computed twice, using both scenarios. In the table on page 23 of SE-1 Rev, titled Case: Coles Assoc December 2011, all the figures are the estimates of Coles Associates, including the estimate of $35,000 for maintenance expenses. The table on page 24 of SE-1 Rev, titled Case: Blaine Irving December 2011, re-computes the business case to reflect the estimates of Mr. Irving. Since Mr. Irving estimated the maintenance expenses at $50,000, this figure appears on page 24.

Both estimates were made by applying a factor to the total capital cost. Mr. Irving's estimate is higher because he used the total capital cost as a basis, whereas Coles Associates backed out of capital cost the components that were not expected to attract maintenance expense, for example engineering costs and certain civil works, before applying a factor.

28. How was the $40,000 annual cost of COS' share of the operation and maintenance costs of the submarine cables and any other annual charges of MECL that might be payable determined? Please provide detail.

$40,000 is the same estimate used by COS in the business case included in Exhibit SE-1, filed in 2009. At that time, the figure was questioned by IRAC staff as part of their Interrogatory S-2. For the convenience of the parties, that response, dated September 8, 2009, is re-stated below, and the supporting schedule is again attached for ease of reference as Schedule J.

"Fee for Access to Submarine Cables

SE has no independent information as to the amount of such a fee. SE anticipates that following approval of its Application, MECL would apply to IRAC for approval of the fee, and be responsible at that time to submit evidence of the related costs.

However, SE acknowledges that such a fee would be applicable, and therefore the economic analysis presented in Exhibit SE-1 incorporates an estimate of $40,000 annually, escalating at two percent, to include any fee for submarine cable access plus other charges of MECL which are not presently applicable as separate charges. These latter amounts would include costs related to connection at the Bedeque Substation, if any, other than capital costs paid directly by SE at the time of connection.

For data in support of a reasonable estimate of the fee, SE has relied on the information filed with IRAC as part of Stakeholder Technical Sessions - Questions and Answers, in MECL's Open Access Transmission Tariff Second Filing to IRAC, dated October 3, 2007, Question 9 on pages 10 and 11. This excerpt is attached for the convenience of Commission Staff.

This information can be summarized as follows:

- the submarine cables have no net capital cost in the transmission rate base of MECL, and therefore there are no amortization, financing costs, return on equity or taxes in the revenue requirement for the submarine cables;
- MECL has identified $161,000 as the annual operation and maintenance cost associated with the submarine cables; and

- MECL has allocated $105,000 of general costs to the submarine cables.

  The total revenue requirement of the submarine cables has therefore been computed by MECL as $262,000.

  It is SE's position that it should be allocated a share of the capacity of the submarine cables based on its share of the provincial load at the time these cables were constructed. That share is approximately 12%. SE therefore estimates that a cost-based fee for used of the submarine cables would be 12% of $262,000, or $ 31,440.

  SE has used these figures for estimation purposes only, and reserves its right to request further information or to dispute the assignment of costs to the submarine cables at such time as MECL makes a specific proposal to IRAC for the fee."

In MECL's evidence filed as the Affidavit of John D. Gaudet, dated September 25, 2009, MECL provided as Exhibit 17 its own calculation of COS' share of costs associated with the submarine cables, as $43,772 for 2009, with such share projected to decline if and when more merchant generation is added to the system. In that Affidavit, Mr. Gaudet suggested that fees for backup and for a share of OASIS costs might also apply. With regard to the estimate for backup costs of $25,000, Mr. Gaudet said at page 10 that this was a high level estimate.

The actual amounts that might apply will be known only when MECL makes application to IRAC and receives approval of the charges. As mentioned by COS in its 2009 response, COS would reserve the right to support or dispute any specific proposal to IRAC at that time.

SCHEDULE "A"

Gardiner MacNeill

From: michael.g.habouri@ca.abb.com
Sent: Monday, October 24, 2011 10:50 AM
To: Gardiner MacNeill
Subject: RE: 071151 Auto transformer budget request

Hi Gardiner,

here is the factory's response:

The 2008 values were higher due to commodity prices were higher. Also I missed the LTC. The price should be around $750,000 - $800,000.

Thanks!
Regards,

Michael G Habouri, Jr Eng
Front End Sales - Quebec & Maritimes
8585 Trans-Canada Highway
H4S 1Z6, Montréal, Québec, CANADA
Phone: +1-514-856-6266 Ext. 6309
Mobile: + 1-514-209-2984
email: michael.g.habouri@ca.abb.com

From: Gardiner MacNeill <gmacneill@colesassociates.com>
To: Michael G Habouri/CAABB/ABB@ABB
Cc: Alain D Martin/CAIND/ABB@ABB
Date: 10/21/2011 04:03 PM
Subject: RE: 071151 Auto transformer budget request

Thank you for your response.

I obtained an estimate from your company in January 2008 (email thread below) for the budgetary price is $1,320,000 (US) Exworks factory. Delivery and installation cost would have to be determined at time of formal quotation.

I am wondering if that 2008 amount would still be valid. The value of $550,000 to 600,000 strikes me as low.

Thanks,
Gardiner

Coles Associates Ltd.
Per: Gardiner MacNeill, P.Eng.
Senior Electrical Engineer
(902) 368-2300 telephone
(902) 566-3768 telefax
www.colesassociates.com

Schedule A1

Partner Technologies Incorporated
1155 Park Street
Regina, Saskatchewan
Canada S4N 4Y8
Ph: 306-721-3114
Fx: 306-721-3014

October 5, 2011

Coles Associates Ltd

, P.E.I.
Canada

QUOTATION
Q- 15800

Page: 1 of ____

Ph: 902 368 2300
Fx: 902 566 3768

Attention : **Gardiner MacNeill**
Subject : Request for Budget Pricing
Your Ref : 091067 Autotransformer
Our Ref : Q - 15800

Dear Sir:

We are pleased to submit our quotation on the following equipment. Additional details on Technical Data Sheets enclosed.

Item	Quantity	Description	CDN Funds Price Each
1	1	30.0/40.0/50.0 MVA 3Ø Auto Transformer	$1,159,181.00
2	1	45.0/60.0/75.0 MVA 3Ø Auto Transformer	$1,259,196.00
3	1	30.0/40.0/50.0 MVA 3Ø Auto Transformer	$1,120,090.00
4	1	45.0/60.0/75.0 MVA 3Ø Auto Transformer	$1,216,896.00

Validity : 30 Days
Prices : Net in CDN Dollars, Taxes Extra when Applicable
Delivery : 28-30 Weeks ARO, Subject To Confirmation At Time Of Order
Terms : Net 30 Days on Progress Payments To Be Arranged
FOB : PTI Regina; Freight Prepaid and Allowed

Note - Lead time for approval drawings will be 8-10 weeks FRO

Copy To: Scott Kaye - skaye@ctsales.ca

Thank you for considering **PTI** and we look forward to supplying the above equipment.
Yours truly,
PARTNER TECHNOLOGIES INCORPORATED

Jim Wardle
Quotations & Order Service

Partner Technologies Incorporated
1155 Park Street
Regina, Saskatchewan
Canada S4N 4Y8
Ph: 306-721-3114
Fx: 306-721-3014

COLES ASSOCIATES LTD
PTI REF: Q- 15800

RECOMMENDED SPARE PARTS, TOOL, & ACCESSORIES

Item	Qty	Description	Price Each	Extended
1	1	HV Bushing	$4,500.00	$4,500.00
2	1	LV Bushing	$2,500.00	$2,500.00
3	1	H)/X0 Bushing	$2,200.00	$2,200.00
4	1	HV Surge Arrester	$2,300.00	$2,300.00
5	1	LV Surge Arrester	$1,500.00	$1,500.00
6	1	Cooling Fan	$650.00	$650.00
7	1	Complete Set of Gaskets	$1,000.00	$1,000.00
			Subtotal:	$14,650.00

Comments:

TRANSFORMERS
SINCE 1969

STANDARD WARRANTY

COLES ASSOCIATES LTD

PTI REF: Q- 15800

Partner Technologies Incorporated
1155 Park Street
Regina, Saskatchewan
Canada S4N 4Y8
Ph: 306-721-3114
Fx: 306-721-3014

PARTNER TECHNOLOGIES INCORPORATED (herein called the "Company"), warrants the apparatus contracted for (herein called the "apparatus"), under normal and proper use, to be free from defects in material and workmanship for a period of eighteen (18) months from the date of shipment by the Company or twelve (12) months from energization whichever comes first, and to be of a kind and quality described in the contract of purchase. In full satisfaction of any claims under this warranty the Company will correct any defect by repair or replacement of defective parts, f.o.b. truck its factory. The Company will not be liable under this warranty for any costs, whether direct or indirect, of removing the apparatus from service, transportation of the apparatus to and from the place of repair or reinstallation of apparatus at site. The conditions of any tests of the apparatus in respect of the warranty claim shall be mutually agreed upon and the Company shall be notified and may be represented at all such tests.

The liability of the Company under the warranty herein shall in no event exceed the cost of correction of defects. In no event shall the Company be liable for any special, indirect or consequential damages even if the Company has been advised of the possibility of such damages and without restricting the generality of the foregoing the Purchaser specifically agrees that the Company will not be liable for loss of profits or for claims against the Purchaser by any other party. The Company shall not be liable under Warranty herein except in respect of defects occurring within the periods stipulated under the Warranty above.

The express warranties set forth are exclusive and no other warranties of any kind, whether statutory, oral, written, express or implied, including any implied warranty of merchantability of rightness for a particular purpose, shall apply. The owner's exclusive remedies and the contractor's only obligations arising out of or in connection with defective equipment or services or both, whether based on warranty, contract, tort (including negligence) or otherwise, shall be those stated herein.

Partner Technologies Incorporated
1155 Park Street
Regina, Saskatchewan
Canada S4N 4Y8
Ph: 306-721-3114
Fx: 306-721-3014

October 5, 2011

QUOTATION
Q- 15800

IMPACT RECORDERS

All PTI transformers ship overland via truck transport. Other modes are available on special request, but the transportation of transformers by truck is a widely accepted practice. By today's standards, this form of transportation has proven over again it can safely handle this type of shipment, and deliver it worry free of any damage in transit. Impact recorders are generally felt to be a necessity for rail type shipments. Therefore, PTI does not feel an impact recorder would be necessary and takes exception to providing it.

If this is not acceptable, PTI will include an analog three-way impact recorder(s) with the truck shipment. However, we must take certain precautions to protect ourselves from loss. We request you indicate your requirement for an impact recorder as a separate line item on your purchase order at a value of $3,500.00 each. We will issue a credit less $400.00 per week if it is returned to PTI undamaged and in working order. A full credit will be issued if it is returned back to PTI within 10 days after receipt at site.

We appreciate your understanding on this matter. This action will permit us to deliver our product in a manner expected by your organization.

PTI TRANSFORMERS SINCE 1969

TECHNICAL DATA & ACCESSORIES

QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.
TANK COVERS ARE BOLTED NOT WELDED TO TANK.

ITEM	1 3Ø 60Hz 65°C
TYPE	Auto Transformer
COOLING	ONAN/ONAF/ONAF
FLUID	Mineral Oil
MVA	30.0/40.0/50.0
HV	138000 GrdY/79672
BIL	650kV
HV TAPS	LTC ±16 Steps at 5/8%
LV	69000 GrdY/39836
BIL	350kV
LV TAPS	
%IZ	6.0%
WINDINGS	All Copper
FINISH	ASA 70 Grey
CUST REF	091067
STANDARD	CSA C88 M90
NOTES	Conservator Style Design Drawing shown is typical only for the transformer quoted

- 3 x HV 650kV BIL Cover Bushings
- 3 x LV 350kV BIL Cover Bushings
- 1 x H0X0 150kV Cover Bushing
- 3 x HV Surge Arresters
- 3 x LV Surge Arresters
- 6 x HV Current Transformers 2/Ph
- 6 x LV Current Transformers 2/Ph
- 2 x H0X0 Current Transformers
- 1 x HV LTC ABB UZE +/- 10% 32 steps
- 1 x LTC Controls
- 1 x Control Box
- 1 x External Core Ground
- 1 x Conservator & Fittings
- 1 x Gas Detector Relay
- 1 x Silica Gel Breather
- 8 x Radiator Valves Set of 2
- 1 x Drain Valve 2" Globe w/ Sampling Device
- 1 x Upper Filter Valve 2" Globe
- 1 x Cooling Fans c/w Controls
- 1 x Liquid Level Gauge 2 Contact
- 1 x Liquid Temperature Gauge 2 Contact
- 1 x Winding Temperature System 4 Contact
- 1 x Pressure Relief Device 1 Contact
- 1 x PRD Deflector
- 1 x Misc. Parts
- 1 x Field Assembly & Commissioning

PTI TRANSFORMERS SINCE 1999

TECHNICAL DATA & ACCESSORIES

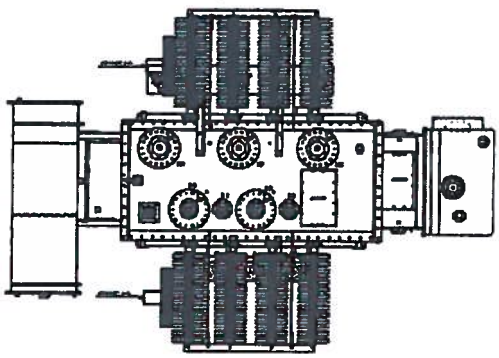
QUOTATION Q- 15800

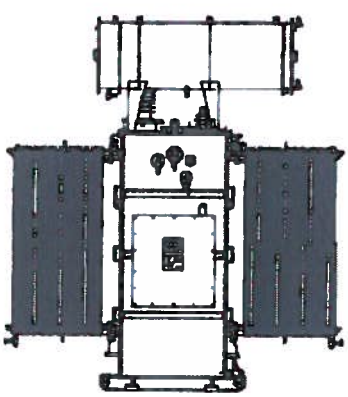
FOR QUOTATION PURPOSES ONLY - AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.

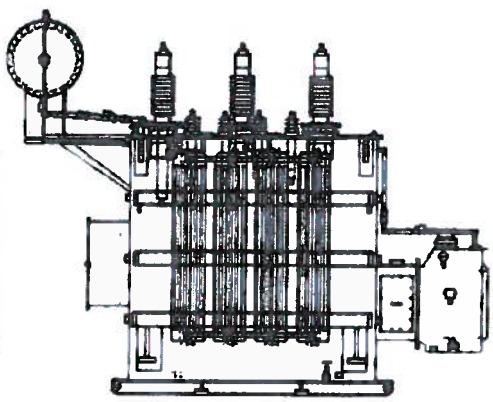
	LBS	KGS		
C&C	54490	24712		
T&F	33216	15064		
FLUID	41979	19038		
TOTAL	129685	58814		
FLUID QTY	4910 G	22320 L		

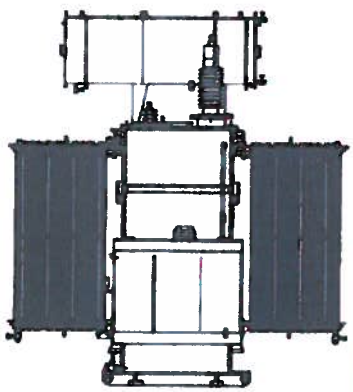
OVERALL QUOTE DIMENSIONS

	INS	MM
LENGTH	269	6833
DEPTH	149	3772
HEIGHT	208	5283









FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

PTI TRANSFORMERS SINCE 1989

TECHNICAL DATA & ACCESSORIES

QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.
TANK COVERS ARE BOLTED NOT WELDED TO TANK.

ITEM	2 3Ø 60Hz 65°C
TYPE	Auto Transformer
COOLING	ONAN/ONAF/ONAF
FLUID	Mineral Oil
MVA	45.0/60.0/75.0
HV	138000 GrdY/79672
BIL	650kV
HV TAPS	LTC ±16 Steps at 5/8%
LV	69000 GrdY/39836
BIL	350kV
LV TAPS	
%IZ	6.0%
WINDINGS	All Copper
FINISH	ASA 70 Grey
CUST REF	091067
STANDARD	CSA C88 M90
NOTES	Conservator Style Design Drawing shown is typical only for the transformer quoted

- 3 x HV 650kV BIL Cover Bushings
- 3 x LV 350kV BIL Cover Bushings
- 1 x H0X0 150kV Cover Bushing
- 3 x HV Surge Arresters
- 3 x LV Surge Arresters
- 6 x HV Current Transformers 2/Ph
- 6 x LV Current Transformers 2/Ph
- 2 x H0X0 Current Transformers
- 1 x HV LTC ABB UZE +/- 10% 32 steps
- 1 x LTC Controls
- 1 x Control Box
- 1 x External Core Ground
- 1 x Conservator & Fittings
- 1 x Gas Detector Relay
- 1 x Silica Gel Breather
- 10x Radiator Valves Set of 2
- 1 x Drain Valve 2" Globe w/ Sampling Device
- 1 x Upper Filter Valve 2" Globe
- 1 x Cooling Fans c/w Controls
- 1 x Liquid Level Gauge 2 Contact
- 1 x Liquid Temperature Gauge 2 Contact
- 1 x Winding Temperature System 4 Contact
- 1 x Pressure Relief Device 1 Contact
- 1 x PRD Deflector
- 1 x Misc. Parts
- 1 x Field Assembly & Commissioning

FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

Technical Data & Accessories

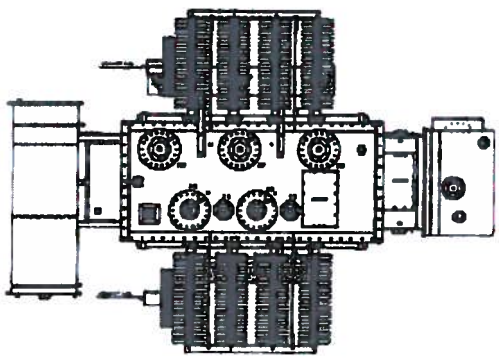
Quotation Q- 15800

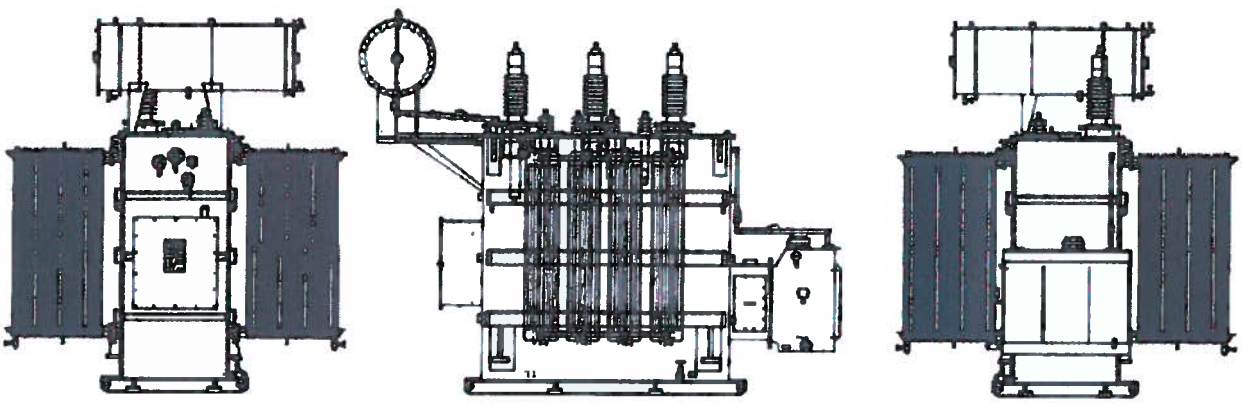
FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.

	Lbs	Kgs	
C&C	69277	31418	
T&F	36985	16773	
Fluid	41459	18802	
Total	147720	66993	
Fluid Qty	4849	G 22044	L

Overall Quote Di

	Ins	MM
Length	253	6426
Depth	165	4178
Height	216	5486





FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

PTI TRANSFORMERS SINCE 1989

TECHNICAL DATA & ACCESSORIES

QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.
TANK COVERS ARE BOLTED NOT WELDED TO TANK.

ITEM	3 3Ø 60Hz 65°C
TYPE	Auto Transformer
COOLING	ONAN/ONAF/ONAF
FLUID	Mineral Oil
MVA	30.0/40.0/50.0
HV	138000 GrdY/79672
BIL	650kV
HV TAPS	LTC ±16 Steps at 5/8%
LV	69000 GrdY/39836
BIL	350kV
LV TAPS	
%IZ	6.0%
WINDINGS	All Copper
FINISH	ASA 70 Grey
CUST REF	091067
STANDARD	CSA C88 M90
NOTES	Sealed Tank Design Drawing shown is typical only for the transformer quoted

- 3 x HV 650kV BIL Cover Bushings
- 3 x LV 350kV BIL Cover Bushings
- 1 x H0X0 150kV Cover Bushing
- 3 x HV Surge Arresters
- 3 x LV Surge Arresters
- 6 x HV Current Transformers 2/Ph
- 6 x LV Current Transformers 2/Ph
- 2 x H0X0 Current Transformers
- 1 x HV LTC ABB UZE +/- 10% 32 steps
- 1 x LTC Controls
- 1 x Control Box
- 1 x External Core Ground
- 8 x Radiator Valves Set of 2
- 1 x Drain Valve 2" Globe w/ Sampling Device
- 1 x Upper Filter Valve 2" Globe
- 1 x Cooling Fans c/w Controls
- 1 x Liquid Level Gauge 2 Contact
- 1 x Liquid Temperature Gauge 2 Contact
- 1 x Winding Temperature System 4 Contact
- 1 x Pressure Relay Rapid Rise
- 1 x Seal-In Relay
- 1 x Pressure Relief Device 1 Contact
- 1 x PRD Deflector
- 1 x Pressure Vacuum Bleeder Device
- 1 x Pressure Vacuum Switch
- 1 x Pressure Vacuum Gauge
- 1 x Misc. Parts
- 1 x Field Assembly & Commissioning

FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

PTI TRANSFORMERS SINCE 1969

TECHNICAL DATA & ACCESSORIES

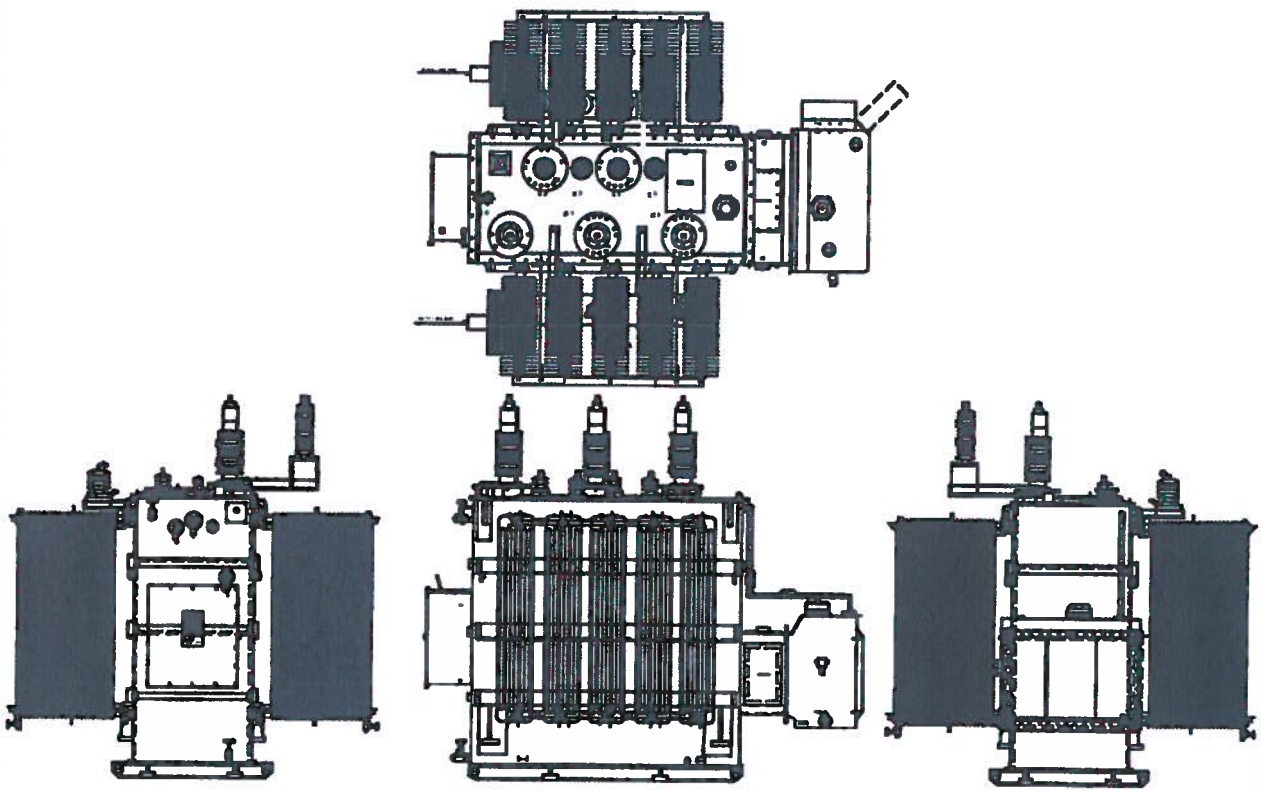
QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.

	LBS	KGS	
C&C	54490	24712	
T&F	33381	15139	
FLUID	36102	16373	
TOTAL	123973	56224	
FLUID QTY	4222	G 19195	L

OVERALL QUOTE DIMENSIONS

	INS	MM
LENGTH	269	6833
DEPTH	152	3861
HEIGHT	136	3454



FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

PTI TRANSFORMERS SINCE 1989

TECHNICAL DATA & ACCESSORIES

QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER
TANK COVERS ARE BOLTED NOT WELDED TO TANK.

ITEM	4	3Ø	60Hz	65°C	
TYPE	Auto Transformer				
COOLING	ONAN/ONAF/ONAF				
FLUID	Mineral Oil				
MVA	45.0/60.0/75.0				
HV	138000 GrdY/79672				
BIL	650kV				
HV TAPS	LTC ±16 Steps at 5/8%				
LV	69000 GrdY/39836				
BIL	350kV				
LV TAPS					
%IZ	6.0%				
WINDINGS	All Copper				
FINISH	ASA 70 Grey				
CUST REF	091067				
STANDARD	CSA C88 M90				
NOTES	Sealed Tank Design Drawing shown is typical only for the transformer quoted				

- 3 x HV 650kV BIL Cover Bushings
- 3 x LV 350kV BIL Cover Bushings
- 1 x H0X0 150kV Cover Bushing
- 3 x HV Surge Arresters
- 3 x LV Surge Arresters
- 6 x HV Current Transformers 2/Ph
- 6 x LV Current Transformers 2/Ph
- 2 x H0X0 Current Transformers
- 1 x HV LTC ABB UZE +/- 10% 32 steps
- 1 x LTC Controls
- 1 x Control Box
- 1 x External Core Ground
- 1 x Radiator Valves Set of 2
- 1 x Drain Valve 2" Globe w/ Sampling Device
- 1 x Upper Filter Valve 2" Globe
- 1 x Cooling Fans c/w Controls
- 1 x Liquid Level Gauge 2 Contact
- 1 x Liquid Temperature Gauge 2 Contact
- 1 x Winding Temperature System 4 Contact
- 1 x Pressure Relay Rapid Rise
- 1 x Seal-In Relay
- 1 x Pressure Relief Device 1 Contact
- 1 x PRD Deflector
- 1 x Pressure Vacuum Bleeder Device
- 1 x Pressure Vacuum Switch
- 1 x Pressure Vacuum Gauge
- 1 x Misc. Parts
- 1 x Field Assembly & Commissioning

FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

PTI TRANSFORMERS SINCE 1969

TECHNICAL DATA & ACCESSORIES

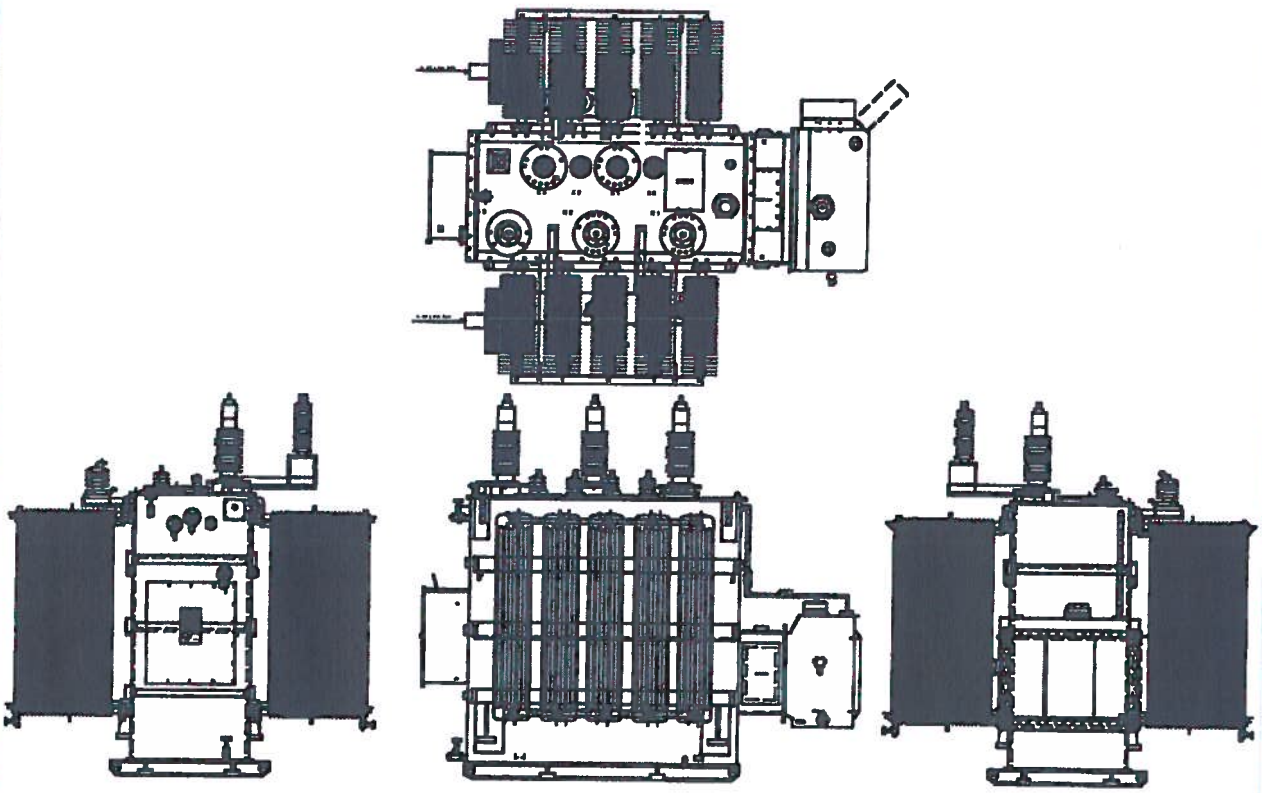
QUOTATION Q- 15800

FOR QUOTATION PURPOSES ONLY. AS BUILT DETAILS AND DIMENSIONS MAY DIFFER.

	LBS	KGS	
C&C	69277	31418	
T&F	37810	17147	
FLUID	35948	16303	
TOTAL	143034	64868	
FLUID QTY	4204	19113	L

OVERALL QUOTE DIMENSIONS

	INS	MM
LENGTH	253	6426
DEPTH	172	4356
HEIGHT	216	5486



FOR CANADIAN CUSTOMERS: PRODUCTS MANUFACTURED BY PTI ARE NOT SUPPLIED WITH A CSA LABEL. THE NAMEPLATES PROVIDED ON PRODUCTS IDENTIFY THE CSA MANUFACTURING STANDARD THE PRODUCT IS MANUFACTURED AND TESTED TO. IF CSA CERTIFICATION AT THE FACTORY IS REQUIRED, THE COSTS AND ARRANGEMENTS TO HAVE THIS PERFORMED SHALL BE THE RESPONSIBILITY OF OTHERS.

SCHEDULE 'B'

Gardiner MacNeill

From:	"Kirby, Jim" <jkirby@hps.hubbell.com>
Sent:	Thursday, September 03, 2009 12:57 PM
To:	<gmacneill@colesassociates.com>
Cc:	"Harper, Cyril" <charper@graybarcanada.com>
Subject:	Budget Pricing for 69kV & 138kV Insulators

Gardiner,

This is further to our discussion yesterday in regards to the above budget pricing.

The 69kV insulator unit price includes an external mounting bracket, mounting stud and insulator. The unit price would be $150.00 for the vertical and about $190.00 for the horizontal. Taxes and pole mounting bolts would be additional.

The 138kV units would include an integral base. The vertical unit would be $295.00 and the horizontal unit would be about $280.00. Again taxes and mounting bolts would be extra.

Hope this helps you with your project.

Regards,

Jim

SCHEDULE "C1"

Gardiner MacNeill

From: "Bruce MacDonald" <Bruce.MacDonald@brockway.ca>
Sent: Wednesday, September 02, 2009 2:31 PM
To: <gmacneill@colesassociates.com>
Cc: "Philip MacPherson" <Philip.MacPherson@brockway.ca>
Subject: Alcan

Here is budget pricing for the Alcan cable you asked our Phil MacPherson for.

Quail 2/0awg $2293.00km

Penguin 4/0awg $3914.00km

Hawk 477kcmil $8588.00km

Linnet 336.4kcmil $6122.00km

BrockwayEnterprises

Bruce MacDonald

Inside Sales

Ph # 902 864-8236

Fax # 902 865-8252

P Do I really need to print this message ?

Gardiner MacNeill

From: George Greeley [George.Greeley@brockway.ca]
Sent: Monday, January 09, 2012 3:48 PM
To: Gardiner MacNeill
Cc: Philip MacPherson; Bruce MacDonald
Subject: RE: Alcan

Gardiner,

As requested please see the revised budget pricing for the cables listed below:

Quail 2/0awg - $2388.50/km (Standard put up 270m on 40" reel)
Penguin 4/0awg - $4074.90/km (Standard put up 1300m on 40" reel)
Hawk 477kcmil - $9840.30/km (Standard put up 2470m on 68" reel)
Linnet 336.4kcmil - $6373.30/km (Standard put up 1940 on 50" reel)

If you have any questions or need anything more please let us know.

Thanks,

George

Brockway Enterprises
George Greeley
Inside Sales
Ph# 902-864-8236
Fax # 902-865-8252
Think Green Read on Screen

-----Original Message-----
From: Bruce MacDonald
Sent: January-09-12 8:15 AM
To: George Greeley (George.Greeley@brockway.ca)
Cc: Philip MacPherson
Subject: FW: Alcan

Please update Gardiner on the items below.

Thank you & Have a great day

Bruce MacDonald
Inside Sales
Brockway Enterprises
Ph # 902 864-8236
Fax # 902 865-8252

Do I really need to print this message ?

SCHEDULE 'D'

KING STREET

ASPHALT DRIVEWAY

FENCE

GATE

HARVARD STREET

OTTAWA STREET

EXISTING POWER PLANT

GENERATOR #8 BUILDING

STORAGE

FUEL PREP

ASPHALT

CONCRETE

T-3 T-4 T-6 T-5 T-1 T-2

V-4 V-3 V-2 V-1

R9 R5 R2 R1 R6 R8 R3 R7 R4

MH 14 MH 13 MH 11 MH 7

CONCRETE ENCLOSED DUCT BANK 6-125mm PVC

4/0 BARE COPPER

TIED TO GROUND BAR IN MANHOLE

BARE COPPER TO PADMOUNT

125mm PVC

75mm PVC

TIED TO GROUND GRID IN NEW SUBSTATION

POLE #1

POLE #8

69 kV

CIRCUIT NUMBER IDENTIFICATION

NUMBER	CIRCUIT	VOLTAGE
R1	SHERBROOKE	12470
R2	WILMONT	12470
R3	EAST	4160
R4	HILLCREST	4160
R5	SPARE	12470
R6	NORTH	4160
R7	SOUTH	4160
R8	WEST	4160
R9	WATERFRONT	12470

prime consultant

CITY of SUMMERSIDE

structural/civil engineers

No.	revisions	date

A: DETAIL No.
B: LOCATION DRAWING No.
C: DETAIL DRAWING No.

project

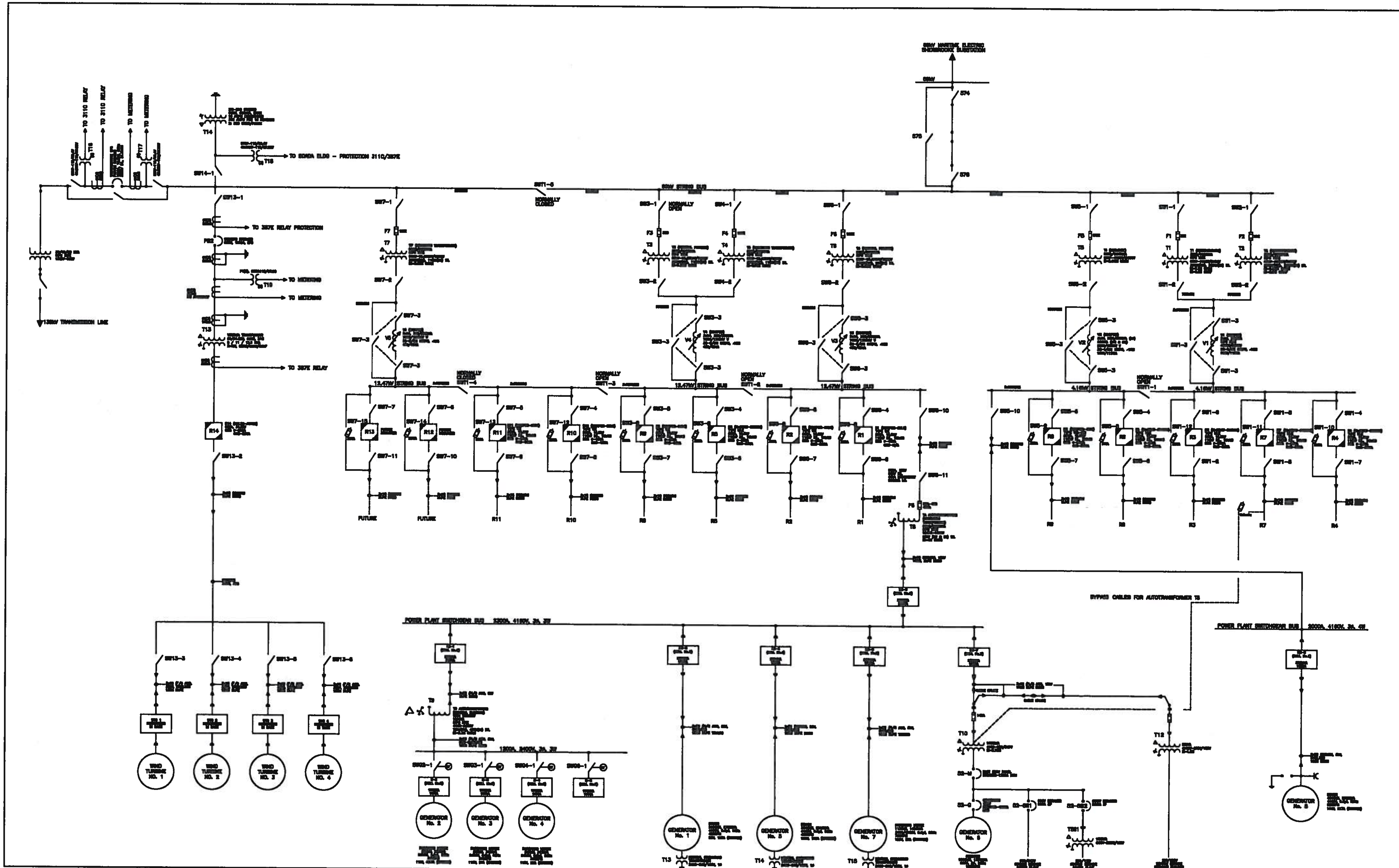
CITY OF SUMMERSIDE
ELECTRICAL SUBSTATION

drawing

ELECTRICAL PLAN
SUBSTATION
AS BUILT

drawn	date
scale 1:200	
approved	
project no.	
sheet no. E1 of 1	

SCHEDULE 'E1'



NOTE:

1. –

2. –

3. –

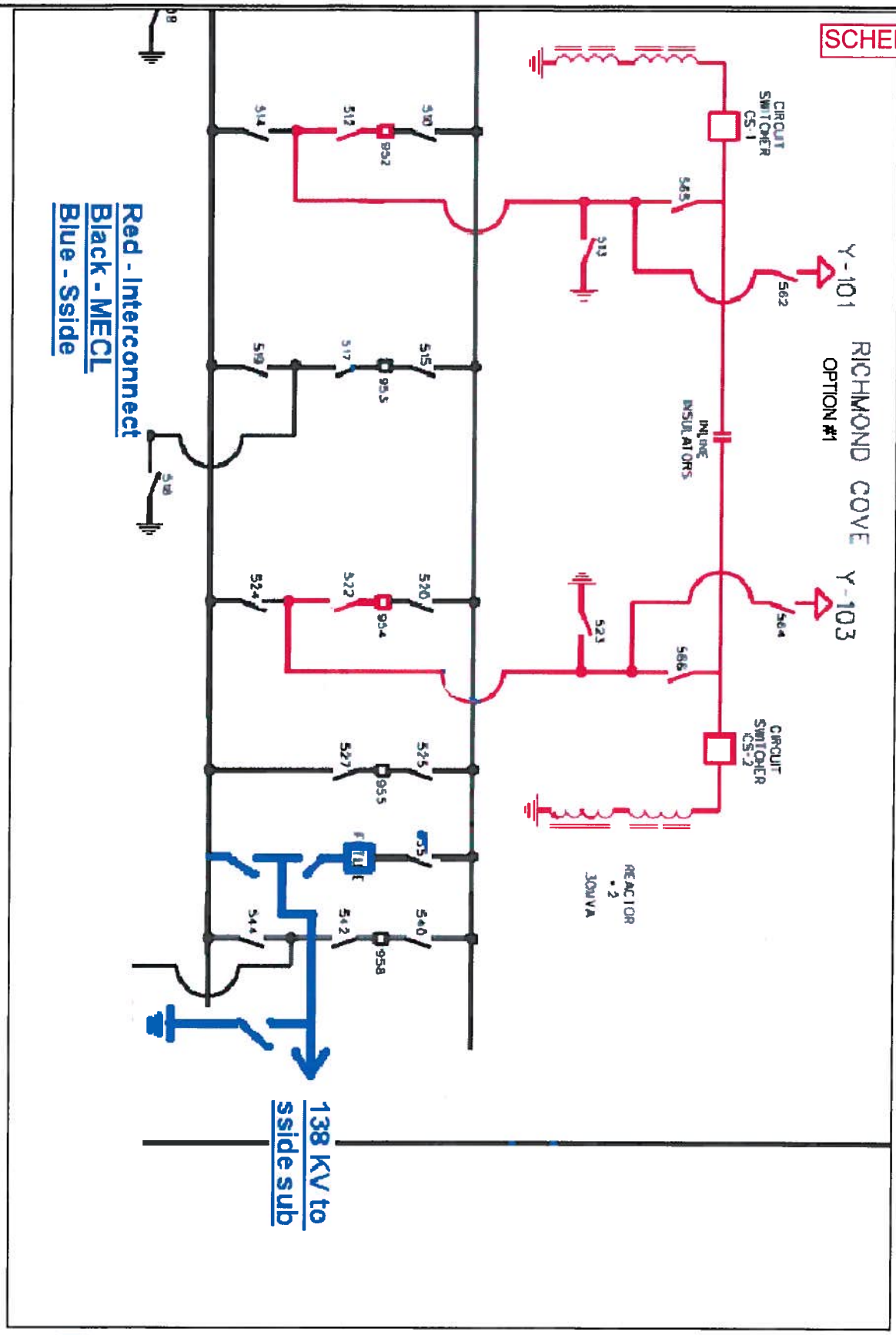
VOLTAGE COLOR LEGEND
208V, 3PH
600V, 3PH
2400V, 3PH
4160V, 3PH
12470V, 3PH
34500V, 3PH
69000V, 3PH
138000V, 3PH

project
CITY OF SUMMERSIDE
ELECTRICAL SUBSTATION

drawing
SUBSTATION
SINGLE LINE, PROPOSED

sheet no.
E1 of E1

SCHEDULE 'E2'



Coles Associates
architecture, engineering, project management
Charlottetown, P.E.I., Canada, C1A 7L3 Phone (902) 368-2300 Fax (902) 566-3768 www.colesassociates.com

CLIENT
City of Summerside

PROJECT TITLE
Transmission Line Interconnection

SHEET TITLE
Option #1

REVISIONS:

DATE: July 2009
DRAWN BY: CM

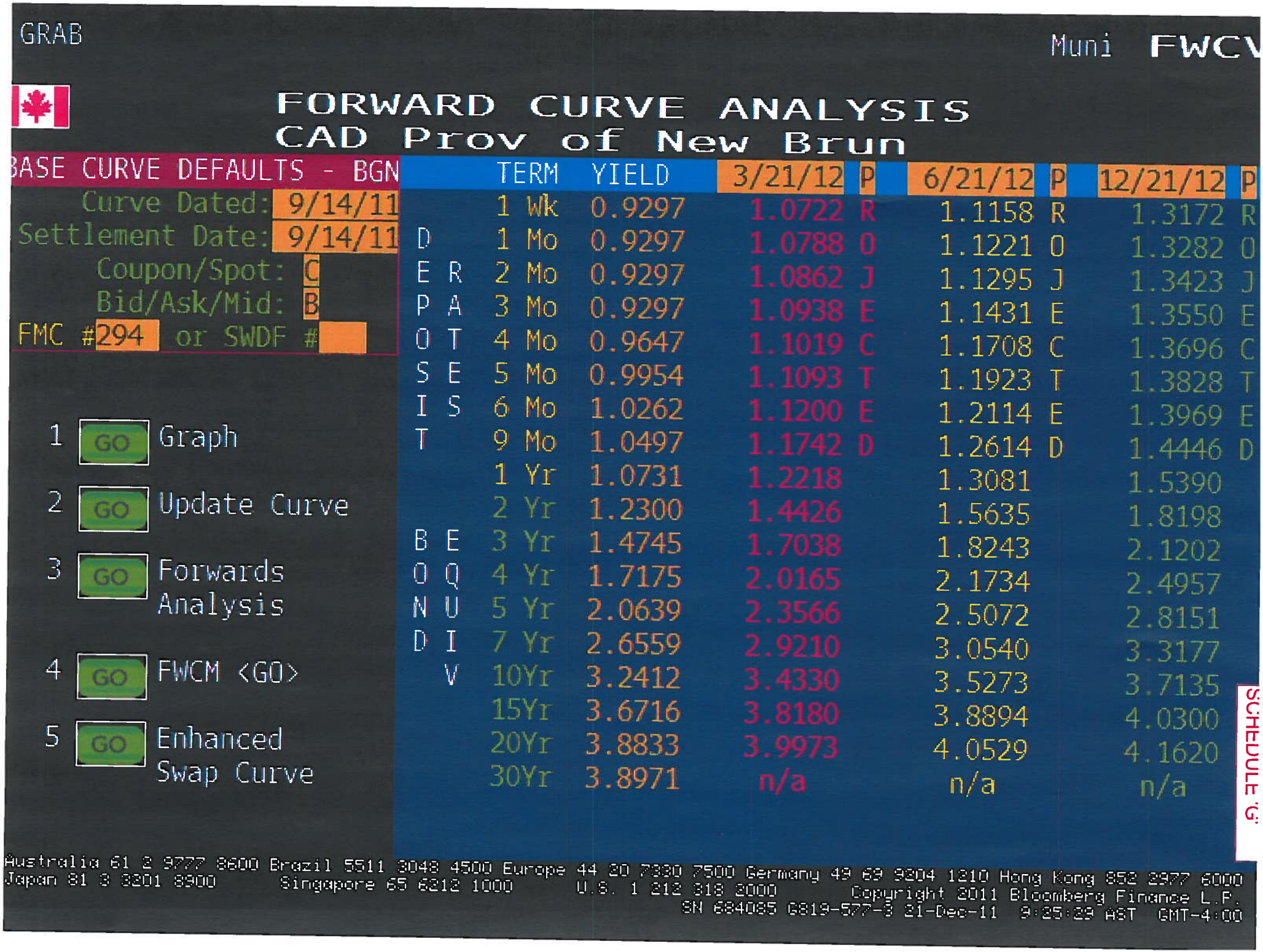
PROJECT NUMBER: 071151

DRAWING NUMBER: SK-1

SCHEDULE 'F'

Summerside Electric Operational Expenses by Category					
Year	Substation	Pole & Fixtures	O/H Conductors		
2000	$ 8,886	$ 14,592	$ 61,295		
2001	$ 8,588	$ 13,299	$ 42,894		
2002	$ 9,805	$ 16,270	$ 42,369		
2003	$ 1,382	$ 17,460	$ 70,599		
2004	$ 48,781	$ 32,038	$ 66,107		
2005	$ 74,342	$ 22,406	$ 64,781		
2006	$ 52,324	$ 29,651	$ 74,212		
2007	$ 56,079	$ 40,955	$ 88,058		
2008	$ 43,769	$ 58,088	$ 168,440		
2009	$ 4,476	$ 66,975	$ 85,387		
2010	$ 91,680	$ 90,993	$ 90,490		
Average	$ 36,374	$ 36,612	$ 77,694		$ 150,679
Approx. Asset Value	$ 5,200,000	$ 4,200,000	$ 5,400,000		$ 14,800,000
Percent of capital	0.69950%	0.87170%	1.43877%		1.01810%
Estimated operating cost per year for transmission line Capital Asset Value					$ 3,400,000
					$ 34,615.49

6 Prince Street, Founders' Hall, Charlottetown, P.E.I., Canada, Voice (902) 368-2300, Fax (902) 566-3768 www.colesassociates.com


GRAB
Muni FWCV
FORWARD CURVE ANALYSIS
CAD Prov of New Brun
BASE CURVE DEFAULTS - BGN
Curve Dated: 9/14/11
Settlement Date: 9/14/11
Coupon/Spot: C
Bid/Ask/Mid: B
FMC #294 or SWDF #
1 GO Graph
2 GO Update Curve
3 GO Forwards Analysis
4 GO FWCM <GO>
5 GO Enhanced Swap Curve
DERIVATIVES
TERM YIELD 3/21/12 P 6/21/12 P 12/21/12 P
1 Wk 0.9297 1.0722 R 1.1158 R 1.3172 R
1 Mo 0.9297 1.0788 O 1.1221 O 1.3282 O
2 Mo 0.9297 1.0862 J 1.1295 J 1.3423 J
3 Mo 0.9297 1.0938 E 1.1431 E 1.3550 E
4 Mo 0.9647 1.1019 C 1.1708 C 1.3696 C
5 Mo 0.9954 1.1093 T 1.1923 T 1.3828 T
6 Mo 1.0262 1.1200 E 1.2114 E 1.3969 E
9 Mo 1.0497 1.1742 D 1.2614 D 1.4446 D
1 Yr 1.0731 1.2218 1.3081 1.5390
2 Yr 1.2300 1.4426 1.5635 1.8198
3 Yr 1.4745 1.7038 1.8243 2.1202
4 Yr 1.7175 2.0165 2.1734 2.4957
5 Yr 2.0639 2.3566 2.5072 2.8151
7 Yr 2.6559 2.9210 3.0540 3.3177
10Yr 3.2412 3.4330 3.5273 3.7135
15Yr 3.6716 3.8180 3.8894 4.0300
20Yr 3.8833 3.9973 4.0529 4.1620
30Yr 3.8971 n/a n/a n/a
SCHEDULE 'G'
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000
Copyright 2011 Bloomberg Finance L.P.
SN 684065 G819-577-3 21-Dec-11 9:25:29 AST GMT-4:00

SCHEDULE 'H'

Loan Program

- Aboriginal Health Access Centres
- Community Health & Social Services Hubs
- Hospices
- Housing Providers
- Local Services Boards
- Long-term Care Homes
- Municipal Corporations
- Municipalities
- Professional Arts Training
- Sports & Recreation Organizations
- Universities & Affiliated Colleges

WebLoans Online Application

Lending Rates

Loan Payment Calculator

Contact Customer Relations

Lending Rates: Municipalities

Indicative Lending Rates as of December 21, 2011**

Term	Construction	Serial	Amortizer
1 Month	1.55%	-	-
5 Year	-	1.76%	1.86%
10 Year	-	2.53%	2.63%
15 Year	-	2.98%	3.08%
20 Year	-	3.25%	3.35%
25 Year	-	3.44%	3.54%
30 Year	-	3.54%	3.64%
35 Year	-	3.60%	3.70%
40 Year	-	3.65%	3.75%

About our Lending Rates

Our online lending rates are updated frequently as we track the movement of our cost of borrowing in the capital markets.

Debentures - rates on debentures are fixed for the entire life of the loan once the debenture is purchased by Infrastructure Ontario. Clients seeking debenture terms longer than 30 years for amounts greater than $25 million, are subject to capital market conditions. Please contact Infrastructure Ontario for details.

Construction Loans - for construction loans, rates float throughout the term of the loan until they are replaced by a debenture. Construction loan requests over $75 million are subject to funding availability and interest rates may vary from those posted.

**These interest rates are the all-in cost for loans of the term and type selected.

RESOURCES

Loan Payment Calculator

Five-year, $30 billion strategic investment plan

ReNew Ontario

Five principles guiding all infrastructure projects

Building a Better Tomorrow

Serial vs. Amortizer Debentures

Schedule I-1

GEG 4-04

Table 07DEC07-1 : Hours When Peak Load Exceeded 200 MW

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)	
2001	0	0	Actual
2002	2	7	Actual
2003	2	6	Actual
2004	16	68	Actual
2005	8	33	Actual
2006	26	176	Actual
2007	56	410	Forecast
2008	73	521	Forecast
2009	89	631	Forecast
2010	131	1 030	Forecast
2011	173	1 744	Forecast
2012	211	2 672	Forecast
2013	260	3 850	Forecast
2014	294	5 309	Forecast
2015	332	7020	Forecast

Hourly Data - Hour Ending

Dec 09 2002 17 00	205	5	Actual
Dec 16 2002 17 00	202	2	7 Actual
Dec 22 2003 17 00	204	4	Actual
Dec 27 2003 18 00	202	2	6 Actual
Dec 06 2004 17 00	206	6	Actual
Dec 06 2004 18 00	201	1	Actual
Dec 07 2004 17 00	203	3	Actual
Dec 13 2004 17 00	204	4	Actual
Dec 14 2004 17 00	205	5	Actual
Dec 14 2004 18 00	201	1	Actual
Dec 15 2004 17 00	209	9	Actual
Dec 15 2004 18 00	204	4	Actual
Dec 16 2004 17 00	204	4	Actual
Dec 16 2004 18 00	204	4	Actual

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)		
Dec 20, 2004 17:00	209	9		Actual
Dec 20, 2004 18:00	202	2		Actual
Dec 21, 2004 17:00	210	10		Actual
Dec 21, 2004 18:00	204	4		Actual
Dec 21, 2004 19:00	201	1		Actual
Dec 22, 2004 17:00	201	1	68	Actual
Dec 06, 2005 17:00	203	3		Actual
Dec 13, 2005 17:00	210	10		Actual
Dec 13, 2005 18:00	204	4		Actual
Dec 14, 2005 17:00	205	5		Actual
Dec 15, 2005 17:00	202	2		Actual
Dec 19, 2005 17:00	203	3		Actual
Dec 22, 2005 17:00	204	4		Actual
Dec 22, 2005 18:00	202	2	33	Actual
Dec 04, 2006 17:00	201	1		Actual
Dec 08, 2006 17:00	202	2		Actual
Dec 11, 2006 17:00	206	6		Actual
Dec 11, 2006 18:00	203	3		Actual
Dec 12, 2006 17:00	212	12		Actual
Dec 12, 2006 18:00	208	8		Actual
Dec 12, 2006 19:00	201	1		Actual
Dec 13, 2006 17:00	204	4		Actual
Dec 18, 2006 17:00	210	10		Actual
Dec 18, 2006 18:00	206	6		Actual
Dec 19, 2006 17:00	217	17		Actual
Dec 19, 2006 18:00	214	14		Actual
Dec 19, 2006 19:00	210	10		Actual
Dec 19, 2006 20:00	204	4		Actual
Dec 20, 2006 17:00	212	12		Actual
Dec 20, 2006 18:00	211	11		Actual
Dec 20, 2006 19:00	209	9		Actual
Dec 20, 2006 20:00	206	6		Actual
Dec 21, 2006 17:00	203	3		Actual
Dec 21, 2006 18:00	203	3		Actual
Dec 22, 2006 17:00	205	5		Actual
Dec 22, 2006 18:00	204	4		Actual
Dec 28, 2006 17:00	208	8		Actual
Dec 28, 2006 18:00	205	5		Actual
Dec 29, 2006 17:00	209	9		Actual
Dec 29, 2006 18:00	203	3	176	Actual
Jan 17, 2007 17:00	211	11		Actual
Jan 17, 2007 18:00	204	4		Actual
Dec 01, 2007 17:00	201	1		Actual
Dec 03, 2007 17:00	203	3		Actual
Dec 09, 2007 17:00	202	2		Actual
Dec 10, 2007 17:00	215	15		Actual
Dec 10, 2007 18:00	210	10		Actual
Dec 10, 2007 19:00	205	5		Actual

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)	
Dec 11, 2007 17:00	213	13	Actual
Dec 11, 2007 18:00	206	6	Actual
Dec 11, 2007 19:00	203	3	Actual
Dec 12, 2007 17:00	210	10	Actual
Dec 12, 2007 18:00	207	7	Actual
Dec 12, 2007 19:00	203	3	Actual
Dec 13, 2007 16:00	201	1	Actual
Dec 13, 2007 17:00	216	16	Actual
Dec 13, 2007 18:00	213	13	Actual
Dec 13, 2007 19:00	210	10	Actual
Dec 13, 2007 20:00	205	5	Actual
Dec 14, 2007 17:00	206	6	Actual
Dec 14, 2007 18:00	203	3	Actual
Dec 15, 2007 17:00	210	10	Actual
Dec 15, 2007 18:00	206	6	Actual
Dec 16, 2007 17:00	209	9	Actual
Dec 16, 2007 18:00	205	5	Actual
Dec 16, 2007 19:00	202	2	Actual
Dec 17, 2007 16:00	202	2	Actual
Dec 17, 2007 17:00	218	18	Actual
Dec 17, 2007 18:00	213	13	Actual
Dec 17, 2007 19:00	210	10	Actual
Dec 17, 2007 20:00	205	5	Actual
Dec 18, 2007 17:00	212	12	Actual
Dec 18, 2007 18:00	203	3	Actual
Dec 19, 2007 17:00	210	10	Forecast
Dec 19, 2007 18:00	207	7	Forecast
Dec 19, 2007 19:00	203	3	Forecast
Dec 20, 2007 16:00	201	1	Forecast
Dec 20, 2007 17:00	216	16	Forecast
Dec 20, 2007 18:00	213	13	Forecast
Dec 20, 2007 19:00	210	10	Forecast
Dec 20, 2007 20:00	205	5	Forecast
Dec 21, 2007 17:00	206	6	Forecast
Dec 21, 2007 18:00	203	3	Forecast
Dec 22, 2007 17:00	210	10	Forecast
Dec 22, 2007 18:00	206	6	Forecast
Dec 23, 2007 17:00	209	9	Forecast
Dec 23, 2007 18:00	205	5	Forecast
Dec 23, 2007 19:00	202	2	Forecast
Dec 26, 2007 17:00	204	4	Forecast
Dec 27, 2007 17:00	213	13	Forecast
Dec 27, 2007 18:00	210	10	Forecast
Dec 27, 2007 19:00	205	5	Forecast
Dec 28, 2007 17:00	214	14	Forecast
Dec 28, 2007 18:00	208	8	Forecast
Dec 28, 2007 19:00	205	5	Forecast
Dec 29, 2007 17:00	203	3	410 Forecast

Schedule 1-2

Exhibit GEG-5

From: Maritime Electric E-Mail System [MECL_EMAIL@maritimeelectric.com]
Sent: Friday, December 14, 2007 4:16 PM
To: COS Energy; Coyle, Jim; MacLeod, John; COS Energy
Subject: Energy Forecast for Dec 14, 2007 entered

Hello Partner

Energy Forecast for Dec 14, 2007 entered by ECC Operator.

Energy Forecast Details
* Transaction Date: Dec 14, 2007 4:16:17 PM
* Source ID: 12
* Source Name: Sside
* Forecast Date: Dec 14, 2007
* Forecast Type: Intraday
* Confirmation Number: 2007121400120004
* Reason: Curtailment

*** Changed Hours ***

Starting Hour	Original Forecast	New Forecast
17	21	19

From: Maritime Electric E-Mail System [MECL_EMAIL@maritimeelectric.com]
Sent: Friday, December 14, 2007 5:23 PM
To: COS Energy; Coyle, Jim; MacLeod, John; COS Energy
Subject: Energy Forecast for Dec 14, 2007 entered

Hello Partner

Energy Forecast for Dec 14, 2007 entered by ECC Operator.

Energy Forecast Details
* Transaction Date: Dec 14, 2007 5:22:31 PM
* Source ID: 12
* Source Name: Sside
* Forecast Date: Dec 14, 2007
* Forecast Type: Intraday
* Confirmation Number: 2007121400120005
* Reason: Curtailment

*** Changed Hours ***

Starting Hour	Original Forecast	New Forecast
18	20	19

From: Maritime Electric E-Mail System [MECL_EMAIL@maritimeelectric.com]
Sent: Wednesday, January 02, 2008 7:35 PM
To: COS Energy; Coyle, Jim; MacLeod, John; COS Energy
Subject: Energy Forecast for Dec 31, 2007 entered

Hello Partner

Energy Forecast for Dec 31, 2007 entered by ECC Operator.

Energy Forecast Details
* Transaction Date: Jan 02, 2008 7:35:01 PM
* Source ID: 12
* Source Name: Sside
* Forecast Date: Dec 31, 2007
* Forecast Type: Intraday
* Confirmation Number: 2007123100120019
* Reason: Curtailment

*** Changed Hours ***

Starting Hour	Original Forecast	New Forecast
19	12	11

Schedule I-3

Page 9

From: LeBlanc, Ron (Maritime Electric) [LeBlanc@MaritimeElectric.com]
Sent: Friday, November 30, 2007 4:48 PM
To: Greg Gaudet
Cc: Coyle, Jim
Subject: COS December Transmission Request
Greg,

As per our correspondence and meeting of this week, your reservation and treatment will be the status quo.

Jim and I will be in Monday should you wish to discuss.

Ron LeBlanc

Maritime Electric
Manager, Production and Energy Supply
Box 1328, 180 Kent Street
Charlottetown PE C1A 7N2

e-mail: leblanc@maritimeelectric.com
Phone: 902-629-3610
Cell: 902-626-7608
Fax: 902-629-3630

From: Terry Murphy
Sent: Thursday, November 22, 2007 7:11 PM
To: gaudet@maritimeelectric.com
Cc: Greg Gaudet; Hooley, David (Cox and Palmer PEI); Malcolm Millar; coyle@MaritimeElectric.com; leblanc@maritimeelectric.com
Subject: FW: Mecl Transmission Request December 2007
John Gaudet

I spoke to you on this subject below this afternoon. I was of the understanding that you were going to look into this issue. As this e-mail was written after our conservation, please advise if this is the final position of MECL or are they going to live by the arrangements we had in previous years based on agreements that were previously signed by yourself?

With respect to this contract referred to below, it is the cities position that there should be no charge for the use of the provincially owned undersea cables as there is no equivalent rate in the NB tariff or at a maximum a separate OATT based on the operational cost of that Provincially owned component of the electric system.

If this position of MECL below continues, obviously the City of Summerside may have to reconsider its position with respect to the OASIS needs in the tariff. We will now have to consider taking the position that there has to be full separation of the transmission system from

the rest of MECL operations, similar to NBSO, so as to ensure a fair and unbiased decision on issues that will arise with respect to future transmission on PEI.

I am also giving you official notice with this e-mail that the City of Summerside will continue to submit transmission requests in similar manners that have been agreed to between our two companies and we expect these requests to be addressed as they have been in previous years. Should MECL not follow past practice until a new OATT is introduced and should any curtailment on services to City of Summerside customers result, the City of Summerside will hold MECL responsible for any and all damages that occur as a result of this action by MECL.

I will await your earliest response to this matter.

Terry Murphy
CAO
City of Summerside
275 Fitzroy St.
Summerside, PEI
C1N 1H9
Tel: (902)432-1248
Cell: (902) 432-2498

From: Coyle, Jim [mailto:coyle@MaritimeElectric.com]
Sent: Thursday, November 22, 2007 4:05 PM
To: Greg Gaudet
Cc: LeBlanc, Ron (Maritime Electric)
Subject: RE: Mecl Transmission Request December 2007

Greg, Greg As indicated in a previous e-mail by Ron LeBlanc, Maritime Electric will treat the City of Summerside as per section 13.3 of the Electricity Purchase Agreement between the City of Summerside and Maritime Electric dated May 31, 1996. "After the end of the Term of this agreement, MECL shall provide Transmission Access to Summerside across its transmission system on terms, including price, determined in a manner consistent with the manner in which Transmission Access is made available to MECL by NB Power."

The NB OATT states that non-firm transmission is curtailed before curtailments to firm, long term firm or network service in order to alleviate a constraint. MECL will be applying this methodology on the transmission system in PEI. During curtailments due to a constraint on the transmission system, all non-firm reservations will be curtailed prior to any reductions to firm or network service reservations. Should the curtailment of non-firm reservations not eliminate the

constraint, then firm and network service reservations will be reduced on a pro-rata basis based on load. This methodology will remain in affect until MECL's OATT is approved.

Your request for 13 MW of monthly firm transmission has been approved for the month of December, 2007. Also, the transmission path losses for the month of December, 2007 will be 3.0%. Please contact me if you have any questions or comments.

Thanks

Jim

Jim Coyle, C.E.T.
Supervisor, Energy Control Centre
Maritime Electric
Phone (902)629-3704
Fax (902)629-3630
Cell (902)626-9107

mailto:coyle@MaritimeElectric.com

From: Greg Gaudet
Sent: Tuesday, November 20, 2007 4:52 PM
To: Jim Coyle (coyle@maritimeelectric.com); Ron LeBlanc (leblanc@maritimeelectric.com); ECC Operator (EccOper@MaritimeElectric.com)
Cc: Terry Murphy; Trevor Harris; Ron Curtis
Subject: Mecl Transmission Request December 07
Gentlemen,

The City of Summerside request's 13 mw's of firm transmission for the month of December 07. All other reservations above 13 mw's will be hourly. The City understands the rate of the transmission reservations are at 95% of the present OATT in effect in New Brunswick. Can you please confirm this request by email to those listed above and also indicate the transmission losses for the month of December 07.

The City is of the understanding that during the month of December any transmission contraints which may cause a curtailment of transmission request on the hourly reservations will only take into the account the transmission capability of the On-Island MECL owned transmission system and not the transmission capability of the provincially owned interconnect tie between New Brunswick and Prince Edward Island. As per previous communicae's between our companies the City is of the opinion that the City's entitlement to this interconnect is based on a ratio share of population of the City of Summerside to that of the rest of the Island and at the very least, curtailments will be based on past practice and precedence.

Thank you.

Greg Gaudet, P.Eng.,
Director of Municipal Services

City of Summerside
94 Ottawa Street
Summerside, PE C1N 1W3

Direct Line: 902-432-1272
Facsimile: 902-436-4255
Mobile: 902-439-5776
E-mail: ggaudet@city.summerside.pe.ca
Website: www.city.summerside.pe.ca

From: Leblanc, Ron (Maritime Electric) [Leblanc@MaritimeElectric.com]
Sent: Thursday, November 25, 2004 12:15 PM
To: Greg Gaudet
Subject: FW:
Greg,

As requested

Ron

From: Coyle, Jim
Sent: Thursday, November 25, 2004 12:13
To: Leblanc, Ron (Maritime Electric)
Subject:

Greg,

As discussed last year when the City of Summerside ceased being an energy customer of Maritime Electric, cable allotment was to be based on loads, and that rationale for cable allotment has not changed. The City of Summerside and Maritime Electric get equal use of the cables on a load basis.

For example, if the cables are overloaded by 20%, each utility will then see a reduction in their use by 20% such that the cables are no longer overloaded. Please see the attached spreadsheet for the calculation.

If you have any questions please call

Jim Coyle, C.E.T.

Supervisor, Energy Control Centre
Maritime Electric
Phone (902)629-3704
Fax (902)629-3630
Cell (902)626-9107

mailto:coyle@MaritimeElectric.com

Schedule I-4

geg 11

Table 07DEC07-1 : Hours When Peak Load Exceeded 200 MW

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)	
2001	0	0	Actual
2002	2	7	Actual
2003	2	6	Actual
2004	16	68	Actual
2005	8	33	Actual
2006	35	176	Actual
2007	56	410	Forecast
2008	73	621	Forecast
2009	89	831	Forecast
2010	131	1 630	Forecast
2011	173	1 744	Forecast
2012	211	2 672	Forecast
2013	260	3 850	Forecast
2014	294	5 309	Forecast
2015	332	7020	Forecast

Hourly Data - Hour Ending

Dec 09 2002 17 00	205	5	Actual
Dec 16 2002 17 00	202	2	7 Actual
Dec 22 2003 17 00	204	4	Actual
Dec 22 2003 18 00	202	2	6 Actual
Dec 06 2004 17 00	206	6	Actual
Dec 06 2004 18 00	201	1	Actual
Dec 07 2004 17 00	203	3	Actual
Dec 13 2004 17 00	204	4	Actual
Dec 14 2004 17 00	205	5	Actual
Dec 14 2004 18 00	201	1	Actual
Dec 15 2004 17 00	209	9	Actual
Dec 15 2004 18 00	204	4	Actual
Dec 16 2004 17 00	204	4	Actual
Dec 16 2004 18 00	204	4	Actual

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)		
Dec 20, 2004 17:00	209	9		Actual
Dec 20, 2004 18:00	202	2		Actual
Dec 21, 2004 17:00	210	10		Actual
Dec 21, 2004 18:00	204	4		Actual
Dec 21, 2004 19:00	201	1		Actual
Dec 22, 2004 17:00	201	1	68	Actual
Dec 06, 2005 17:00	203	3		Actual
Dec 13, 2005 17:00	210	10		Actual
Dec 13, 2005 18:00	204	4		Actual
Dec 14, 2005 17:00	205	5		Actual
Dec 15, 2005 17:00	202	2		Actual
Dec 19, 2005 17:00	203	3		Actual
Dec 22, 2005 17:00	204	4		Actual
Dec 22, 2005 18:00	202	2	33	Actual
Dec 04, 2006 17:00	201	1		Actual
Dec 06, 2006 17:00	202	2		Actual
Dec 11, 2006 17:00	206	6		Actual
Dec 11, 2006 18:00	203	3		Actual
Dec 12, 2006 17:00	212	12		Actual
Dec 12, 2006 18:00	208	8		Actual
Dec 12, 2006 19:00	201	1		Actual
Dec 13, 2006 17:00	204	4		Actual
Dec 18, 2006 17:00	210	10		Actual
Dec 18, 2006 18:00	206	6		Actual
Dec 19, 2006 17:00	217	17		Actual
Dec 19, 2006 18:00	214	14		Actual
Dec 19, 2006 19:00	210	10		Actual
Dec 19, 2006 20:00	204	4		Actual
Dec 20, 2006 17:00	212	12		Actual
Dec 20, 2006 18:00	211	11		Actual
Dec 20, 2006 19:00	209	9		Actual
Dec 20, 2006 20:00	206	6		Actual
Dec 21, 2006 17:00	203	3		Actual
Dec 21, 2006 18:00	203	3		Actual
Dec 22, 2006 17:00	205	5		Actual
Dec 22, 2006 18:00	204	4		Actual
Dec 28, 2006 17:00	208	8		Actual
Dec 28, 2006 18:00	205	5		Actual
Dec 29, 2006 17:00	209	9		Actual
Dec 29, 2006 18:00	203	3	176	Actual
Jan 17, 2007 17:00	211	11		Actual
Jan 17, 2007 18:00	204	4		Actual
Dec 01, 2007 17:00	201	1		Actual
Dec 03, 2007 17:00	203	3		Actual
Dec 09, 2007 17:00	202	2		Actual
Dec 13, 2007 17:00	215	15		Actual
Dec 13, 2007 18:00	210	10		Actual
Dec 13, 2007 19:00	205	5		Actual

Date	Number of hours when load > 200 MW	Amount of energy > 200 MW (MWh)	
Dec 11, 2007 17:00	213	13	Actual
Dec 11, 2007 18:00	206	6	Actual
Dec 11, 2007 19:00	203	3	Actual
Dec 12, 2007 17:00	210	10	Actual
Dec 12, 2007 18:00	207	7	Actual
Dec 12, 2007 19:00	203	3	Actual
Dec 13, 2007 16:00	201	1	Actual
Dec 13, 2007 17:00	216	16	Actual
Dec 13, 2007 18:00	213	13	Actual
Dec 13, 2007 19:00	210	10	Actual
Dec 13, 2007 20:00	205	5	Actual
Dec 14, 2007 17:00	206	6	Actual
Dec 14, 2007 18:00	203	3	Actual
Dec 15, 2007 17:00	210	10	Actual
Dec 15, 2007 18:00	206	6	Actual
Dec 16, 2007 17:00	209	9	Actual
Dec 16, 2007 18:00	205	5	Actual
Dec 16, 2007 19:00	202	2	Actual
Dec 17, 2007 16:00	202	2	Actual
Dec 17, 2007 17:00	216	16	Actual
Dec 17, 2007 18:00	213	13	Actual
Dec 17, 2007 19:00	210	10	Actual
Dec 17, 2007 20:00	205	5	Actual
Dec 18, 2007 17:00	212	12	Actual
Dec 18, 2007 18:00	203	3	Actual
Dec 19, 2007 17:00	210	10	Forecast
Dec 19, 2007 18:00	207	7	Forecast
Dec 19, 2007 19:00	203	3	Forecast
Dec 20, 2007 16:00	201	1	Forecast
Dec 20, 2007 17:00	216	16	Forecast
Dec 20, 2007 18:00	213	13	Forecast
Dec 20, 2007 19:00	210	10	Forecast
Dec 20, 2007 20:00	205	5	Forecast
Dec 21, 2007 17:00	206	6	Forecast
Dec 21, 2007 18:00	203	3	Forecast
Dec 22, 2007 17:00	210	10	Forecast
Dec 22, 2007 18:00	206	6	Forecast
Dec 23, 2007 17:00	209	9	Forecast
Dec 23, 2007 18:00	205	5	Forecast
Dec 23, 2007 19:00	202	2	Forecast
Dec 26, 2007 17:00	204	4	Forecast
Dec 27, 2007 17:00	213	13	Forecast
Dec 27, 2007 18:00	210	10	Forecast
Dec 27, 2007 19:00	205	5	Forecast
Dec 28, 2007 17:00	214	14	Forecast
Dec 28, 2007 18:00	208	8	Forecast
Dec 28, 2007 19:00	205	5	Forecast
Dec 29, 2007 17:00	203	3	410 Forecast

COS coincident peaks would be added to the 161.3 MW and the 14 MW of Long-Term Firm Point-to-Point reservations shown for COS would be deleted.

6.12 Is the $6,052,000 being allocated based on a 1 CP or 12 CP?

Maritime Electric Response
In the Maritime Electric Tariff calculation the average 12 CP for the Network Load is used to allocate costs to the Network Load. See Schedules 1-2 and 1-4 in the Maritime Electric Tariff calculations.

6.13 In Schedule 1-4 of MECL's Tariff calculations, you are allocating costs directly to COS. Are these intended to be paid separately or to be included in the Point-to-Point charges?

Maritime Electric Response
The amount shown in Schedule 1-4 as being allocated to the Direct Assignment Facilities associated with COS would be billed to COS separately from the Tariff charges for Transmission Service.

It would not be sufficient to apply OATT Schedule 9 because this only recovers the OM&A costs associated with Direct Assignment Facilities. The $5000 shown in Schedule 1-4 includes capital related charges as well as OM&A.

6.14 Why is COS being treated differently? COS are coming off a point that is there. Why would COS pay a premium if they have already paid for the cost and we have no infrastructure cost. Will MECL be putting a stranded cost back into the system?

Maritime Electric Response
Under the OATT, facilities used solely to serve a single customer are classed as Direct Assignment Facilities and the costs associated with these Direct Assignment Facilities are charged to that single customer.

6.15 If there was a second Point-to-Point customer, would there be a charge in addition to the Transmission Tariff for that customer?

Maritime Electric Response
It would depend on whether there were any Direct Assignment Facilities required to serve that customer.

6.16 Is there an extra cost to MECL for the Direct Assignment Facilities associated with COS? Is the $5,000 the cost that MECL actually incurred?

Maritime Electric Response

No. The purpose of the OATT is to provide non-discriminatory access to the Maritime Electric Transmission System to all Eligible Customers. The City of Summerside is by definition an Eligible Customer and entitled to Transmission Service as per Part II or Part III of the Maritime Electric OATT. Maritime Electric Native Load customers will be purchasing Network Service and will be subject to all applicable policies, procedures and tariff charges contained in the approved OATT in the same manner as other Transmission System users based on the service they choose to purchase.

8. Reference: 2006 Cost of Service Study prepared for Maritime Electric Company Limited, Charlottetown, Prince Edward Island, Canada, prepared by Foster Associates Inc., Bethesda, Maryland, October, 2006, Schedule 2.2, Page 1 of 2, Line 3.

What portion of the $24,999,090 identified as the net transmission plant component of MECL's rate base is net investment in the two Northumberland Strait cables?

Maritime Electric Response

Schedule 1-1 of the Transmission Tariff Rates Design (Tab 3 of November 30, 2006 Tariff filing) shows that there is $0 of net investment in the submarine cables. See the line "Gov't owned interconnection", which refers to the submarine cables.

9. Reference: 2006 Cost of Service Study prepared for Maritime Electric Company Limited, Charlottetown, Prince Edward Island, Canada, prepared by Foster Associates Inc., Bethesda, Maryland, October, 2006, Schedule 4.1, Page 1 of 2, Column 6.

(a) *What portion of each line item in column 6, and of the total of $6,052,072, is directly attributable to the Northumberland Strait cables?*

Maritime Electric Response

See the line "Gov't owned interconnection" on Schedule 1-1 of the Transmission Tariff Rates Design (Tab 3 of November 30, 2006 Tariff filing)

Revenue Requirement	Cost of Service Study Schedule 4.1 Page 1 of 2 Column 6	Schedule 1-1 Line "Gov't Owned Interconnection"
Operation & Maintenance	$ 1,870,511	$161,000
Amortization	$ 1,464,184	$ 0
Financing Costs	$ 913,069	$ 0
Return for Common Equity	$ 1,089,109	$ 0
Income Taxes	$ 746,406	$ 0

The above table shows that $161,000 of the $1,870,511 total O&M for Transmission is directly attributable to the submarine cables while none of the capital related costs are directly attributable to the submarine cables. The above is based on a determination by Maritime Electric as part of preparing the November 2006 Tariff filing. Foster Associates did not treat the submarine cables as a separate line item for the purposes of the 2005 Cost of Service Study.

(b) *Please describe the methodology that would be consistent with this FACOS in attributing indirect or shared costs to the Northumberland Strait cables.*

Maritime Electric Response
See Page 13 of the Cost of Service Study, where Foster Associates describes the methodology they used in attributing indirect of shared costs, as follows:

"General plant costs incurred in the management "in support of plant" were functionalized in proportion to plant in service; costs incurred in the management "in support of labour" were functionalized in proportion to direct labour costs, using internal O&M as a direct proxy of labour expenses."

(c) *Based on the methodology identified in part (b), please quantify the indirect or shared costs that would, in MECL's view, be attributable to the Northumberland Strait cables.*

Maritime Electric Response
Maritime Electric used the methodology described in (b) above to allocate $105,000 of general costs to the submarine cables in Schedule 1-1. This results in the "allocated OM&A expense" of $266,000 ($ 161,000 + $ 105,000) shown for "Gov't owned interconnection" in Schedule 1-1.

10. *Please provide a table which compares demand on MECL's on-island transmission system with demand on the Northumberland Strait cables* ***for each hour*** *in 2005 and 2006. Specifically indicate the hours in which the total capacity of the Northumberland Strait cables was not available. Specifically indicate the hour in each month which was the PEI system peak hour for that month.*

Maritime Electric Response
This information will be provided in a separate attachment.

11. *With reference to the following components of the MECL Transmission System:*

- *North Cape Wind Gen. to Alberton SS;*
- *West Cape Wind Gen. to O'Leary SS;*