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April 23, 2010

RESS, EMAIL & COURIER

Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4

Attention: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

Re: Great Lakes Power Transmission LP - Responses to Technical Conference Undertakings (EB-2009-0408)

Attached are the responses of Great Lakes Power Transmission LP (GLPT) to undertakings arising from the Technical Conference held in connection with the above-referenced proceeding on April 14, 2010.

Yours truly,

Jonathan Myers

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Fax 416.865.7380
jmyers@torys.com

cc: All Intervenors
N. Mikhail, Board Staff
A. McPhee, GLPT
D. Fecteau, GLPT
C. Keizer, Torys LLP

EXHIBIT 12 - RESPONSES TO TECHNICAL CONFERENCE UNDERTAKINGS

Exhibit 12, Tab 1, Schedule 1

Responses to Technical Conference Undertakings

LIST OF UNDERTAKINGS

JT1.1 To remap graphs provided at Supplemental IR 6(I) with numbers 1 through 14 to match up table in Excel spreadsheet.

JT1.2 To Provide high-level estimates of incorporation of four new breakers and ancillary services that would arise from doing so within the redevelopment project.

JT1.3 To explain the seasonality effect used in the load forecast, and provide an example.

JT1.4 To advise expected changes to OM&A.

JT1.5 To provide depreciated value in 2005 and the gross and depreciated value as of the beginning of test year, together with breakdown of assets into classes.

JT1.6 To provide summary of all revenue requirement impacts of change to have OSCC operated solely by Transmission.

JT1.7 To confirm with auditors the difference between fair market value and face value of bonds.

JT1.8 To explain the two transactions at the bottom of page 10 of 12 of the financial statements.

JT1.9 To track the impact of two transactions on the test year.

JT1.10 To make reasonable efforts to advise tax consequences of GLPL puts and takes in the agreement.

JT1.11 To provide copies of any references in the March 2008 transaction to OSCC.

JT1.12 To provide presentation materials that went with both the capital plan and the five-year budgeted financial statements when they were approved.

JT1.13 To provide table showing December 31, 1995 gross and net book values for transmission assets and what happened with the comprehensive revaluation.

JT1.14 To provide the basis for the valuation.

JT1.15 To provide the collective agreement for unionized employees.

JT1.1 To remap graphs provided at Supplemental IR 6(I) with numbers 1 through 14 to match up table in Excel spreadsheet.

Response to Undertaking JT1.1

With reference to the materials that follow, please note that Graphs 1, 2 and 3 are based on one sample comprised of companies numbered 1 -14. Graph 4 is based on a different sample, which is comprised of some but not all of the companies 1-14, as well as additional companies numbered 15-19. The reason for using a different sample for Graph 4 is explained in the initial FQC Report filed at Exhibit 4, Tab 2, Schedule 1 at Appendix 'A'. The materials that follow include further explanation from First Quartile Consulting, LLC.

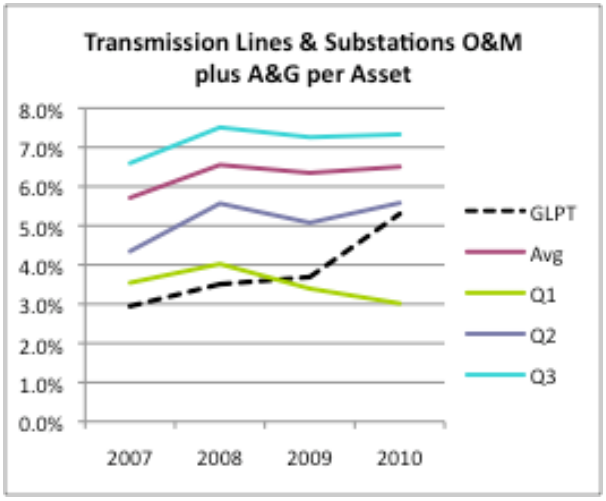
The graphs in this document are matched to the original 1QC report which was filed as testimony. In a previous interrogatory response, the numbers for the graphs (Graphs 1, 2, 3, and 4) were different from those in the original report. To avoid any confusion, the graph numbers in this response are matched to those in the original report.

In response to the most recent interrogatory, we have provided ID numbers for each company to match the demographic panel listing provided in a previous interrogatory (i.e. we have numbered each of the companies 1 through 14). Graphs and charts are provided below, using these identifiers consistently throughout.

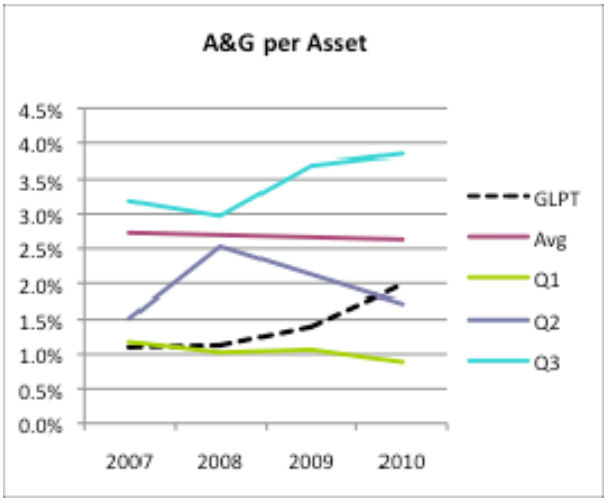
Note that in graphs 1, 2, 3, and 4, years 2009 and 2010 are projected based upon 2005 to 2008 actual data for all companies other than GLPT. For a few companies, only data from 2007 and 2008 were available, so the 2009 and 2010 forecasts for those companies used only the two years of actuals as the basis.

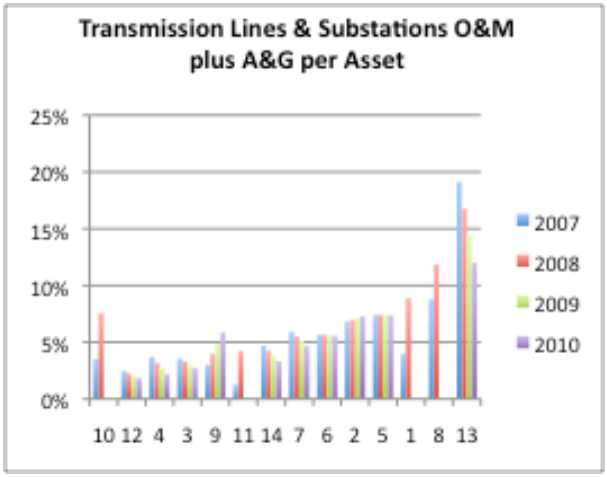
For graphs 1 and 2 below, only companies for which A&G data was available were used. GLPT compares favorably against this panel. Graph 2 shows just the A&G per asset. Clearly, while GLPT shows increasing A&G costs, the result is still very close to the median cost within the panel

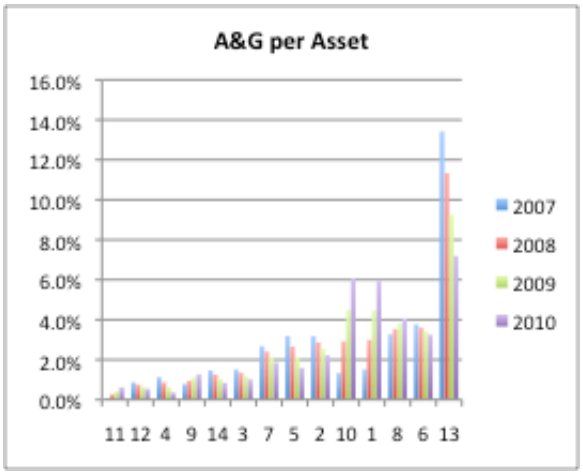
Graph 1



Graph 2

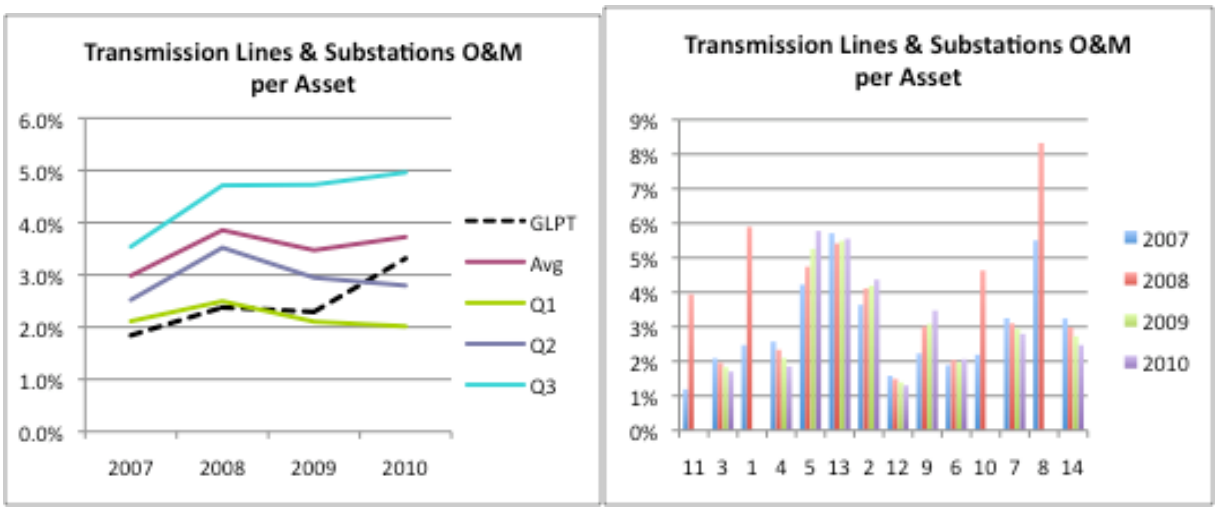






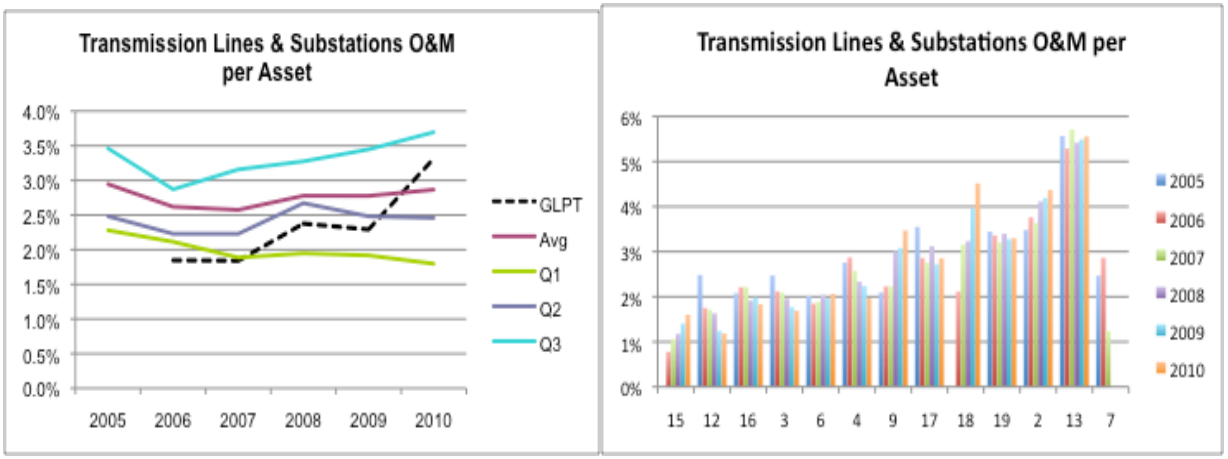
Graph 3 below shows the O&M costs without the A&G costs. Despite the expected increases in costs for GLPT, the overall result in the projected period is still below average.

Graph 3



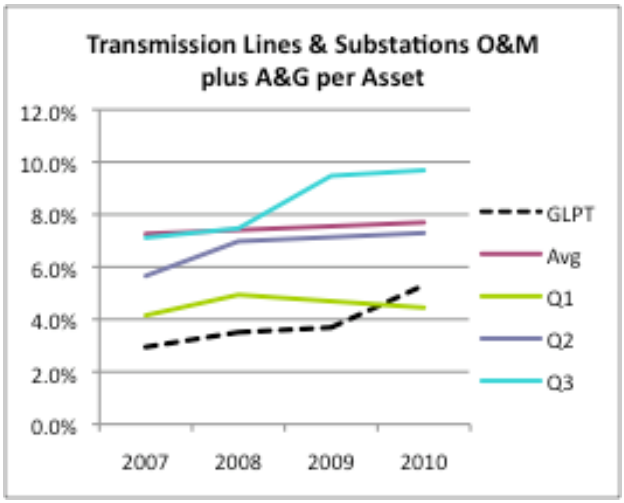
In Graph 4, GLPT was compared to our largest data set, which includes transmission lines and substations operations & maintenance costs and excludes A&G costs. Note that there are a few companies included in this group beyond those numbered 1-14. Individual data for those companies is shown at the end of this document, with the companies listed as numbers 15-19.

Graph 4:

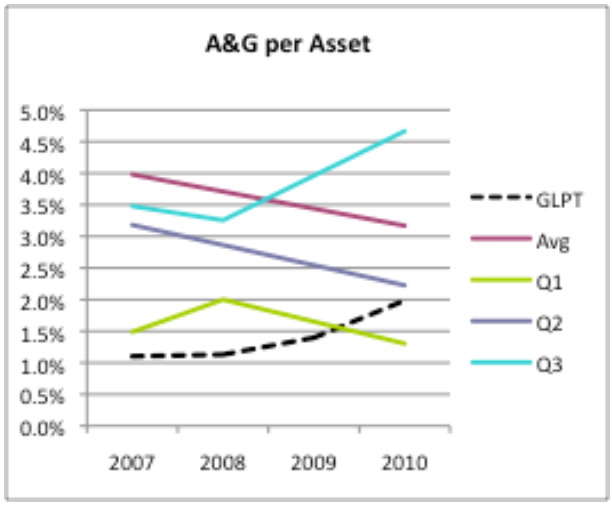


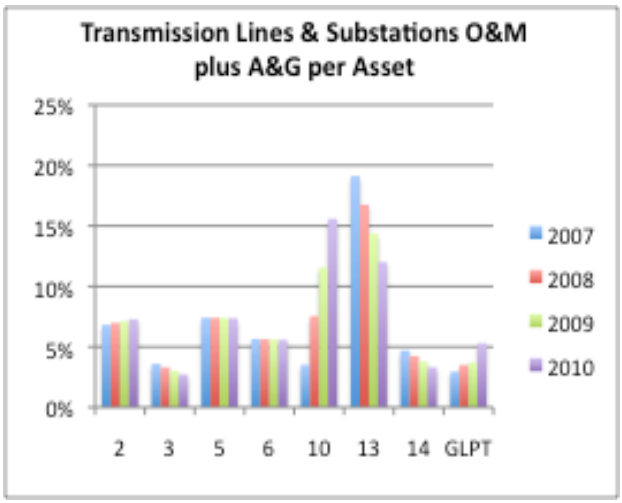
The following graphs have been modified so that only the companies in the chosen panel are included (companies 2, 3, 5, 6, 10, 13, 14).

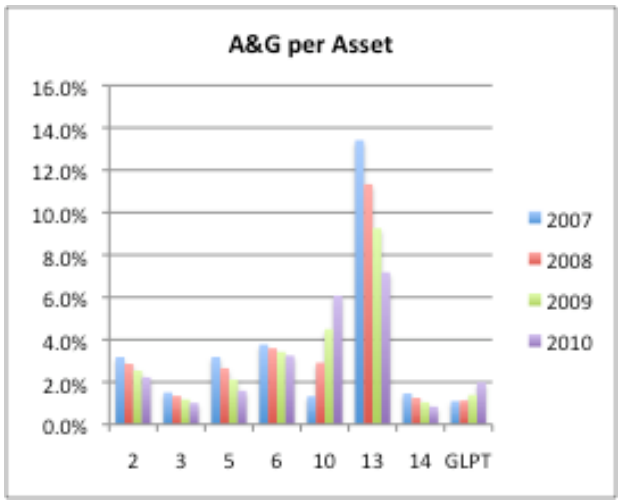
Graph 1



Graph 2

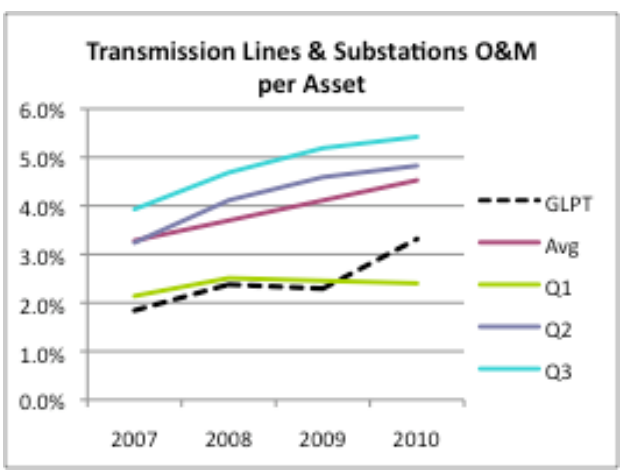


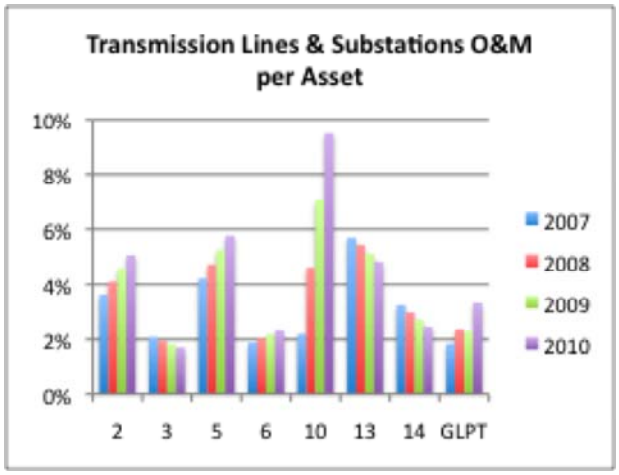




Graph 3 below shows the O&M costs without the A&G costs. Despite the expected increases in costs for GLPT, the overall result in the projected period is still below average.

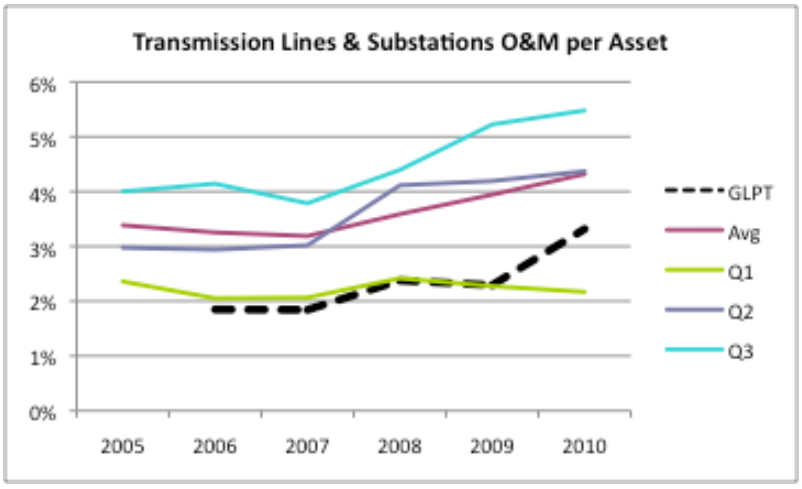
Graph 3

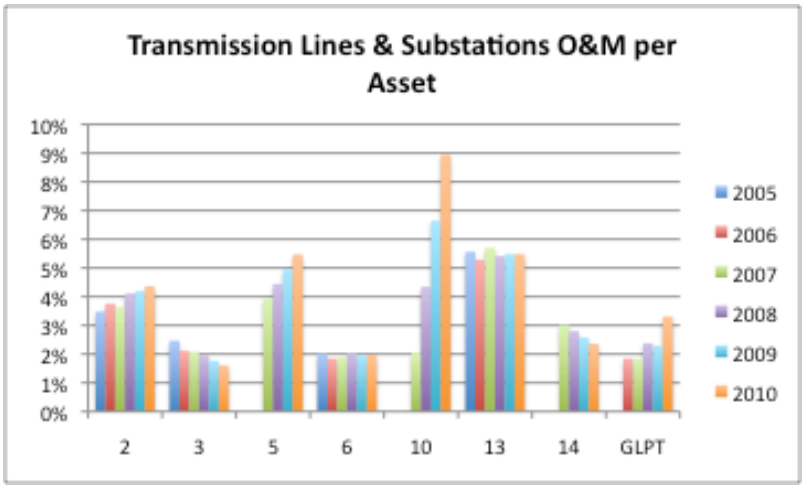




In Graph 4, GLPT was compared to our largest data set, which includes transmission lines and substations operations & maintenance costs and excludes A&G costs.

Graph 4:





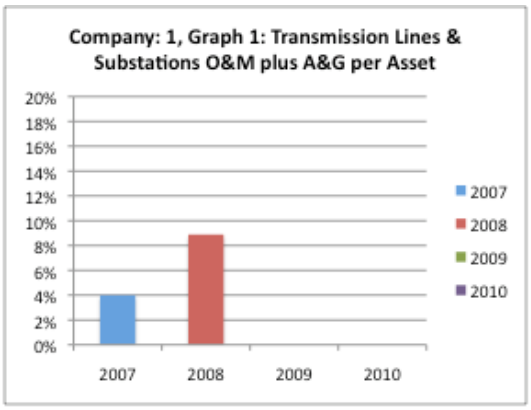
Individual Company Detailed Bar Charts

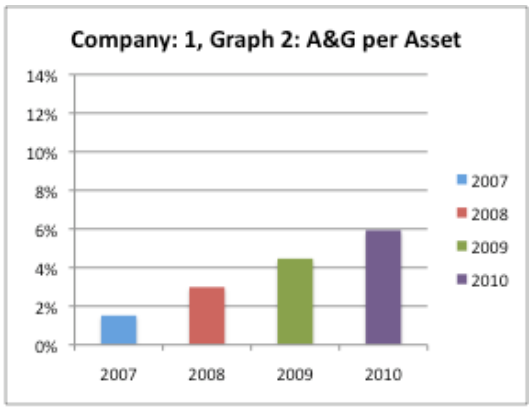
In this section, we provide the detailed bar charts for the individual companies, as requested in the interrogatory. For each of the 14 companies, there is a separate bar chart for Graphs 1-4.

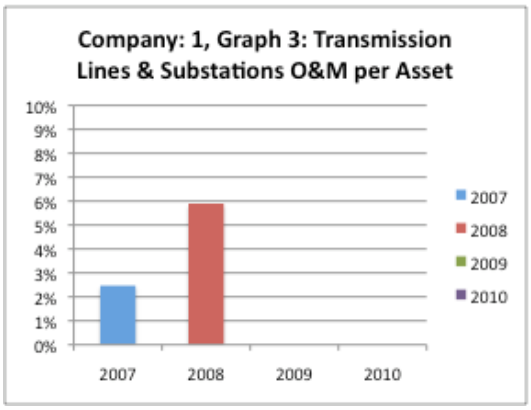
Additions to listing of panel companies.

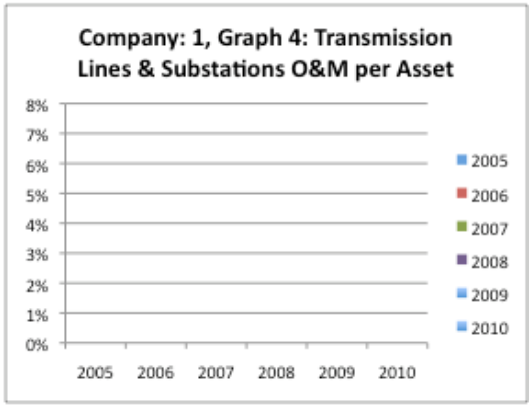
In a previous interrogatory response, we provided a listing of the companies included in the graphs. That listing was from the graphs where a subset of companies was chosen for which A&G data was available (companies 1-14). Graph 4 uses additional companies where A&G data was not available. We've updated the panel listing to include the additional companies. Details of graph 4 are provided below for the additional companies.

Company #1

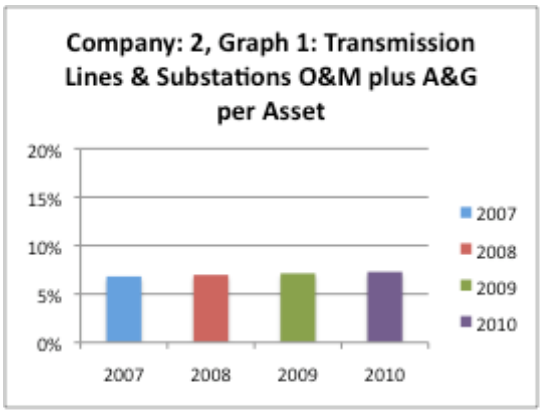

Company: 1, Graph 1: Transmission Lines & Substations O&M plus A&G per Asset
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

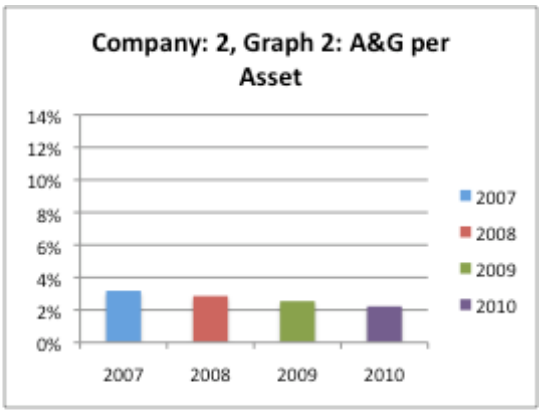

Company: 1, Graph 2: A&G per Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

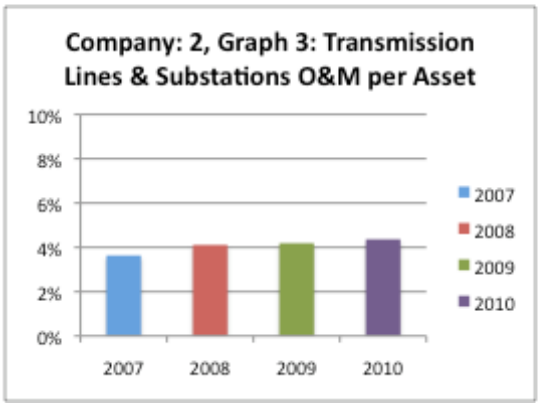

Company: 1, Graph 3: Transmission Lines & Substations O&M per Asset
10%
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
2007
2008
2009
2010
2007
2008
2009
2010

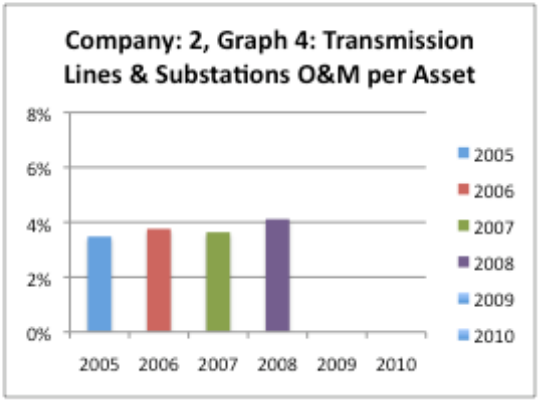

Company: 1, Graph 4: Transmission Lines & Substations O&M per Asset
8%
7%
6%
5%
4%
3%
2%
1%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #2

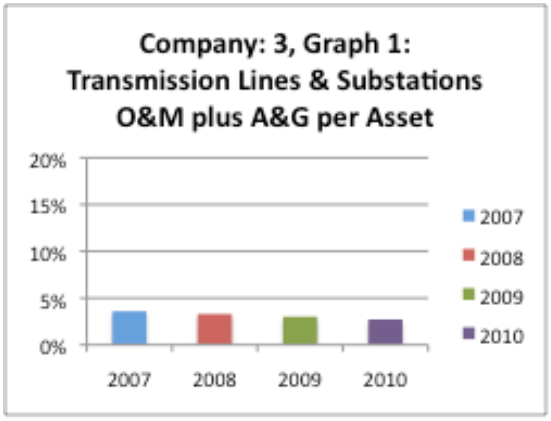

Company: 2, Graph 1: Transmission Lines & Substations O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

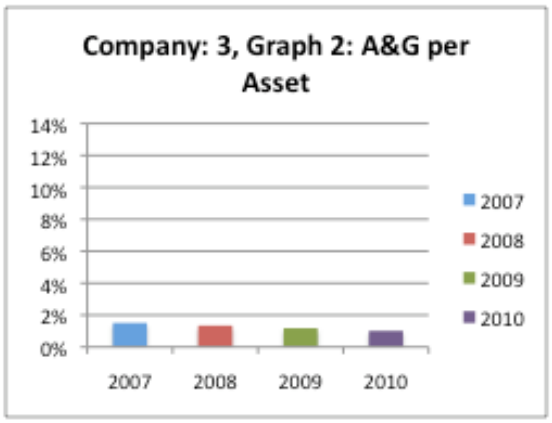

Company: 2, Graph 2: A&G per Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

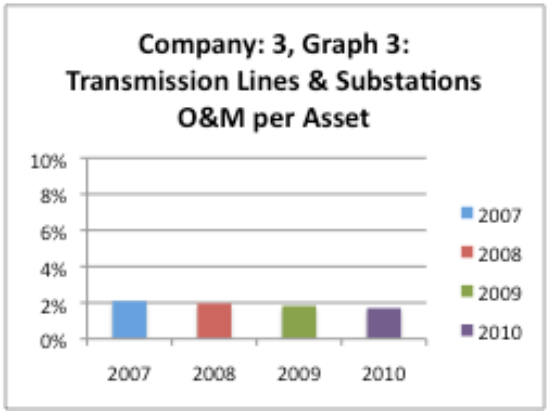

Company: 2, Graph 3: Transmission Lines & Substations O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

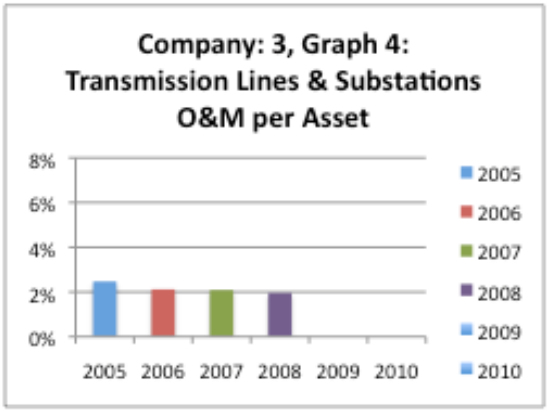

Company: 2, Graph 4: Transmission Lines & Substations O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #3

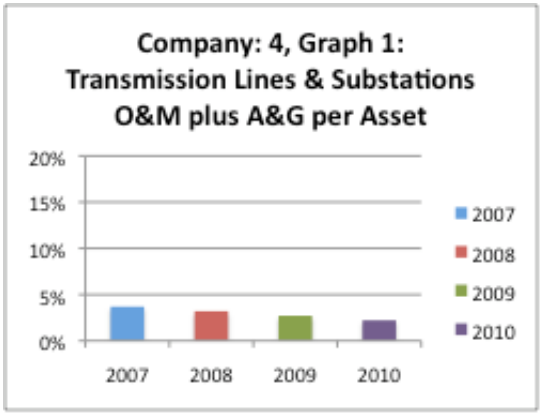

Company: 3, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

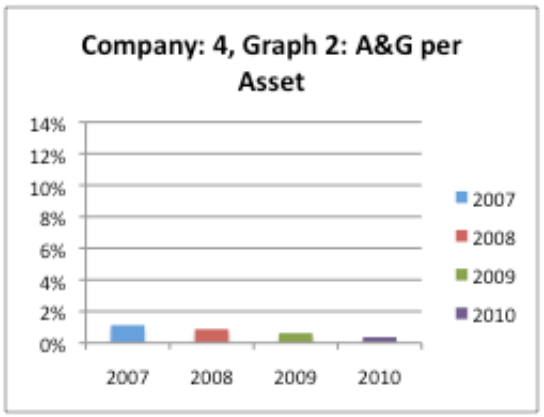

Company: 3, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

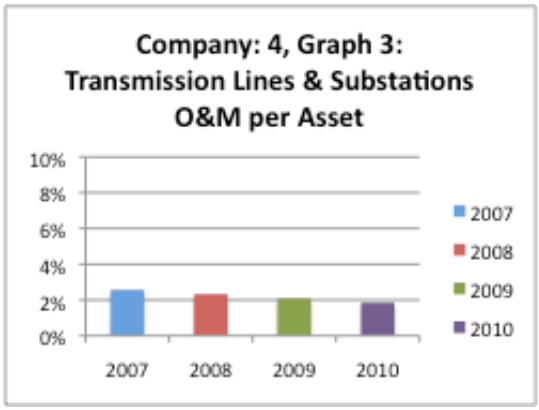

Company: 3, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

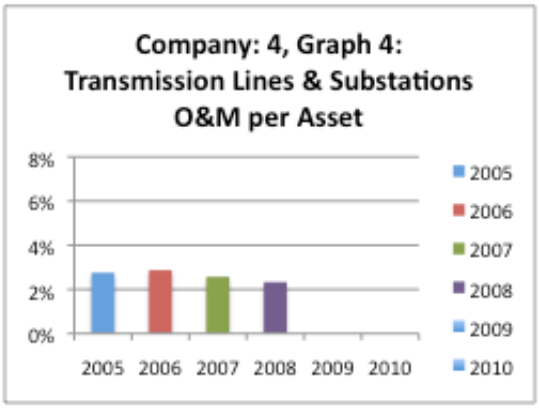

Company: 3, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #4

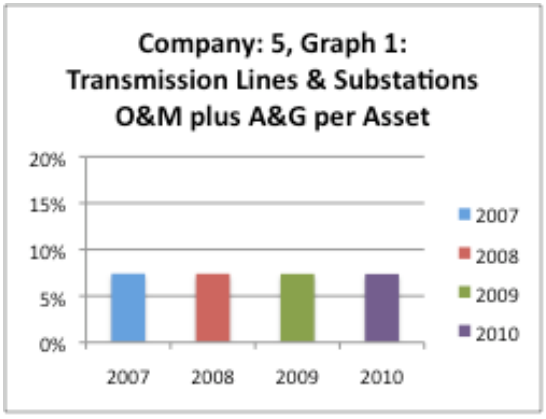

Company: 4, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

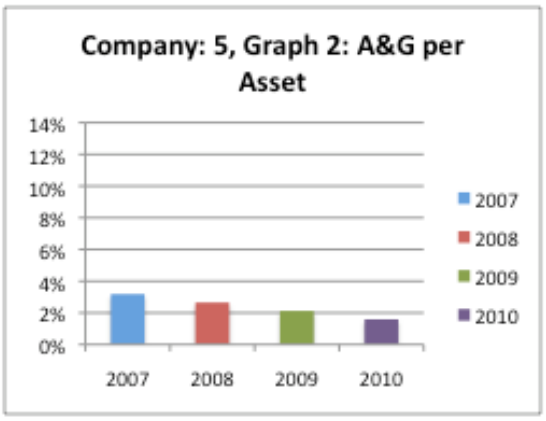

Company: 4, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

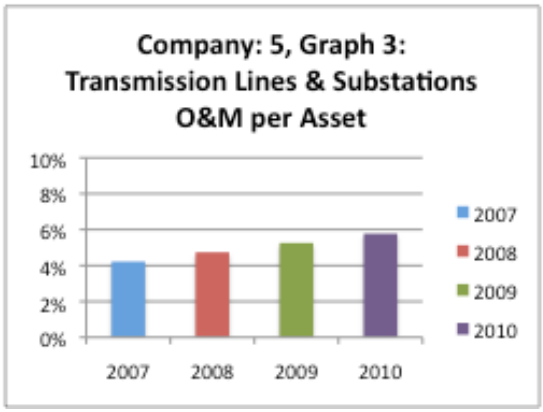

Company: 4, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

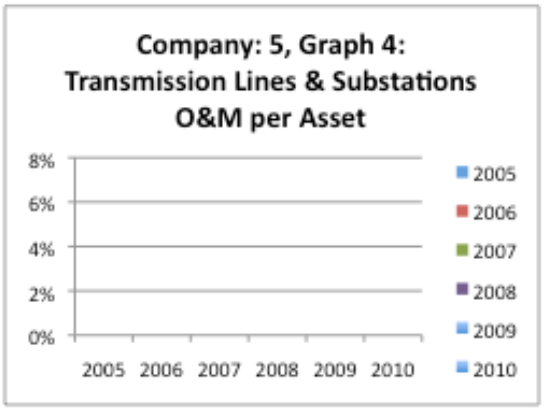

Company: 4, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #5

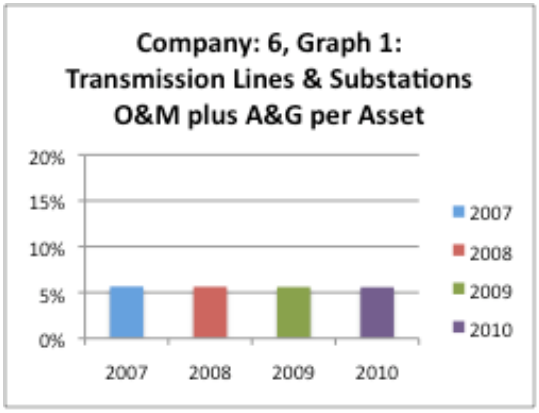

Company: 5, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

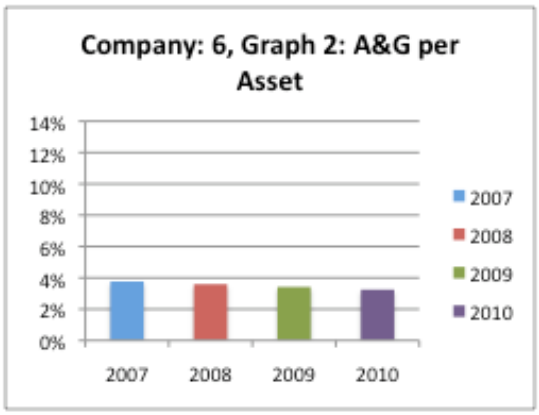

Company: 5, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

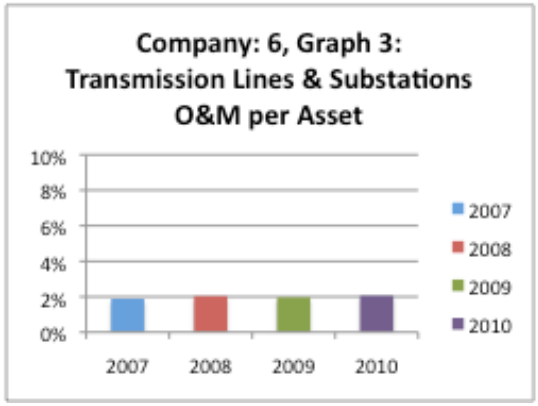

Company: 5, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

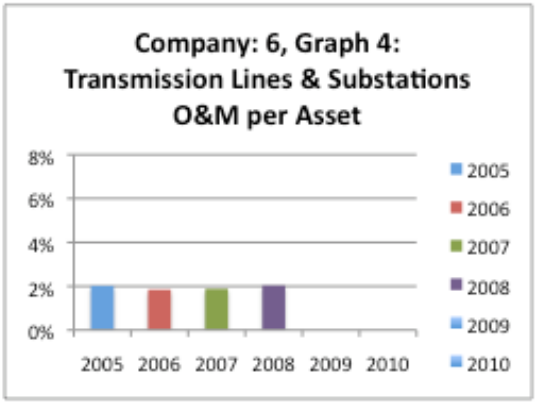

Company: 5, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #6

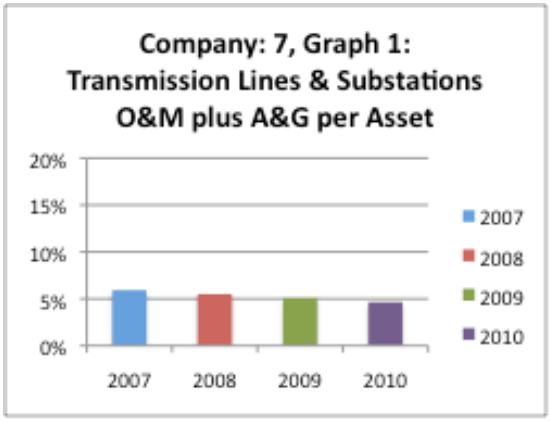

Company: 6, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

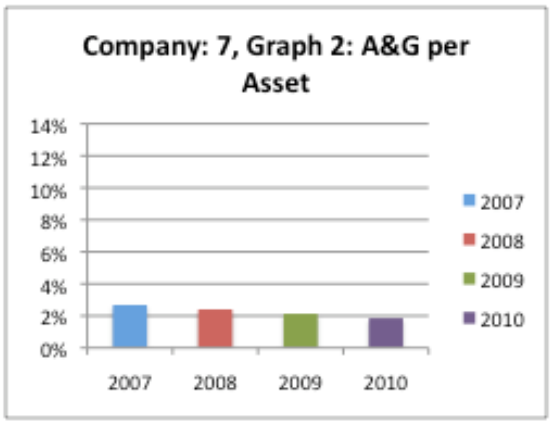

Company: 6, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

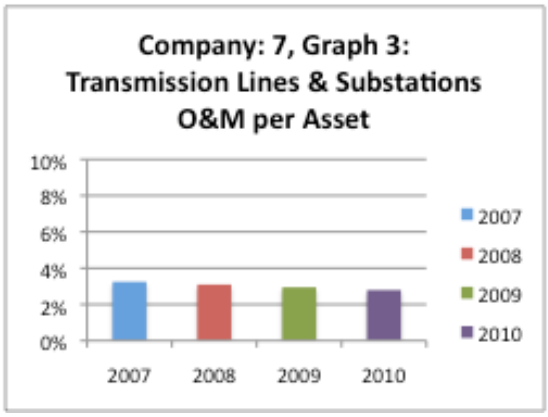

Company: 6, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

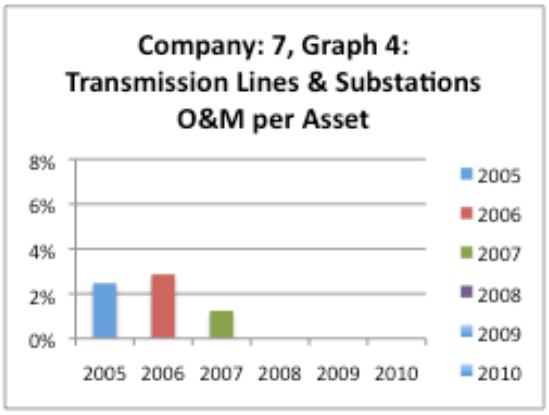

Company: 6, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #7

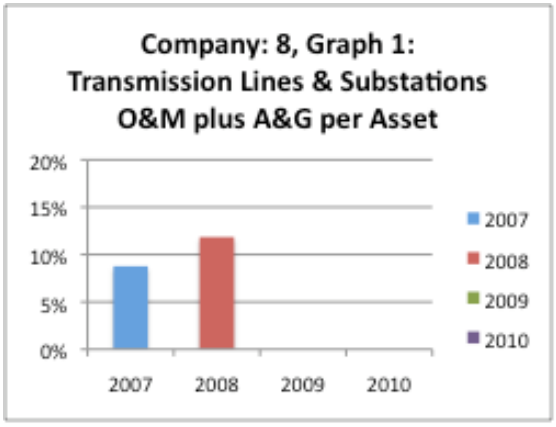

Company: 7, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

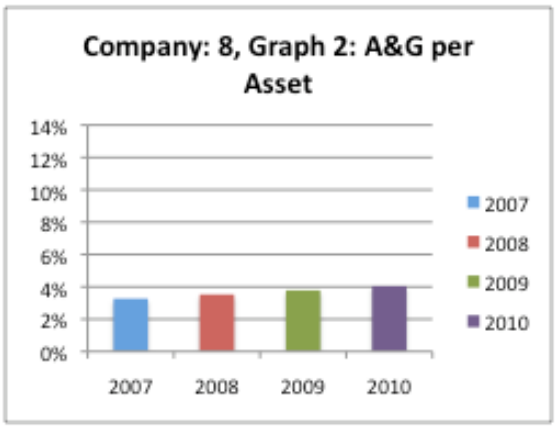

Company: 7, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

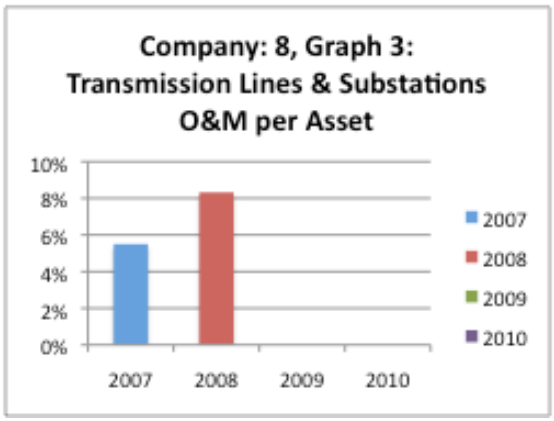

Company: 7, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

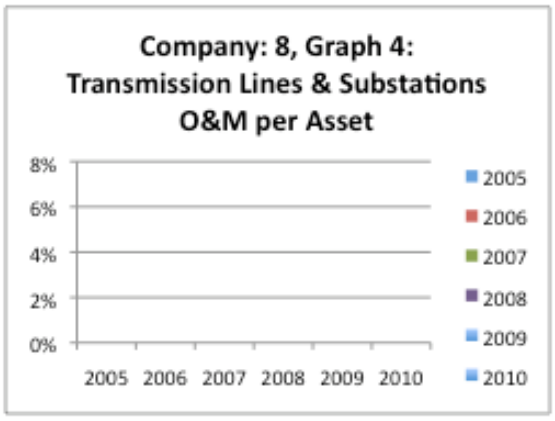

Company: 7, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #8


Company: 8, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010


Company: 8, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010


Company: 8, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010


Company: 8, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
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2009
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2005
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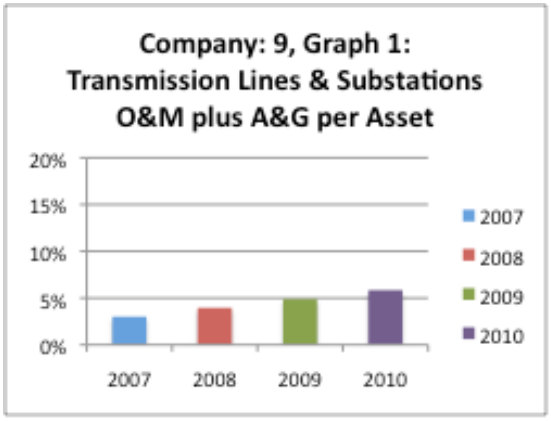
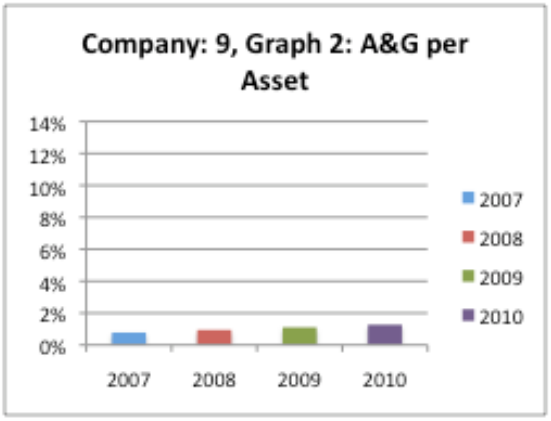
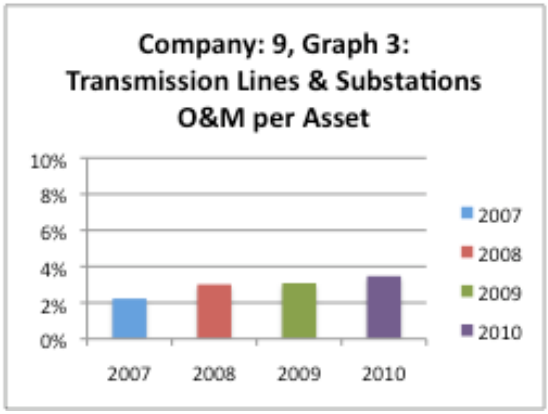
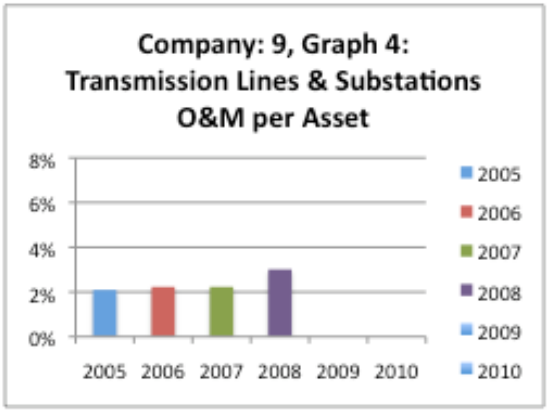
2007
2008
2009
2010

Company #9

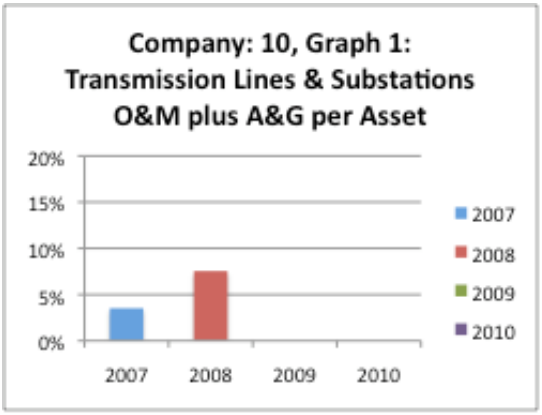

Company: 9, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

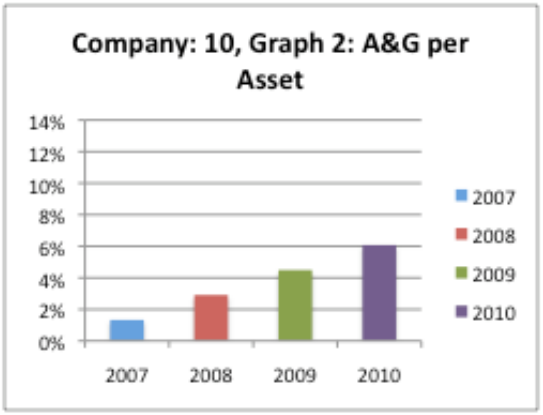

Company: 9, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

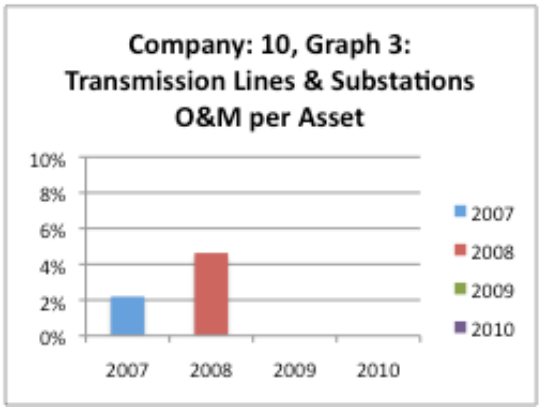

Company: 9, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

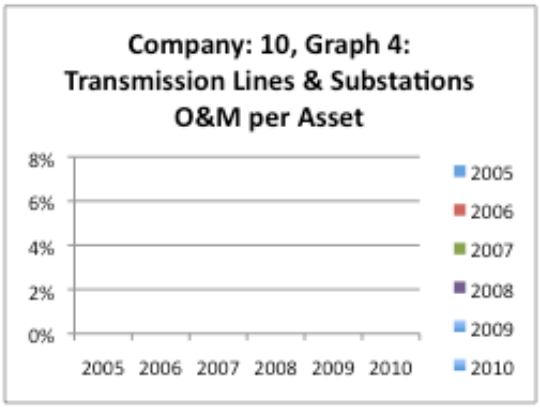

Company: 9, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #10

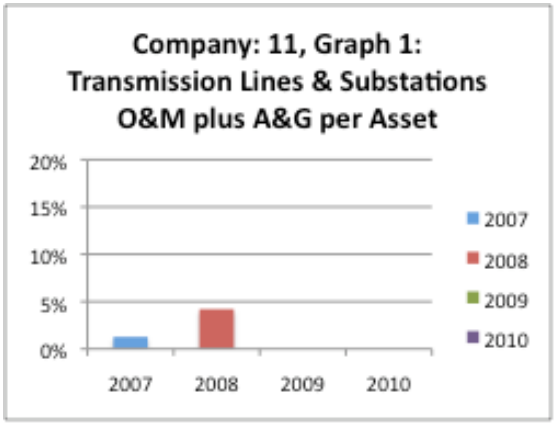

Company: 10, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

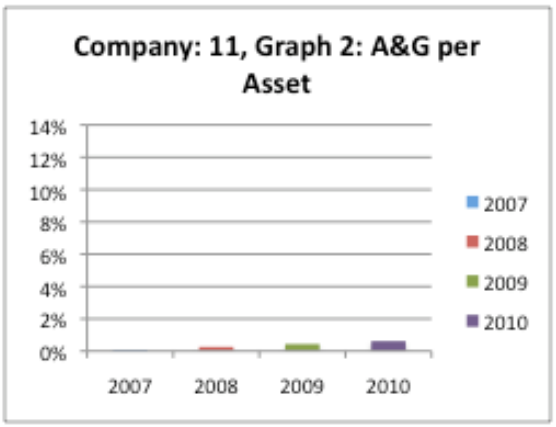

Company: 10, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

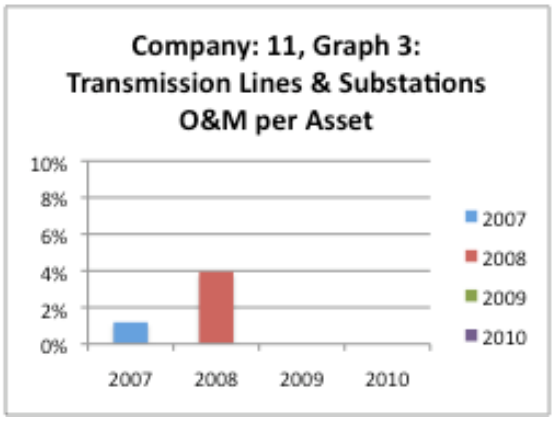

Company: 10, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

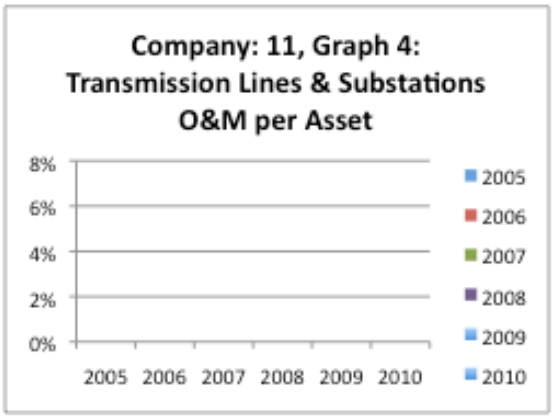

Company: 10, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #11

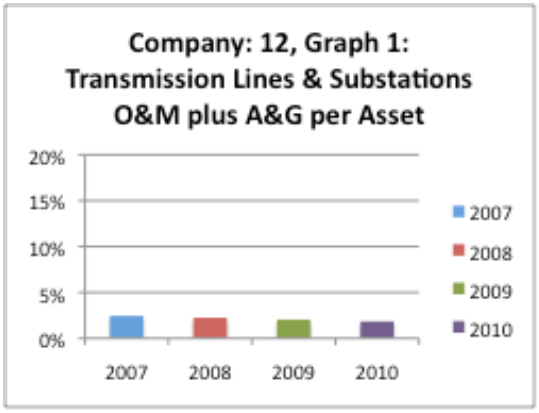

Company: 11, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

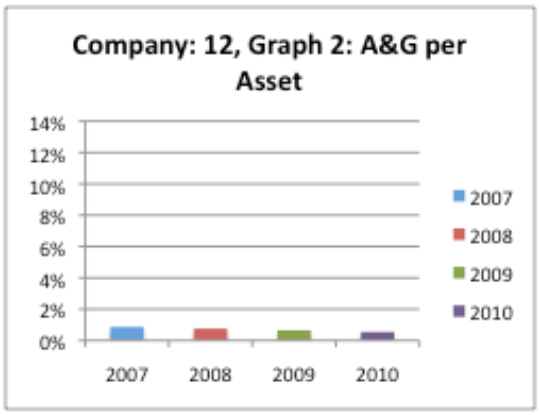

Company: 11, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

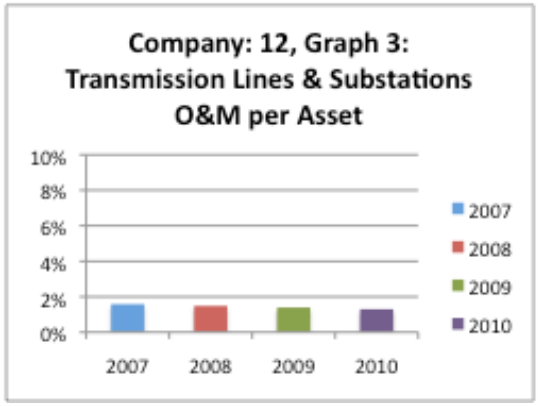

Company: 11, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

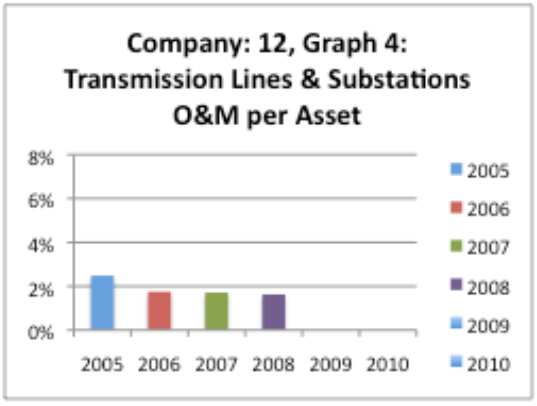

Company: 11, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #12

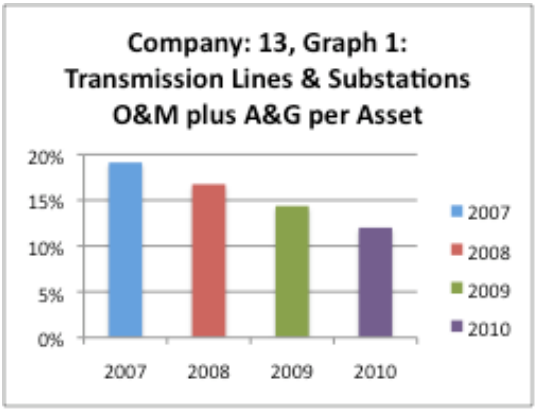

Company: 12, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

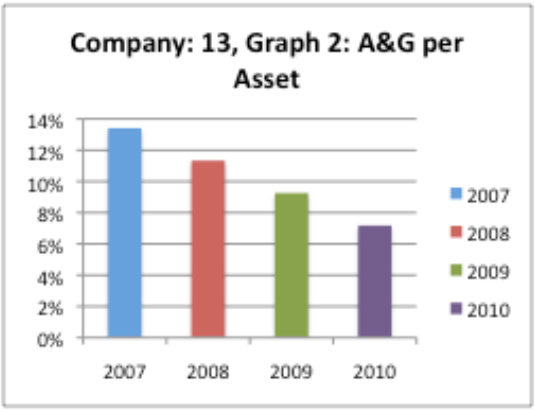

Company: 12, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

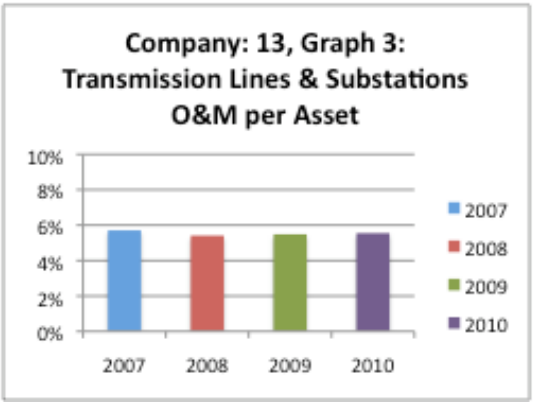

Company: 12, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

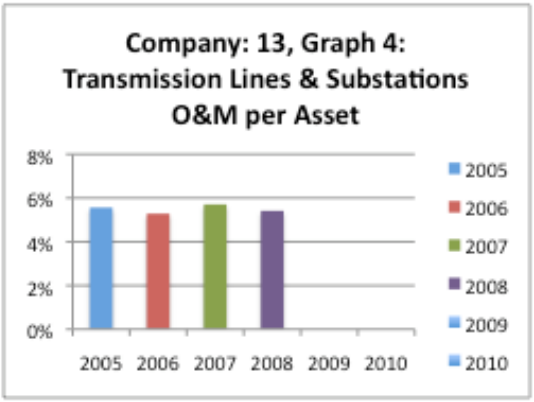

Company: 12, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #13

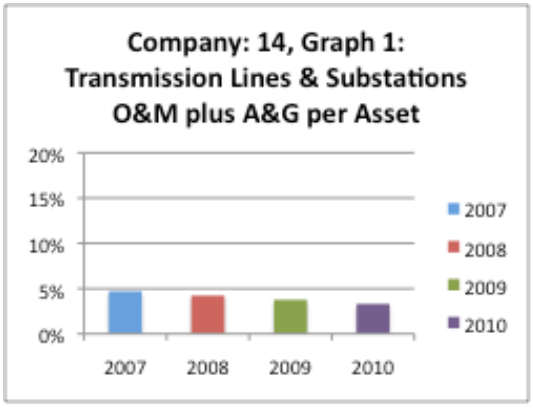

Company: 13, Graph 1:
Transmission Lines & Substations
O&M plus A&G per Asset
20%
15%
10%
5%
0%
2007
2008
2009
2010
2007
2008
2009
2010

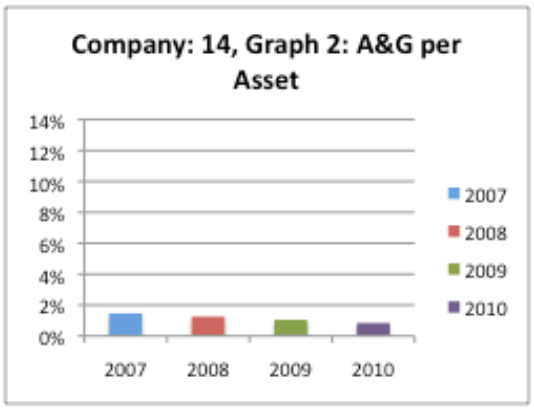

Company: 13, Graph 2: A&G per
Asset
14%
12%
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

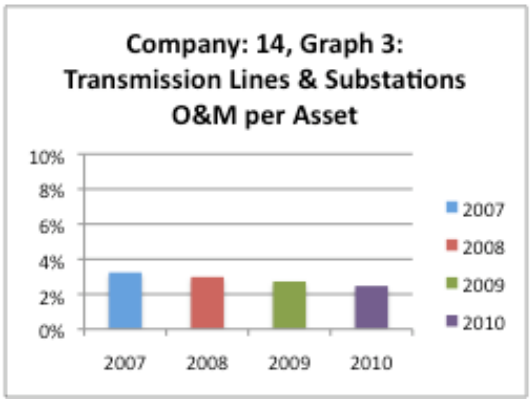

Company: 13, Graph 3:
Transmission Lines & Substations
O&M per Asset
10%
8%
6%
4%
2%
0%
2007
2008
2009
2010
2007
2008
2009
2010

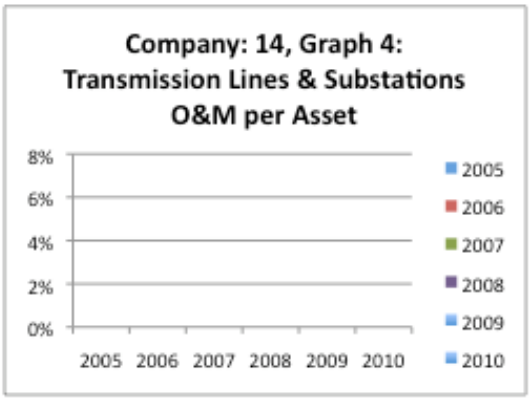

Company: 13, Graph 4:
Transmission Lines & Substations
O&M per Asset
8%
6%
4%
2%
0%
2005
2006
2007
2008
2009
2010
2005
2006
2007
2008
2009
2010

Company #14

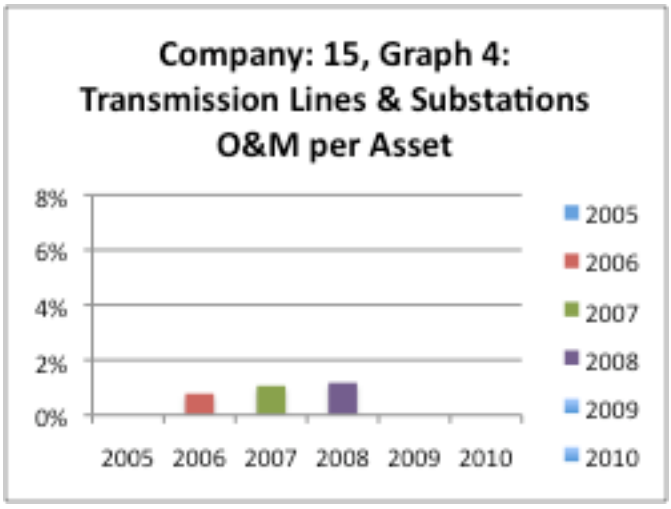




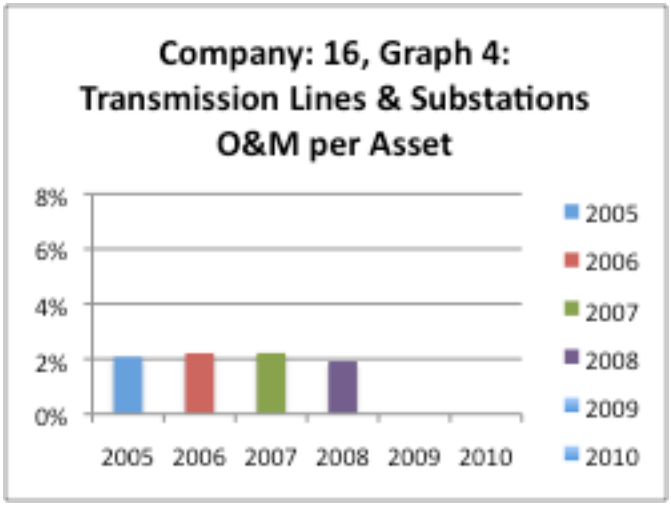




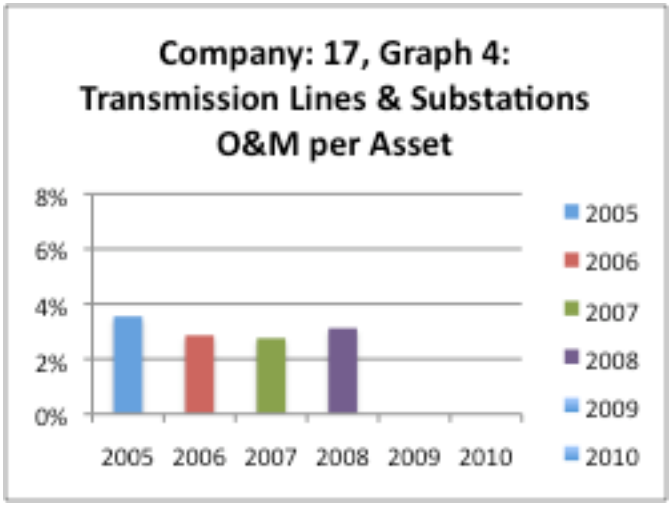
Company #15



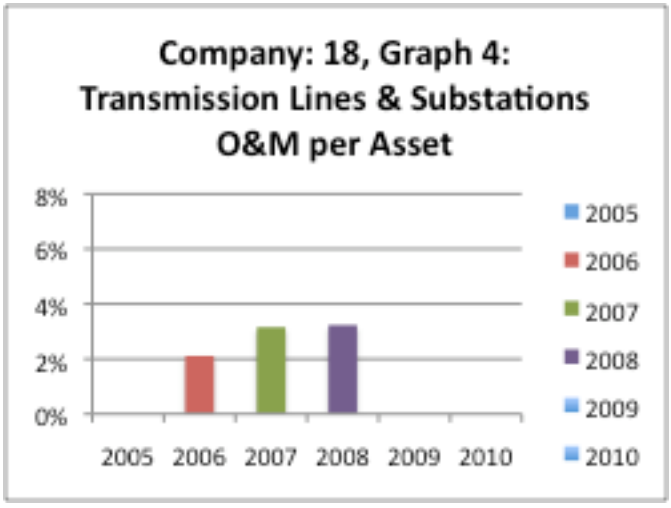
Company #16



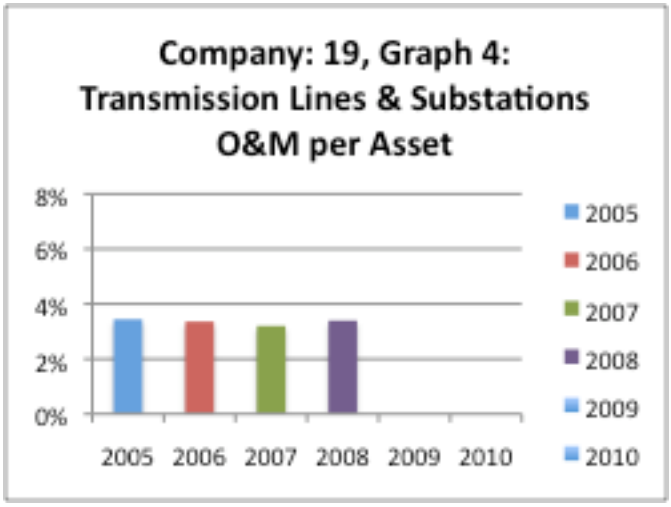
Company #17



Company #18



Company #19



Graph 1	Graph 1: Transmission Lines & Substations O&M plus A&G per Asset					
	2007	2008	2009	2010		
1	3.99%	8.89%				
2	6.82%	6.98%	7.13%	7.29%		
3	3.60%	3.30%	3.01%	2.72%		
4	3.70%	3.20%	2.71%	2.22%		
5	7.41%	7.39%	7.38%	7.37%		
6	5.66%	5.63%	5.61%	5.58%		
7	5.93%	5.50%	5.08%	4.65%		
8	8.77%	11.85%				
9	3.02%	3.96%	4.91%	5.85%		
10	3.53%	7.55%				
11	1.27%	4.21%				
12	2.45%	2.25%	2.05%	1.85%		
13	19.12%	16.75%	14.38%	12.00%		
14	4.70%	4.24%	3.78%	3.31%		

Graph 2	Graph 2: A&G per Asset					
	2007	2008	2009	2010		
1	1.518%	2.992%	4.465%	5.939%		
2	3.181%	2.863%	2.544%	2.225%		
3	1.510%	1.345%	1.180%	1.015%		
4	1.126%	0.873%	0.620%	0.368%		
5	3.186%	2.655%	2.123%	1.591%		
6	3.770%	3.597%	3.423%	3.249%		
7	2.678%	2.404%	2.129%	1.855%		
8	3.272%	3.529%	3.787%	4.044%		
9	0.786%	0.949%	1.112%	1.275%		
10	1.332%	2.915%	4.497%	6.080%		
11	0.083%	0.262%	0.441%	0.620%		
12	0.868%	0.760%	0.653%	0.545%		
13	13.413%	11.335%	9.257%	7.179%		
14	1.464%	1.257%	1.050%	0.843%		

Graph 3	Graph 3: Transmission Lines & Substations O&M per Asset					
	2007	2008	2009	2010		
1	2.47%	5.90%				
2	3.64%	4.11%	4.19%	4.37%		
3	2.09%	1.96%	1.83%	1.70%		
4	2.57%	2.33%	2.09%	1.85%		
5	4.22%	4.74%	5.26%	5.78%		
6	1.89%	2.03%	1.97%	2.06%		
7	3.25%	3.10%	2.95%	2.80%		
8	5.50%	8.32%				
9	2.23%	3.01%	3.08%	3.47%		
10	2.19%	4.63%				
11	1.19%	3.94%				
12	1.58%	1.49%	1.39%	1.30%		
13	5.71%	5.41%	5.49%	5.55%		
14	3.24%	2.98%	2.73%	2.47%		

Graph 4	Graph 4: Transmission Lines & Substations O&M per Asset					
	2005	2006	2007	2008	2009	2010
2	3.48%	3.76%	3.64%	4.11%	4.19%	4.37%
3	2.47%	2.12%	2.09%	1.96%	1.77%	1.69%
4	2.76%	2.87%	2.57%	2.33%	2.24%	1.97%
6	2.02%	1.85%	1.89%	2.03%	1.97%	2.06%
7	2.47%	2.86%	1.24%			
9	2.09%	2.23%	2.23%	3.01%	3.08%	3.47%
12	2.48%	1.75%	1.71%	1.63%	1.24%	1.18%
13	5.57%	5.29%	5.71%	5.41%	5.49%	5.55%
15		0.78%	1.06%	1.17%	1.40%	1.60%
16	2.08%	2.21%	2.22%	1.91%	1.98%	1.83%
17	3.55%	2.86%	2.76%	3.12%	2.73%	2.86%
18		2.11%	3.16%	3.23%	3.96%	4.52%
19	3.44%	3.36%	3.20%	3.40%	3.28%	3.30%

JT1.2 To Provide high-level estimates of incorporation of four new breakers and ancillary services that would arise from doing so within the redevelopment project.

Response to Undertaking JT1.2

Scenario	**Option 2 Total Station Cost $ 5 New Breakers (25 % Contingency Included)**	**Option 5 Total Station Cost $ 9 New Breakers (25 % Contingency Included)**
(I) **Expansion** - assume additional breakers to accommodate **4 New Positions**	25,800,000	28,900,000

JT1.3 To explain the seasonality effect used in the load forecast, and provide an example.

Response to Undertaking JT1.3

The easiest way to see exactly how the data were "deseasonalized" (using a standard approach) is to look at some example calculations. The Network data showed the most seasonality, so we will use that as the example. The first step is to compute the centered moving average for each month. This is done by averaging the 12 months in which the month is exactly in the middle. For example, if we want to compute the centered moving average for January, 2005 then we need the monthly average for the year that includes half of July, 2004, all of August,2004 through June, 2005, and half of July, 2005. So the centered moving average for January, 2005 is:

{(1/2)(289,047) + 301,251 + 324,273 + 332,120 + 336,125 +394,975 + 397,455 + 356,438 + 361,757 + 334,339 + 305,856 + 312,546 + (1/2)(310,030)} / 12 = 338,056

We then divide each month's actual value by its centered moving average to get its ratio. The ratio for January, 2005 is 397,455 / 338,056 = 1.175707. This indicates that January, 2005 was 17.5707% larger than the average month of the year in which it is in the middle. It is important to use the centered average because any trend effect will be precisely eliminated since the average is computed using exactly the same amount of data before and after the month.

The next step is to compute an average monthly ratio for each of the 12 months in the year. The ratios for all the January months in the Network data (computed exactly as shown for January, 2005) are:

- January, 2005: 1.175707
- January, 2006: 1.112661
- January, 2007: 1.127250
- January, 2008: 1.153349
- January, 2009: 1.186982

The average of these ratios is 1.151190.

In exactly this manner, the average monthly ratio for each month is computed.

The results are:

Month	Ratio
1	1.151190
2	1.113948
3	1.086986
4	0.992017
5	0.868426
6	0.924860
7	0.925068

8	0.924170
9	0.904005
10	0.955063
11	1.050709
12	1.099340

The next step is to scale these ratios so that they average exactly one. The average of the 12 ratios is 0.999648 so each ratio is divided by 0.999648. The results are (now the ratios average exactly 1):

Month	Ratio
1	1.151595
2	1.114340
3	1.087368
4	0.992366
5	0.868731
6	0.925185
7	0.925394
8	0.924495
9	0.904323
10	0.955399
11	1.051079
12	1.099726

This table was provided in the original analysis.

The next step is to divide each month's actual value by its ratio. This gives the deseasonalized value for that month. The deseasonalized value for January, 2005 is:

397,455 / 1.151595 = 345,134

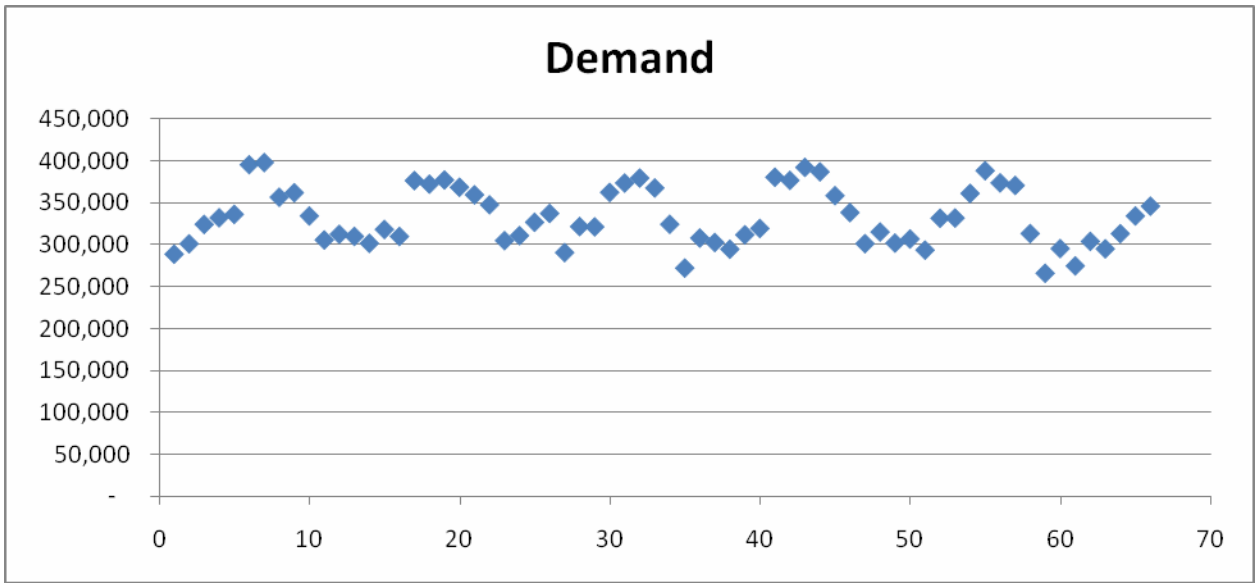
In exactly this manner, the deseasonalized value is computed for each month in the data set. The results are:

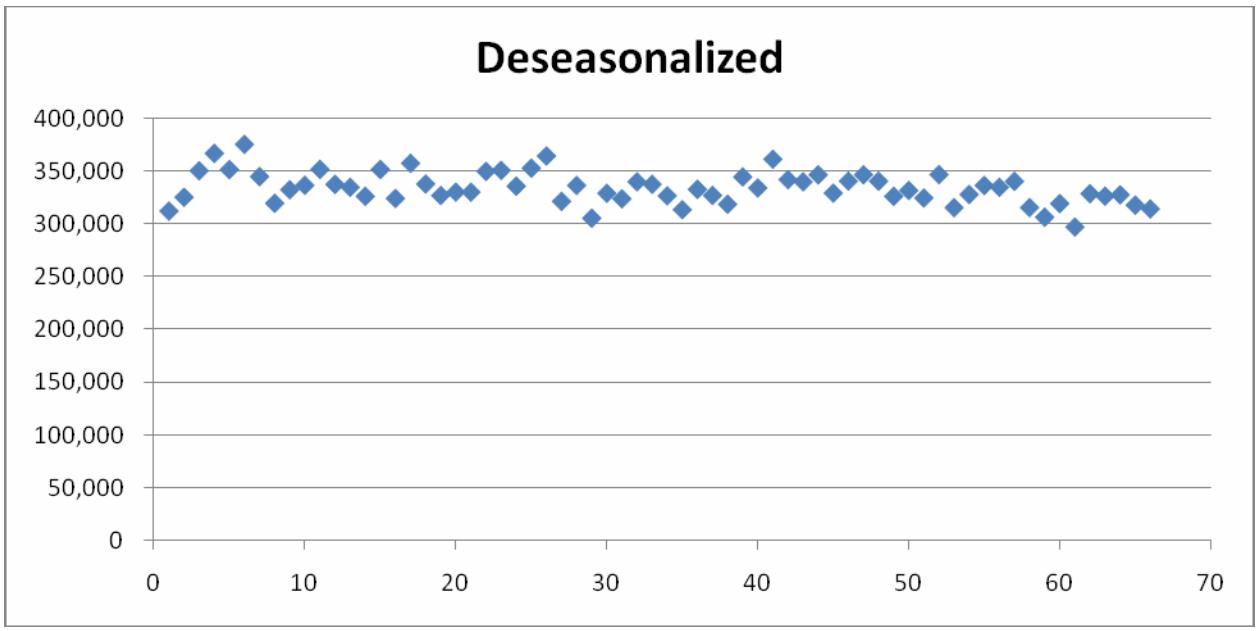
Month	Year	Deseasonalized
July	2004	312,421
August	2004	325,538
September	2004	350,757
October	2004	367,258
November	2004	351,816
December	2004	375,781
January	2005	345,134
February	2005	319,865
March	2005	332,690

April	2005	336,911
May	2005	352,072
June	2005	337,820
July	2005	335,025
August	2005	326,501
September	2005	351,956
October	2005	324,395
November	2005	357,861
December	2005	338,185
January	2006	327,250
February	2006	330,482
March	2006	330,399
April	2006	350,122
May	2006	351,118
June	2006	336,149
July	2006	353,179
August	2006	364,781
September	2006	321,664
October	2006	336,801
November	2006	305,734
December	2006	329,375
January	2007	324,098
February	2007	340,227
March	2007	337,881
April	2007	326,911
May	2007	313,714
June	2007	333,044
July	2007	327,318
August	2007	318,937
September	2007	344,896
October	2007	334,389
November	2007	361,666
December	2007	342,277
January	2008	340,259
February	2008	346,840
March	2008	329,494
April	2008	340,913
May	2008	346,936
June	2008	340,792
July	2008	326,469
August	2008	332,022
September	2008	324,902
October	2008	347,071
November	2008	315,741
December	2008	328,201

January	2009	336,778
February	2009	335,050
March	2009	340,634
April	2009	315,833
May	2009	306,679
June	2009	319,563
July	2009	297,287
August	2009	328,960
September	2009	326,657
October	2009	327,911
November	2009	318,049
December	2009	314,491

These deseasonalized values can then be examined for trend. It is important to remove the effects of the seasonality so that the trend can be properly evaluated. This can be seen by comparing the original data and the deseasonalized data:





These graphs were provided in the original analysis.

It is easier to spot a slight negative trend in the deseasonalized data than it is in the original data. Not only is deseasonalizing necessary to visually detect trend, it is necessary to statistically detect trend. For example, the popular r-squared measures the percent of the total variation in the data explained by the trend.

JT1.4 To advise expected changes to OM&A.

Response to Undertaking JT1.4

GLPT is not proposing to change the allocation of costs among its OM&A accounts (nor the overall OM&A amount) for the test year in this application. However, as demonstrated in the table below, it is GLPT's expectation that a re-allocation of funds from account 5630 ($30.5k), as well as a re-allocation of funds within account 5615 ($39.5k) will provide the required funding to fill an additional position in the accounting department (estimated at $70k). Any incremental costs that may arise as a result of these changes will *not* be incorporated in GLPT's 2010 revenue requirement to be recovered from ratepayers.

	Original 2010 OM&A ($000's)	Reallocation	Adjusted 2010 OM&A ($000's)
5615 General Administrative Salaries and Expenses	$ 1,286.00	$ 30.50	$ 1,316.50
5630 Outside Services Employed	1,062.10	(30.50)	1,031.60
	$ 2,348.10	$ -	$ 2,348.10

JT1.5 To provide depreciated value in 2005 and the gross and depreciated value as of the beginning of test year, together with breakdown of assets into classes.

Response to Undertaking JT1.5

The depreciated value at year end 2005 was $61,027,100.

The gross and depreciated values as of the beginning of the test year, together with a breakdown of assets into classes are set out in the following table.

Table JT1.5 A (in $000's)

USofA	2009 Gross Assets	Accum. Depr.	Net Book Value, 2009
1715	$42,050.0	($13,252.6)	$28,797.4
1720	14,016.7	(4,417.5)	9,599.1
1725	9,630.0	(3,825.4)	5,804.6
1730	13,244.2	(4,312.4)	8,931.9
	$78,940.9	**($25,807.9)**	**$53,133.0**

JT1.6 To provide summary of all revenue requirement impacts of change to have OSCC operated solely by Transmission.

Response to Undertaking JT1.6

The schedule below identifies the revenue requirement impacts related to the OSCC operated solely by Transmission. The highlighted lines in the table represent costs associated with the transition, and are summed at the bottom of the schedule for a total impact of **$928,933**. The first portion of the schedule identifies the impacts realized in accounts 4810 and 4845 (discussed together in Exhibit 4, Tab 2, Schedule 2, pages 6-9. The "Other Variances" section incorporates adjustments made to the revenue requirement during this proceeding. Finally, the "Incremental Building Costs" section incorporates the building costs associated with the OSCC, which are now borne by GLPT.

Revenue Requirement Impacts of OSCC

Account 4810 - Load Dispatching - 2008 Actual		$945,896
Account 4845 - Miscellaneous Transmission Expense - 2008 Actual		166,923
Subtotal 2008 OSCC Costs (including Communications)		**1,112,819**
		**Ties to Table 4-2-2 B*
Inflationary Measures (3% over two years)**	Cost Driver #2	66,769
NERC training (not related to stand-alone transition)	Cost Driver #2	30,000
Incremental SCADA Lease Costs	*Cost Driver #4*	*293,813*
Incremental Fibre Optic Lease Costs	*Cost Driver #4*	*63,150*
Incremental Labour and Labour Related Costs	*Cost Driver #2*	*328,800*
Incremental Equipment and Licencing Fees	*Cost Driver #2*	*92,300*
Other Incremental Costs from 2009	*Cost Driver #2*	*50,049*
Account 4810 & 4845 - 2010 Budget (Subtotal)		**2,037,700**
		**Ties to Table 4-2-2 B*
Other Variances:		
Less: 5% of SCADA Lease - Billed to API		*(14,691)*
Less: 5% of Fibre Lease - Billed to API		*(3,158)*
Add: Incremental Building Costs		
Total Office Complex Costs for GLPT (incl. lease)	872,618.0	
Less: Lease Billed to API	(139,221.0)	
Less: Other O&M Billed to API	(258,719.0)	
Office Complex Costs billed to GLPT	**474,678.0**	
Office Complex Costs related to OSCC (approximately 25%)		*118,670*
Total Revenue Requirement Impact		**$928,933**

JT1.7 To confirm with auditors the difference between fair market value and face value of bonds.

Response to Undertaking JT1.7

GLPT has confirmed the following with its auditors:

The fair value of the bonds disclosed at the bottom of Page 7 in GLPL Transmission's 2006 Audited Financial Statements was calculated in two separate pieces. The GLPL Senior bonds (a portion of which was related to the transmission division) were calculated with a fair value of $432,395,000 using a market rate of 5.391%, and the GLPL Subordinated bonds (none of which were related to the transmission division) were calculated with a fair value of $143,867,000 using a market rate of 5.467%. The disclosure of the fair value of the bonds is merely a disclosure item and does not affect any numbers in the financial statements.

JT1.8 To explain the two transactions at the bottom of page 10 of 12 of the financial statements.

Response to Undertaking JT1.8

The transactions found at the bottom of page 8 of GLPL transmission's 2006 audited financial statements (See Exhibit 11, Tab 1, Schedule 2, Appendix 16(i), p. 10 of 12) are described in the Notes as follows:

- Due to related parties settled through the allocation of First Mortgage Bonds ($27M), and
- Taxes payable settled through the allocation of First Mortgage Bonds ($20M).

The total dollar value of these transactions is $47M, and represents funds required to support GLPL Transmission Division's capital expenditures in 2005 ($44M of capital spending as noted in GLPT's audited 2005 statement of cash flows (See Exhibit 10, Tab 1, Schedule 2, Appendix 54(i))). In 2005, the debt was recorded in the transmission division, eliminating the due to related parties balance of $27M, and the taxes payable balance (payable to another division of GLPL) of $20M. As explained in Note 5 to the 2005 audited financial statements (See Exhibit 10, Tab 1, Schedule 2, Appendix 54(i)), the balance in the First mortgage bonds increased from $68,750,000 to $115,750,000 (a difference of $47M).

JT1.9 To track the impact of two transactions on the test year.

Response to Undertaking JT1.9

Table JT1.9 A

Calculation of the UCC impact of the two transactions			
GLPT tax values as at close of March 12, 2008		$188,410,400	(Board staff IR 60 (iii))
GLPL gain on sale of assets (50%)	(a)	8,774,210	(Board staff Supp. IR 18 (iii))
GLPT tax values after gain on sale of assets		179,636,190	
GLPL tax values as at March 31, 2008		140,310,080	(Board staff IR 60 (iii))
Increase from regulatory UCC (recapture)	(b)	39,326,110	
Increase in tax value related to the fair market value sale	(a)+(b)	48,100,320	
CCA tax deduction taken between March 12, 2008 - December 31, 2009		(3,752,133)	
		44,348,187	
Calculation of the impact on the NBV as at December 31, 2009			
Depreciated value of comprehensive revaluation as at December 31, 2009		**53,133,000**	(Per undertaking JT1.5)
Variance between net book value and UCC as at December 31, 2009		**$8,784,813**	

JT1.10 To make reasonable efforts to advise tax consequences of GLPL puts and takes in the agreement.

Response to Undertaking JT1.10

GLPL provided the following information to GLPT relating to the SCADA lease agreement:

- Funds paid from GLPT to GLPL are recognized as regular taxable revenue,
- The SCADA assets are part of a pooled UCC class,
- No unusual tax treatment exists with respect to the SCADA equipment (ie. Capital Cost Allowance is calculated in the pooled UCC class, and is deducted from taxable income)

GLPL has advised GLPT that there are no other incremental benefits realized by GLPL as a result of this SCADA agreement, and the recovery of only 50% of depreciation with no cost of capital.

JT1.11 To provide copies of any references in the March 2008 transaction to OSCC.

Response to Undertaking JT1.11

Please see section 2.2.1 of the Asset Purchase Agreement that has been filed at Exhibit 10, Tab 1, Schedule 2, Appendix 60(v). This December 11, 2007 Asset Purchase Agreement was included as Schedule B to an executed Certificate as to Material Contracts that formed part of the documentation associated with the March 2008 transaction.

JT1.12 To provide presentation materials that went with both the capital plan and the five-year budgeted financial statements when they were approved.

Brookfield Transmission (GLPT)

Business Plan Summary

2010-2014

2009 Review

thousands of CDN dollars	Q1	Q2	Q3	Q4	2009 Financial Results		
(unaudited)	Actual	Actual	Actual	Forecast	Forecast	Budget	Variance
Revenues	$ 8,907	$ 8,030	$ 8,756	$ 8,102	$ 33,795	$ 35,063	$ (1,268)
Operating Expenses							
Operating and administration	1,413	1,425	1,563	$ 1,937	6,338	6,197	(140)
Depreciation	1,684	1,687	1,877	$ 1,748	6,996	6,895	(101)
Maintenance	484	542	345	$ 363	1,734	2,513	779
Taxes, other than income taxes	127	127	139	$ 102	495	510	15
	3,708	3,781	3,924	4,150	15,563	16,115	553
Other income (Expense), net	(22)	(11)	(10)	(133)	(176)	(53)	(123)
	5,177	4,238	4,822	3,819	18,056	18,895	(838)
Expenses							
Interest	1,967	1,974	1,917	1,887	7,745	7,609	(136)
Loss on disposal of property, plant and equipment	412	413	413	412	1,650	1,649	(1)
Income taxes - current	679	243	562	331	1,815	2,111	296
Income taxes - future	243	295	226	125	889	1,016	127
Net income and comprehensive income	$ 1,876	$ 1,313	$ 1,704	$ 1,064	$ 5,957	$ 6,509	$ (552)

Variance Analysis

Revenue

Reduction in revenue is due to lower than anticipated peak loads in Ontario, the Ontario actual MW loads determine the monthly revenues for Transmission. The current economic downturn has resulted in lower than planned and previously approved loads. As a result of this, it is expected that Ontario Transmission will under earn in 2009. The most recent Independent Electricity System Operator (IESO) forecast indicates that, despite a cooler than normal winter, loads were lower as a result of the economy. Based on the new quantitative forecast produced by the IESO, it is anticipated that by the end of 2009, transmission revenue will be under budget. Load variance should correct itself in 2010 with the updated GLPT and Hydro One 2010 load forecasts,

Operating Expenses

Total expenses are expected to be under budget, primarily due to a reduction in major maintenance ($629K). The reduction in major maintenance was brought on by management as a response to the lower load forecast to help offset the decrease in revenue. The decrease in major maintenance was offset by an increase operating costs caused by the reorganization of transmission, legal and consulting expenses caused by an increase in Ontario Energy Board consultations.

Operational Highlights

1 Health and Safety Results excellent - 2009 safety audit was a detailed audit and we achieved a 89.5 rating vs. the last detail audit rating of 83.7 (2007).
2 Environmental Stewardship - achieved a 72 rating, lower than expected, need to focus on documentation
3 Operational Risk Management -No high risk incidents.

Portfolio Highlights

1	Transmission employees and related obligations transferred to GLPT	Completed July 1, 2009
2	Transfer of shared assets from GLPL to GLPT	Completed July 1, 2009
3	Development of 2010 Transmission Rate Application	To be filed in November 2010 for a January 2011 effective date
4	Capital program	Some delays in Capital program to coincide with rate application
5	Revenue target	Deficit of $1.2 million due to decrease Ontario loads
6	Achieve OM&A budget	Achieved OM&A with a reduction to help offset revenue decrease
7	Meeting with First Nations to discuss land usage.	On going discussions
8	OEB consultation on cost of capital	GLPT actively involved anticipate positive announcement by year end.
9	OEB incentive rates consultation	GLPT actively involved.
10	Transmission connection review	GLPT took a lead role in making submission for enabler lines.
11	Transmission directive	GLPT lobbied for directive and we believe directive provides opportunities.
12	Texas transmission	Brookfield and Isolux awarded $500 million in transmission line and station development.

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2010-2014 Initiatives

Transmission

	2010	2011	2012	2013	2014
Maintenance Capital Requirements	$7,458	$ 7,644	$7,836	$8,031	$8,232
Capital Expenditures					
Legislative Compliance	459				
Refurbishment/Replacement	12,728	21,649	10,854	4,410	13,019
External Demand					
System Improvements	2,263	2,076	1,488	1,635	660
Facilities, Tools and Equipment	754	737	479	378	581
Total Capital Expenditures	16,204	24,462	12,821	6,423	14,260
Growth Capital Expenditures	$8,746	$16,818	$4,985	-$1,608	$6,028

2010 Project Initiatives (For more detail see Capital Plan)

Legislative Compliance

Mackay TS Fire Suppression Installation	117
Third Line TS Fire Suppression Installation	155
Tx System Safety / Security Enhancements	187
	459

Refurbishment/Replacement

# 3 Sault Numbering	46
Northern Ave Transformer Leak Repair	74
Telecom upgrades	100
Transmission Line / Station Emergency work	174
Algoma #1, 2, 3 Refurbishment - engineering	347
Master SCADA System Replacement	407
OSC / Sackville building Genset	444
Minor Fixed Assets - 2010	481
Building Upgrades - 2010	541
Steelton St TS Gnd. Refurbishment	584
Third Line TS - Redevelopment	9,530
	12,728

System Improvement

Anjigami TS SS Voltage Regulator Installation	54
ROW Acquisition Planning	149
Centralized Information Retrieval - Upgrades	165
Engineering	165
Engineering	1,730
	2,263

Facilities Tools & Equipment

Fleet Requirements	130
Asset Management Software	183
GIS Software Purchase / Installation	193
IT Infrastructure	248
	754

Assessment of Operating Environment

GLPT is a licensed transmitter in Ontario. There are four other transmitters, the largest of which is Hydro One. Being the second largest, transmitter located in Northern Ontario, it services local industrial consumers and local distribution companies. Rates are set by the Ontario Energy Board in a Uniform Rates proceeding every few years. In the last rates proceeding, GLPL achieved full recovery of its rate base, attainted an 8.6% ROE with a 55/45 D/E ratio.

Barriers to Entry

- Ontario is underinvested. Generally, the asset base is older with many system inefficiencies. Accordingly, the Ontario Power Authority has indicated a number of large projects that will need to be completed in order to facilitate its renewable energy mandate. Once the mandate is complete, opportunities for transmission development will again slow down.
- First Nations have expressed concerns regarding development of any kind without consultation and agreement. New or expanded transmission Rights of Way will require good relations with First Nations communities.
- There are no franchise areas for Transmission, which makes all development work contestable.

Business Positioning

GLPT has participated and has been instrumental in a number of regulatory activities that will dramatically impact the business environment in which we operate.

Regulatory Treatment for Infrastructure Investment in the Transmission and Distribution of Electricity

On April 3, 2009, the Chair of the Ontario Energy Board issued a Statement confirming the Board's commitment to creating conditions that will foster timely and appropriate investment in electricity distribution and transmission infrastructure while ensuring that the interests of ratepayers continue to be protected. This initiative considered more innovative approaches to cost recovery for electricity infrastructure projects. In response to the Board Staff's discussion paper GLPT actively advocated in its written submissions for the enhanced recovery of costs associated with infrastructure investment and an incentive based ROE to reflect the added risks related to such investments.

Consultation on Cost of Capital

On March 16, 2009, the Ontario Energy Board initiated a consultative process to help it to determine whether current economic and financial market conditions warrant an adjustment to any of the Cost of Capital parameter values (i.e., the Return on Equity, Long Term Debt rate, and/or Short Term Debt rate) set out in the Board's letter of February 24, 2009.

On June 18, 2009, the Board advised stakeholders that it is proceeding with a review of its policy regarding the cost of capital. It is anticipated that any changes to the policy made as a result of this review will apply to the setting of rates for the 2010 rate year. GLPT, together with its consultant Power Advisory LLC, made a series of written and oral submissions to establish that the Board current equity risk premium formula used to establish ROE is not loner appropriate and to propose alternative approached that establish a higher and a fair return.

Transmission Connection Cost Responsibility Review

The Board has initiated a consultation process to examine the issue of cost responsibility associated with the connection of generation and load facilities to electricity transmission systems. The Board has decided to examine its cost responsibility policies at this time for a variety of reasons, including the large number of connections that are expected to be required for generation facilities using renewable sources of energy. In particular, GLPT took a lead role in making submissions related to the cost responsibility associated with enabler lines and the designation of transmitters responsible for their construction.

Transmission Directive

The Minister of Energy has issued a directive to Hydro One to proceed with major transmission infrastructure. It is anticipated that the infrastructure will be in excess of $2.1 billion with the majority to be completed by 2015. The Directive while specific to Hydro One does contemplate third party involvement. The Directive provides for Hydro One to enter into business arrangements with strategic partners to complete the require transmission or to transfer the construction of specific projects to a third party. GLPT has been directly involved with the Directive and we believe the Directive provides significant business opportunities for GLPT.

Transmission

ECONOMIC OUTLOOK

Foreign Exchange and Interest Rates: 2009-2013

		2010				2011	2012	2013	2014
		Q1	*Q2*	*Q3*	*Q4*				
FX Forwards									
CIBC	CAD/USD	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Interest Rates									
Long Term Debt Rates		6.600	6.600	6.600	6.600	6.600	6.600	6.600	6.600
Long Term Debt Rates (Effective Rate)		6.874	6.874	6.874	6.874	6.874	6.874	6.874	6.874
Short Term Debt Rates		1.330	1.330	1.330	1.330	1.330	1.330	1.330	1.330
TD - Deposit Rates	CAD 3mo Tbill	0.150	0.150	0.150	0.150				

Transmission Rate Application

The financial projections have been developed based on a successful 2010 transmission rate application with an effective date of January 1, 2010. The transmission rate application is based on a number of assumptions that are fundamental to the 2010 business plan. It is managements intent to manage to the outcome of the 2010 transmission rate application which in turn may require changes to operating expenditures.

Financing

The Business Plan assumed GLPT will be able to arrange for financing to meet all capital and dividend requirements over the next five years. The projection assumes financing will be available by June 30, 2010.

BALANCE SHEET ASSUMPTIONS

Cash

Cash balances are assumed to float around the $2M level, utilizing borrowing when necessary, and paying dividends when cash becomes available.

Account Receivable

Accounts receivables are based on current month revenue, collectible from the Independent Electricity System Operator ("IESO").

Prepaid Expenses and Other

Prepaid expenses include but are not limited to OEB fees, Canadian Electricity Association fees, Electrical Safety Authority fees, and insurance fees.

Property, Plant and Equipment

Property, plant and equipment consists both of capital assets as well as construction work in progress. Property, plant and equipment are depreciated on a straight line basis at rates between 2.5% and 20%. The majority of the assets are depreciated at 2.5%.

Construction Work in Progress

The company transfers assets classified as construction work in progress to property, plant and equipment when the asset being constructed is put into service.

Accounts and Other Payables

Accounts and other payables represents trade accounts payable supporting operating and capital expenditures, and the interest payable on all outstanding bonds.

Trade accounts payable at year end represents all operating and capital spending activity from the current month, and 50% of the activity from the previous month.

Interest on outstanding bonds is accrued monthly with interest payments made bi-annually in June and December.

Regulatory Liability

In the 2010 Transmission Rate Application GLPT proposes to consolidate all regulatory liabilities and assets into a single account and to disburse the aggregate balance over a two-year period. The consolidated deferral account balance is a liability balance of $2,829,000 as at December 31, 2009. This amount will be returned to the ratepayer over a three year period.

Taxes Payable

The Company is a Limited Partnership and as such does not pay tax at the company level. The company records a tax provision based on current taxes at the corporate level.

A provision for Income Taxes has been calculated for each year using the currently enacted tax rates. In calculating CCA for 2010-2014, the UCC table was re-established so UCC was equal to the purchase price of the Transmission assets at March 12, 2008.

First Mortgage Bonds

First mortgage bonds have been issued for CDN$120 million, the balance reflected on the balance sheet is net of finance fees that will be amortized over a 20 year period.

Under the current bond agreement, principle re-payments will begin in June 2013. It is assumed that the bonds will be re-financed and no principle re-payments will occur during the forecast period.

Interest on the first mortgage bonds is at a rate of 6.60% with an effective interest rate of 6.87%.

Intercompany Loans
Intercompany loans are assumed to be made between GLPT and an affiliated company at the OEB deemed rate of interest of 7.62%. the loan is assumed to be interest only, with interest paid monthly, The principal is repayable on demand.

INCOME STATEMENT ASSUMPTIONS

Revenue
Revenue for 2010 is calculated using the applicable revenue requirement calculation in the 2010 Transmission Rate Application. The revenue calculation in the 2010 Transmission Rate Application has been modified to take into account the actual corporate UCC table, a deemed debt to equity of 60/40 and the approved ROE of 8.01%.

Revenue for 2011 - 2014 is calculated using a Cost of Service approach to develop the company's annual revenue requirement. It is expected that the company will submit and receive approval for new revenue requirement effective January 1 of each year.

Expenses
Operations, maintenance, administration, insurance, property taxes and extraordinary expenditures are based on the approved 2010 budget for the company, and have been increased annually by the assumed inflation rate of 3%.

Capital taxes for 2010 are based on the approved 2010 budget for the company. Capital taxes will be eliminated by the Ontario government effective July 1, 2010.

Interest and Financing Fees
Interest expense is paid on the outstanding First mortgage bonds at an effective rate of 6.87%, actual interest rate is 6.60%, and on the outstanding intercompany loans at the OEB deemed interest rate of 7.62%.

Capitalized Interest
Interest on funds used during construction is charged to construction work in progress at the company's weighted average interest rate on all outstanding debt. Interest is charged based on monthly closing balances in the construction work in progress account.

Depreciation of Transmission Assets
Depreciation of the company's property, plant and equipment is forecasted based on net fixed asset values. Property, plant and equipment is depreciated on a straight line basis at rates between 2.5% and 20%. The majority of the assets are depreciated at 2.5%.

Total Tax and Other
The Company is a Limited Partnership and as such does not pay tax at the company level. The company records a tax provision based on currently enacted tax rates at the corporate level. Total tax and other represents the tax provision for each period.

Other Income
Where applicable, Other income would represent gains or losses from activities that are not operational in nature.

CASH FLOW ASSUMPTIONS

Depreciation and Amortization
Depreciation of the company's property, plant and equipment is forecasted based on net fixed asset values. Property, plant and equipment is depreciated on a straight line basis at rates between 2.5% and 20%. The majority of the assets are depreciated at 2.5%.

Non-Cash Working Capital
Items in non-cash working capital include: Accounts receivable, Prepaid Expenses, Regulatory Asset, Accounts payable, Income taxes payable, and Regulatory liability. The year-to-year variances in these accounts are reflected in the cash flow forecast.

Additions to Property Plant and Equipment
The cash flow budget is affected by the forecasted capital spending for each year. All capital spending is tracked through construction work in progress. The company transfers assets classified as construction work in progress to property, plant and equipment when the asset being constructed is put into service.

Dividends Paid
Dividends paid represent funds that are transferred to the parent company.

Dividends will be paid annually and will be based on both the cash flow generated in the previous year, and on maintaining a consistent debt/equity structure throughout the forecast period.

All dividend payments will abide by existing covenants on First mortgage bonds and Secondary bonds.

REGULATORY ASSUMPTIONS
Frequency of OEB Rate Filing
The assumption in the model is that a regulatory application will be filed for 2010, dual test year (2011 and 2012), and (2013 and 2014).

Working Capital
Working Capital rate base allowance for the Transmission Division is assumed at $200,000 for each year. This is around the level allowed in the 2005/2006 Transmission Rate Application.

Human Resources Plan

Summary Table

	2009 CURRENT Status	Count	2010 BUDGET Status	Count	VARIANCE Budget to Current
	FT	39	FT	50.75	11.75
	Temp	7.25	Temp	2.5	-4.75
	Cont	6.25	Cont	6.08	-0.17
		52.5		**59.33**	**6.83**

Planned Changes

		CURRENT Status	Count	BUDGET Status	Count	VARIANCE Budget to Current
Management						
Director of Operations	Will not hire in 2010					0
Health, Safety & Environment						
Health, Safety & Environment Specialist	Vacant			FT	1	1
Finance and Administration						
Buyer	Clint Robinson	Cont	0.25	Cont	0.25	0
Supervisor, Acctg & Procurement	Wes Crigger	Cont	0.5	Cont	0.33	-0.17
Engineering/Asset Mgt						
Protection & Control Engineer	Vacant			FT	1	1
Transmission Engineer	Vacant			FT	1	1
Contract Monitor	Don Dowding			Temp	1	1
System Control						
System Operator, Second	Vacant			FT	1	1
Superintendent						
Administrative Assistant	Vacant			FT	1	1
Civil Maintenance						
Civil Maintainers	Dom Sacco, Dave Derbyshire	FT	2	FT	1	-1
Group Leader, Civil Maintenance	Vacant			FT	1	1
Head Office Engineering						
Engineer	Peter Bettle			FT	1	1
						6.83

Appendix B - Financial Plan 2010-2014
Statement of Operations

Transmission Cash Flow and Net Income

CND $ MILLIONS	*March 31 2010*	*June 30 2010*	*Sept 30 2010*	*Dec 31 2010*	*Annual 2010*	*Annual 2011*	*Annual 2012*	*Annual 2013*	*Annual 2014*
Revenue	-$ 9.09	-$ 8.43	-$ 9.37	-$ 8.47	-$ 35.36	-$ 36.82	-$ 38.68	-$ 39.49	-$ 40.41
Cost of sales (excluding depreciation)	-	-	-	-	-	-	-	-	-
Net operating income (gross margin)	- 9.09	- 8.43	- 9.37	- 8.47	- 35.36	- 36.82	- 38.68	- 39.49	- 40.41
Interest expense									
Asset specific debt	1.93	1.92	1.89	1.78	7.52	6.83	7.45	7.63	7.63
Other debt	0.03	0.03	0.03	0.21	0.31	1.69	2.84	3.25	3.29
G&A costs (from details)	2.72	3.12	2.98	2.78	11.61	11.81	12.16	12.53	12.90
Asset management fees	-	-	-	-	-	-	-	-	-
Current taxes	0.44	0.25	0.44	0.29	1.42	1.37	1.39	1.37	1.42
Cash flow from operations	**- 3.97**	**- 3.10**	**- 4.03**	**- 3.41**	**- 14.51**	**- 15.13**	**- 14.84**	**- 14.71**	**- 15.16**
Depreciation (depletion)	1.86	1.86	1.86	1.86	7.46	7.64	7.84	8.03	8.23
Future taxes	-	-	-	-	-	-	-	-	-
Net income	**-$ 2.11**	**-$ 1.24**	**-$ 2.16**	**-$ 1.55**	**-$ 7.05**	**-$ 7.48**	**-$ 7.01**	**-$ 6.68**	**-$ 6.93**

Appendix D - Financial plan 2010-2014 (cont.)
General and Administrative Costs

Transmission G&A Costs

CND $ MILLIONS	*March 31 2010*	*June 30 2010*	*Sept 30 2010*	*Dec 31 2010*	*Annual 2010*	*Annual 2011*	*Annual 2012*	*Annual 2013*	*Annual 2014*
G&A costs									
Salaries	$ 0.51	$ 0.52	$ 0.57	$ 0.54	$ 2.13	$ 2.20	$ 2.26	$ 2.33	$ 2.40
Bonus	0.13	0.13	0.14	0.13	0.53	0.55	0.56	0.58	0.60
Deferred compensation	-	-	-	-	-	-	-	-	-
Rent and occupancy	0.19	0.22	0.17	0.21	0.80	0.82	0.85	0.87	0.90
Audit	0.09	0.02	0.02	0.06	0.18	0.19	0.19	0.20	0.20
Legal	0.14	0.14	0.14	0.14	0.54	0.56	0.58	0.59	0.61
Consulting	0.03	0.11	0.13	0.07	0.34	0.35	0.36	0.37	0.38
Travel	-	-	-	-	-	-	-	-	-
Meals and entertainment	0.12	0.14	0.10	0.13	0.49	0.50	0.51	0.53	0.55
Other	1.52	1.86	1.72	1.50	6.60	6.65	6.85	7.05	7.27
Total G&A	**$ 2.72**	**$ 3.12**	**$ 2.98**	**$ 2.78**	**$ 11.61**	**$ 11.81**	**$ 12.16**	**$ 12.53**	**$ 12.90**

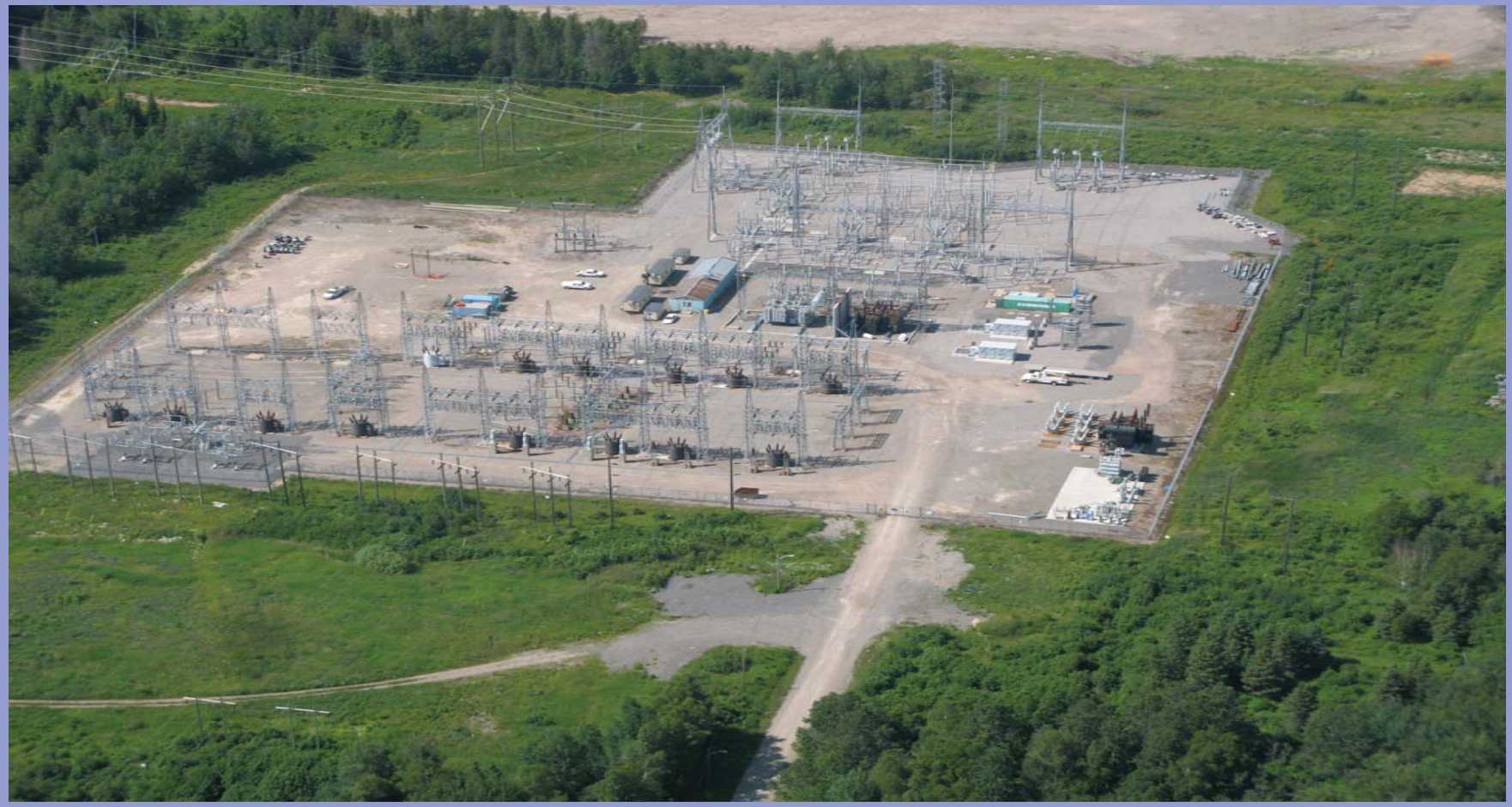
Appendix E - Financial plan 2010-2014 (cont.)
Statement of Financial Position

Transmission	*2009 Forcast*		*2010*		*2011*		*2012*		*2013*		*2014*	
CND $ MILLIONS	*BV*	*FV*	*BV*	*FV*	*BV*	*FV*	*BV*	*FV*	*BV*	*FV*	*BV*	*FV*
Assets												
Cash and Equivalents	$ 0.89	$ 0.89	$ 0.87	$ 0.87	$ 3.11	$ 3.11	$ 1.15	$ 1.15	$ 1.50	$ 1.50	$ 0.54	$ 0.54
Investments	-	-	-	-	-	-	-	-	-	-	-	-
Property Plan and Equipment	215.06	215.06	224.25	224.25	241.07	241.07	246.05	246.05	244.45	244.45	250.47	250.47
Intangible assets	-	-	-	-	-	-	-	-	-	-	-	-
Other	4.51	4.51	3.14	3.14	3.27	3.27	3.42	3.42	3.48	3.48	3.57	3.57
	220.46	220.46	228.26	228.26	247.45	247.45	250.62	250.62	249.43	249.43	254.58	254.58
Liabilities												
Accounts payable and other	- 1.38	- 1.38	- 1.41	- 1.41	- 1.92	- 1.92	- 1.92	- 1.92	- 1.92	- 1.92	- 1.99	- 1.99
Asset specific debt	- 117.08	- 117.08	- 117.21	- 117.21	- 117.34	- 117.34	- 117.47	- 117.47	- 117.60	- 117.60	- 117.73	- 117.73
Other debt	- 4.31	- 4.31	- 15.89	- 15.89	- 35.94	- 35.94	- 41.00	- 41.00	- 41.00	- 41.00	- 47.00	- 47.00
	- 122.76	- 122.76	- 134.51	- 134.51	- 155.20	- 155.20	- 160.38	- 160.38	- 160.51	- 160.51	- 166.72	- 166.72
Shareholders capital												
Net (income) / loss	-	-	- 7.05	- 7.05	- 7.48	- 7.48	- 7.01	- 7.01	- 6.68	- 6.68	- 6.93	- 6.93
Dividends / distributions	-	-	11.00	11.00	9.00	9.00	9.00	9.00	8.00	8.00	8.00	8.00
Other changes in equity	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	3.95	3.95	1.52	1.52	1.99	1.99	1.32	1.32	1.07	1.07
Co-investor interests	-	-	-	-	-	-	-	-	-	-	-	-
BAM capital (net assets)	$ 97.70	$ 97.70	$ 93.75	$ 93.75	$ 92.25	$ 92.25	$ 90.24	$ 90.24	$ 88.92	$ 88.92	$ 87.86	$ 87.86

Appendix F - Financial Plan 2010-2014 (cont.)
Capital Plan

Transmission CND $ MILLIONS	*March 31 2010*	*June 30 2010*	*Sept 30 2010*	*Dec 31 2010*	*Annual 2010*	*Annual 2011*	*Annual 2012*	*Annual 2013*	*Annual 2014*
Operating activities									
Cash flow from operations	$ 3.97	$ 3.10	$ 4.03	$ 3.41	$ 14.51	$ 15.13	$ 14.84	$ 14.71	$ 15.16
Changes in working capital	1.73	- 2.42	2.04	- 2.23	- 0.89	- 0.43	- 0.98	0.06	0.13
Operating cash flow	5.70	0.68	6.06	1.18	13.62	14.70	13.86	14.77	15.30
Financing activities									
Asset specific financing	-	-	-	14.00	14.00	21.00	6.00	-	6.00
Other debt issued / (repaid)	-	-	-	-	-	-	-	-	-
Co-investor capital called / (repaid)	-	-	-	-	-	-	-	-	-
BAM capital called / (repaid)	-	-	-	-	-	-	-	-	-
Dividends / distributions to co-investors	-	-	-	-	-	-	-	-	-
Dividends / distributions to BAM	-	-	-	- 11.00	- 11.00	- 9.00	- 9.00	- 8.00	- 8.00
Financing cash flow	-	-	-	3.00	3.00	12.00	- 3.00	- 8.00	- 2.00
Investing activities									
Property, plant and equipment	- 0.49	- 2.44	- 6.06	- 7.66	- 16.65	- 24.46	- 12.82	- 6.42	- 14.26
Investments, securities and loans	-	-	-	-	-	-	-	-	-
Investing cash flow	- 0.49	- 2.44	- 6.06	- 7.66	- 16.65	- 24.46	- 12.82	- 6.42	- 14.26
Opening cash and equivalents	0.89	6.11	4.35	4.35	0.89	0.87	3.11	1.15	1.50
In period change	5.21	- 1.76	0.00	- 3.48	- 0.02	2.24	- 1.96	0.35	- 0.96
Closing cash and equivalents	**$ 6.11**	**$ 4.35**	**$ 4.35**	**$ 0.87**	**$ 0.87**	**$ 3.11**	**$ 1.15**	**$ 1.50**	**$ 0.54**

THIRD LINE TS REDEVELOPMENT PROJECT



AGENDA

Great Lakes Power

- INTRODUCTION
- BACKGROUND
- NEED
- Options Explored
- Option Selection
- IESO Approval
- Project Phased Approach
- Summary
- Questions

INTRODUCTION

Great Lakes Power

- Third Line Transmission Station is located in Sault Ste. Marie, Ontario and is GLP's largest station comprising of a 230 kV and a 115 kV station, with the 230kV section of the station being part of the Ontario bulk power system.
- Emanating from the station are nine 115 kV circuits that connect varying loads and generation comprised of 240 and 130 MW respectively, on average. The station serves the largest load in the GLP system as it supplies power to the city of Sault Ste Marie as well as other large industrial loads including a Steel mill, a Pulp and Paper Mill and a Flakeboard production mill.
- Due to the station's size and importance to the local community and the Ontario power system, it is imperative that the equipment residing within are maintained according to the Transmission System Code (TSC) as well as implementing a capital replacement program that proactively manages an aging population of equipment to ensure that safety, environmental and reliability requirements are met.
- A majority of the equipment in the station is greater than 40 years old where the probability catastrophic failure increases at an exponential rate annually for each piece of equipment. Should a failure of a catastrophic nature occur, the financial consequences of loss would be estimated to be in the millions, which would include but not be limited to the loss of industry production, environmental cleanup and environmental fines. This does not include the negative impact that this would have on the corporate image.

BACKGROUND

Great Lakes Power

- **Station History:**

- The station has evolved since its inception in 1967 and has continuously changed to marginally meet new system demands and since market opening, has changed to account for additional regulatory requirements. The following is a summary of it's evolution.

  - In 1967 / 68 – A new Third Line TS was erected - included P21G, P22G (T1 and T2), No's 1,2 ,3 Sault Circuits and Algoma #1 & #2

  - In 1978 / 79 – the station was expanded within the existing yard to include #3 Algoma - (previously terminated at Northern Ave) and also included a new PUC station
    - - NOTE - this "build-on" added further to maintainability and operability issues

  - In 2005 / 2006 – the station was expanded once again on the 230kV portion to accommodate a new circuit (K24G) where the configuration changed to allow for greater maintenance and operational flexibility. The 115 kV portion of the station was changed slightly but did not provide and additional enhancements to flexibility

  - In 2007, Transformer T1 (230/115/34.4kV) was replaced with new due to failure of the original that was installed in 1967 / 1968.

BACKGROUND con't

Great Lakes Power

Station History:

- In 2007 a Tie Breaker, located between the Algoma 1 and Algoma 3 115 kV circuits was installed to ensure that the loss of the station North bus did not result in the loss of two circuits thus increasing reliability of the local area supply
  - Note: Upon Completion of the new station redevelopment project the Tie breaker and associated components will be removed from service and used as system spares. Ultimately this equipment will be placed back into service in 2013 at Watson TS.
- In 2008 a major overhaul was performed on Transformer T2 (230/115/34.5kV) to increase the life expectancy of the unit and to ensure that there was no evidence of component failure as was found on T1 two years earlier.
- In 2008, the Station was reviewed by an independent third party (WARDROP) where the recommended outcome was to build a new station within the limits of the existing property to enhance operability, maintainability and to eliminate any existing safety and environmental issues.
- In 2009, Series Reactors are being installed and the existing Capacitor banks will be replaced as part of the recommendations that were presented as the result of a third party study of transformers T1 and T2 tertiary systems.

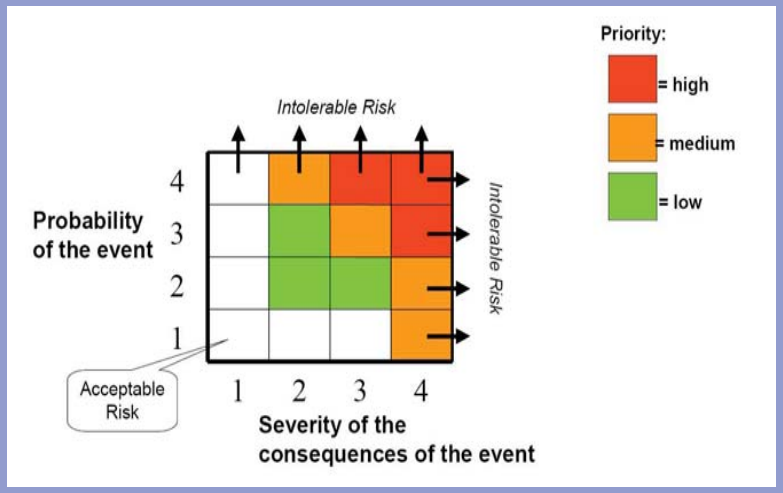
NEED

Great Lakes Power

- Although of poor historic design, the station has been marginally capable of supplying the local area with limited negative impact, however, as equipment ages and regulatory requirements become more stringent, a holistic view of refurbishment must be considered as to ensure that the station will perform as required over its estimated lifecycle and that future needs are considered.
- **Overview of existing issues:**
  - **Equipment requires proactive replacement due to age:**
    - Risk
    - Probability of failure
  - **Safety Issues – Clearance Issue with PTS, Temporary Cross buss**
  - **Environmental Issues – KSO bulk oil breakers, no containment , cost to implement / maintain**
  - **Maintainability issues – Existing cross buss conductors, infrared, insulators, breakers (spare part availability and cost.**
  - **Maintenance costs – 12 years**
  - **Operability / Reliability issues – equipment outage requires line outage – reducing customer reliability**
  - **Equipment ratings issues – Breakers (voltage, fault interrupting capability), cross bus conductors (need to temp bus to be strung)**

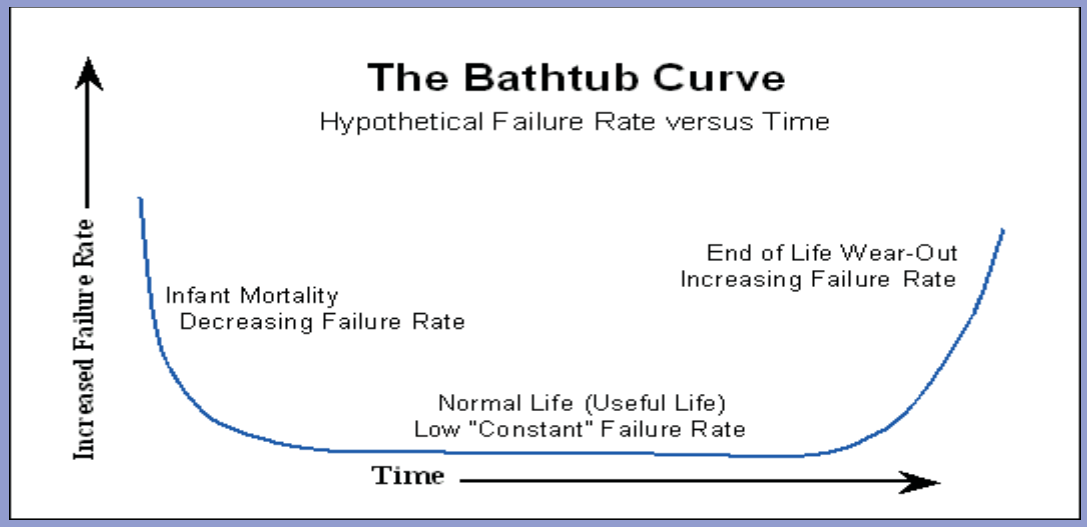
NEED con't

- **Equipment requires proactive replacement due to age:**
- Risk Basics - Definition:
  - Risk = (probability of event) x (consequences of this event)
  - Risk Tolerance



NEED con't

- **Risk Basics - Definition**:
  - Probability of Failure
    - Probability of failure increases with age
    - Example of a bathtub curve – figure below



    - Breakers are over 40 years old – life expectancy
    - Subject to overvoltage, earlier maintenance records not accurate
    - Higher probability of failure

NEED con't

- **Risk Basics - Definition**:
- Consequence of catastrophic failure (loss)
  - Consequence of failure costs – Loss of Supply
    - Loss of Production
      - Local Steel Mill ½ million per day
    - Environmental Cleanup –
      - 1 to 3 million to remediate impacted soils
      - Ministry of Environment fines – 60k
    - Employee or public injury
      - Litigation – millions
    - Severe disruption to entire Sault area
      - Financial impacts
      - Social impacts
    - Leads to Negative Corporate Perception – Public and Regulatory
    - NERC / IESO Investigations – Operating Transmission system using good utility practice?

Need

- **Safety Issues** –
  - Clearance Issues with PT's - Do not meet Brookfield Policy
    - Limits Of Approach violation
    - Temp fence installed around area to permit access

Need

- **Safety Issues** –
  - Clearance Issues with Temp Bus
  - Does not account for snow load or vehicular access

Need

- **Safety Issues** –
  - Asbestos Issues
  - This has been completed as part of Phase 1. Details later in presentation

Need

- **Safety Issues** –
  - Probability of Failure of aging equipment increases annually
    - Increased risk of injury should equipment fail catastrophically
    - Breakers are 40 years old. Suspect history, operating voltages, maintenance performed
    - PT's - Mackay PT's failed catastrophically, PT's at Third Line are the same age
      - Probability of failure is high

Need

- **Safety Issues** –
  - Ground Grid and Yard requires refurbishment
    - Station yard grading and crushed stone layer shall be brought up to standards
    - Ground grid specification – Poor Design – Good Utility Practice Requires a minimum of Six inches of crushed stone.
    - Pictures below – Ground Surface Condition
    - Poor Drainage



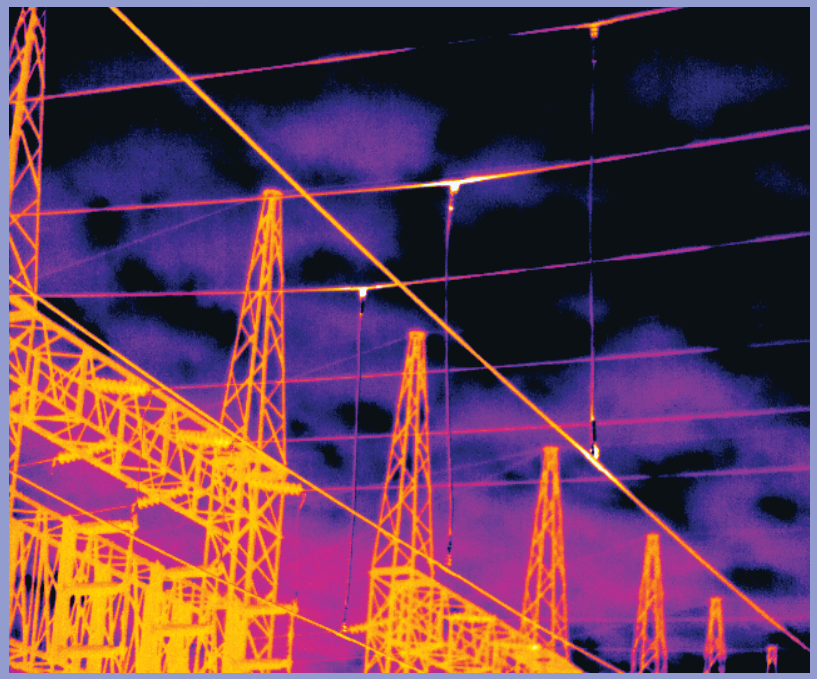
NEED

Great Lakes Power

- **Environmental Issues** –
- KSO bulk oil breakers, no containment
  - Cost To Install Containment on all Breakers
    - 14 breakers X 50,000
    - $700,000
    - Plus annual maintenance costs – approx $5,000
  - Adjacent to Sault Conservation Area Wetlands
- Soils remediation impediments
  - Ability to safely and efficiently correct documented evidence of hydrocarbon contamination limited – excavation will require removal/replacement of existing breakers bases
  - Impossible to excavate if “like for like” replacement were to occur.
- Total of 38,500 gallons of oil removed
- Results in no bulk oil breakers in the system!!

NEED

- **Maintainability issues**
  - Infrared Scan in 2008 –
    - Unable to deal with identified issues as the existing bus configuration (general layout – upper/lower bus runs) currently does not allow for maintenance without a full station outage
    - Failure of a bus component during maintenance could result in injury as well as a blackout to city of Sault Ste Marie.



NEED

- **Maintainability issues**
- Replacement of cracked Insulators in 2009:
  - Identified cracked Insulators on main North and South bus during temp bus installation work
  - Replaced defective insulators where possible – 16 Replaced
  - Upper cross bus was inspected and it was determined that approximately 5 insulators are currently cracked.
  - Existing bus configuration (general layout – upper/lower bus runs) currently does not allow for replacement of the upper bus insulators without a full station outage.
  - Failure of a bus component during replacement could result in employee injury as well as blackout to city of Sault Ste Marie

NEED

- **Maintainability issues**
- Availability of Spare components – Breakers no longer in production, spare parts hard to find, need to be manufactured, ling lead times
  - Leads to high costs and extended outage duration

NEED

Great Lakes Power

- **Maintenance Costs** (Bulk Oil Breakers vs SF6 comparison) –
- Perform Major Overhauls every 4 years – 12 year outlook
  - 14 breakers
  - $25,000 per bulk oil breaker – Oil Handling, cost of spare parts, contractor
  - 14 breakers x $25,000 x 3 (# of over hauls in 12 years) = $1,050,000
  - Compare to SF6 Breakers –
  - $1,500 per breaker – No Oil handling, performed internally
  - 14 breakers x $1,500 x 2 (Over haul every 6 years) = $42,000
- Replacement components (Bulk Oil) expensive and not readily available
  - Anti pump relays - $1100 each.
  - Control Valve Coil – 5113 each.

NEED

- **Operability / Reliability issues** –
  - Equipment outage results in line outages – reducing customer reliability
    - PUC circuits (CB 485, 495, 505, 515), Algoma Circuits (CB 435 and 455).
  - No Isolation flexibility with CB's 482, 492 and 445, connected to Temp Bus
    - Any issues with aforementioned equipment results in main bus outage to allow for repair as there is no direct means of isolation.
  - If a "Like for Like" replacement were to occur, equipment outages still require line outages as the operational flexibility would not be enhanced.
  - As equipment ages, higher risk of failure, thus affecting delivery point reliability.

NEED

Great Lakes Power

- **Operability / Reliability issues** –
  - Removal of all redundant panels and cabling
  - Figure below – Redundant Panels and Cabling
  - Drawings updated, panels removed, results in a lower probability of protections mis-operation

NEED

Great Lakes Power

- **Equipment rating issues** – Breakers (voltage, fault interrupting capability)
  - Disconnect Switches and Breakers
    - Breaker Nameplate data – Rated Voltage 115 kV, Max Voltage 121 kV
    - Average Annual Voltage at Third Line is 122, with the annual max of 124 (2008). **NTD – Confirm numbers**
    - Station Fault values are approximately 20 kA
      - Little margin of safety - aging breakers

NEED

- **Equipment ratings issues** –
  - IESO –Controlled Grid Performance Standards
  - Equipment shall be capable of operating at the Northern Ontario maximum continuous voltage of 132 kV as shown in the figure below.

Appendix 4.1 – IESO-Controlled Grid Performance Standards

Ref	Item	Requirement
	Transmission System	
1	Frequency variations	All *equipment* shall be capable of continuously operating in the range between 59.5 Hz and 60.5 Hz.
2	Voltage variations	Under normal conditions voltages are maintained within the range below.
		Transmission Voltage: Nominal (kV) 500 / 230 / 115; Maximum Continuous (kV) 550 / 250* / 127*; Minimum Continuous (kV) 490 / 220 / 113
		*In northern Ontario, the maximum continuous voltage for the 230 and 115 kV systems can be as high as 260 kV and 132 kV respectively
3	[Intentionally left blank]	
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7	[Intentionally left blank]	
8	[Intentionally left blank]	

NEED

- **Equipment ratings issues** –
  - Cross Bus Conductor Ratings
    - Existing overhead cross bus is underrated. IESO imposed operating restrictions until resolved.
    - Could not replace overhead conductor due to aforementioned hazards involved.
    - Solution: Installation of Temp Cross bus.
      - Issues:
      - Clearance Issues – need temp fence to permit vehicle access to location
      - Installation of temp bus causes issues as aforementioned

OPTIONS EXPLORED

Great Lakes Power

- Wardrop Engineering Inc.- Mississauga, ON contracted by GLP to carry out an independent review of Third Line TS 115kV to correct current shortfalls in the most cost effective, technically efficient manner and provide budgetary estimates

- 5 options surfaced and examined

OPTIONS EXPLORED – con't

The five options considered include:

1. Direct upgrades to the limiting bus sections using cable, SF6 bus duct, or overhead lines and replacement of all breakers and disconnect switches;
2. Construction of a new 115 kV switchyard on undeveloped GLP land on the west end of the station as well as existing station property using "folded" diameters with a breaker and a third configuration;
3. Construction of a new 115 kV switchyard on undeveloped GLP land to the west of the station using "folded" diameters with a breaker and a half configuration;
4. Construction of a new 115 kV switchyard on existing station property as well as undeveloped GLP land to the west of the station using "linear" diameters with a breaker and a half configuration; and,
5. Construction of a new 115 kV switchyard on undeveloped GLP land to the west of the existing property as well as partially on the existing station property using the "linear" diameters of breaker and a half configuration.

These options were evaluated based on their constructability, maintainability, reliability, expandability, the outage requirements in the implementation of the proposed solutions, and their cost.

WARDROP ESTIMATE: -
Expected Capital Expenditure:

Wardrop Summary	Option 1	Option 2	Option 3	Option 4	Option 5
Total Estimated Cost	Eliminated	**$20,202,500**	**$22,302,500**	**$21,990,000**	**$21,596,250**

OPTION SELECTION

- **Summary Analysis of Option 1: Upgrade of the Limiting Bus Sections**
- **<u>Advantages</u>**
  1. The material cost of just replacing conductors will be considerably smaller when compared with the other options
  2. Construction of this option will be relatively simple if undersized conductors are replaced with others of appropriate capacity
  3. load restrictions would be eliminated

OPTION SELECTION

- **Summary Analysis of Option 1: Upgrade of the Limiting Bus Sections**

- **Disadvantages**
  1. Expandability, operational flexibility and reliability would remain similar to the original switchyard configuration
  2. Extensive, complex (high safety risk) and long duration outages will be required for implementation
  3. Maintenance of the overhead conductors would still require a total station outage or multiple complicated outages to maintain worker safety clearances
  4. Does not conform with IESO requirements regarding the maximum number (six) of high voltage (115kV) breakers that need to trip following any fault (Source: IESO, "Ontario Resource and Transmission Assessment Criteria", Issue 5.0, Section B.3.3)
  5. With respect to reliability, the single point failure mode will remain as failure of an overhead conductor could result in a fault on both buses, causing a complete station shutdown
  6. Poor expandability except for addition of T3 as there will be no increased benefit with respect to expansion compared to the current configuration
  7. SF6 bus duct on site would introduce a new technology and require skills and training for site personnel
- **Result:** Option 1 has been eliminated from further consideration.

OPTION 5 - Recommended by Wardrop Engineering Inc.

Great Lakes Power

- **Summary Analysis of Option 5: Construction of New 115 kV Switchyard on Undeveloped Western GLP Land and Existing Station Property (Breaker and a Half Configuration - Linear Arrangement)**

- **<u>Advantages</u>**

1. Conforms with IESO requirements regarding the maximum number (six) of high voltage (115kV) breakers that need to trip following any fault (Source: IESO, "Ontario Resource and Transmission Assessment Criteria", Issue 5.0, Section B.3.3)
2. Second lowest cost
3. Increased flexibility and overall very good operating flexibility
4. Would eliminate single contingency failure of overhead bus crossing both main buses
5. Only short duration outages will be required to move source and customer connections

Option 5 - Recommended by Wardrop Engineering Inc.

Great Lakes Power

- **Advantages con't**

6. Extremely good reliability and very good maintainability
7. Very good access to all equipment via an open layout and roads between each pair of diameters allows aerial lift access to maintain all equipment
8. GLP staff familiar with the linear layout of a breaker and a half similar to Mackay TS
9. No temporary cable is required to energize the new switchyard compared with options 3 and 4
10. Good expandability – One spare diameter connection is available with the addition of one breaker, and additional diameters can be added easily for expansion to the north and south as the switchyard is not entirely bound by wrapping of transmission lines (Note: expansion will require the addition of bus tie breakers)
11. New switchyard can be constructed without staging of diameters

Option 5 – Additional Advantages

- Construction schedule not impeded by a complicated outage plan
- Aggressive construction schedule possible
- 90% of planned construction activity external to energized devices in existing yard footprint
- Commissioning timeline streamlined – in-servicing new equipment simplified – total construction interest substantially reduced
- Expectations clear and unknowns minimized for prospective bids
- All control/protections resident in a single control building (230kV and 115kV) - increased vulnerability of this asset

Option 5 - Recommended by Wardrop Engineering Inc.

Great Lakes Power

- **Disadvantages**

1. Higher overall cost than Option 2
2. Requires 17 breakers (as opposed to 15 for the existing installation and Option 2) to implement switchyard with all current connections on separate diameters
3. A significant amount of civil work will be required compared to option 4
4. A land survey is required to verify the final location of a new switchyard to reduce civil costs of developing the vacant land to the north-west of the existing 115kV switchyard
5. Switchyard located more distant from the existing Control Building than option 4
6. Additional diameter connections require the addition of bus tie breakers to maintain conformance to IESO requirements

IESO APPROVAL

- This System Impact Assessment has examined the impact of the proposed Third Line TS 115 kV Refurbishment, on the reliability of the IESO-Controlled grid. The studies concluded that:
- 1. The proposed project will not have a materially adverse impact on the reliability of the IESO-controlled grid.
- 2. The proposed project will improve 115 kV transmission elements connectivity and the reliability of power supply at Third Line TS under various breaker failure scenarios.
- 3. All the pre-contingency voltages, post-contingency voltages and voltage declines meet the requirements described in the "Ontario Resource and Transmission Assessment Criteria (ORTAC)" document.
- 4. No thermal overloading concerns were identified for the monitored transmission circuits in the studied scenarios. All pre and post-contingency power flows on the monitored circuits were observed to be within the applicable ratings of the circuits.
- 5. The IESO recognizes that Great Lakes Power Limited - Transmission Division plans to install 40 kA rated circuit breakers which do not meet maximum symmetrical values of 50kA for 115kV equipment specified in the Transmission System Code requirements. While 40 kA breakers are sufficient in meeting the present fault current levels, should future power system changes result in fault currents greater than 40 kA, Great Lakes Power Limited - Transmission Division will be required to change these circuit breakers at their expense.
- 6. The proposed station configuration change meets the IESO guidelines for general requirements for station layout described in the "Ontario Resource and Transmission Assessment Criteria (ORTAC)" document.

PROJECT PHASED APPROACH

- Initial Plan (Option 1) – 2007
  - Replace Existing Breakers and Disconnects “like for like”
  - Upgrade Existing Bus “like for Like”
  - Issues Found
    - Bus replacement Impossible without full station outage
    - Costs still fairly high – $15 Million
    - Complex outage plans
    - Use of temp cable to feed emanating lines
    - Existing Configuration would remain
      - No expandability
      - Equipment Maintainability Issues – Compromised Reliability, cannot maintain overhead cross bus
      - No enhancements to operational flexibility

PROJECT PHASED APPROACH - con't

- Phase One (2008) :
- Control Building Upgrades
  - Asbestos Removal – *COMPLETE*
  - Redundant P&C Rack Removal – *COMPLETE*
  - Redundant Cable Removal – *COMPLETE*
  - Marshalling Rack Installation – *COMPLETE*
  - HVAC Upgrades – *COMPLETE*
  - 7 breakers Purchased – *COMPLETE*
  - 13 Disconnects Purchased – *COMPLETE*
- Redevelopment Project Justification –
  - Wardrop Report
  - IESO Communication

PROJECT PHASED APPROACH - con't

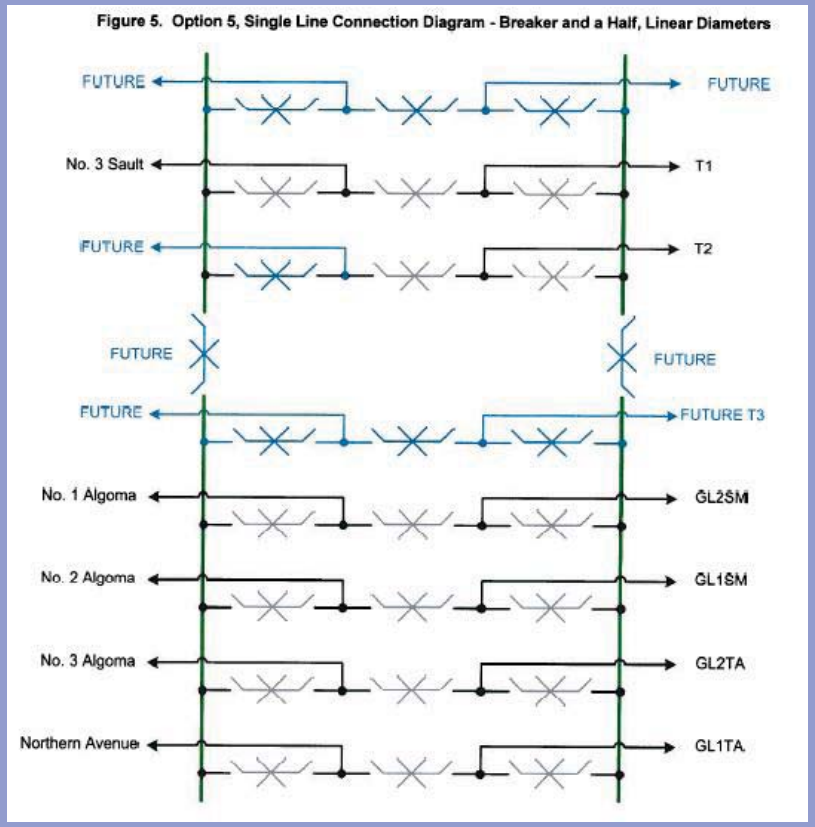
- Phase Two (2009 / 2010) : - Tender – Award – Construction

- Outage planning and detailed Project Development:
  - Electrical
    - Installation of 17 Circuit Breakers and 34 Disconnect Switches
    - Installation of Motorized Operated Disconnect Switches
    - Installation of CVT's and SSVT's
    - Installation of Protection and Control Equipment
  - Civil
    - Yard Clearing
    - Application of fill and crushed stone
    - Installation of New Control Building
    - Installation of Cable Trench
    - Installation of Bus and Support Structures
    - Breaker foundation ground grid refurbishment
    - Drainage enhancements
    - Vegetation eradication
    - Fence upgrades
    - Steel Structure Installation
  - Proposed Layout attached
  - Tender / Award / Start Construction

PROJECT PHASED APPROACH - con't

Great Lakes Power

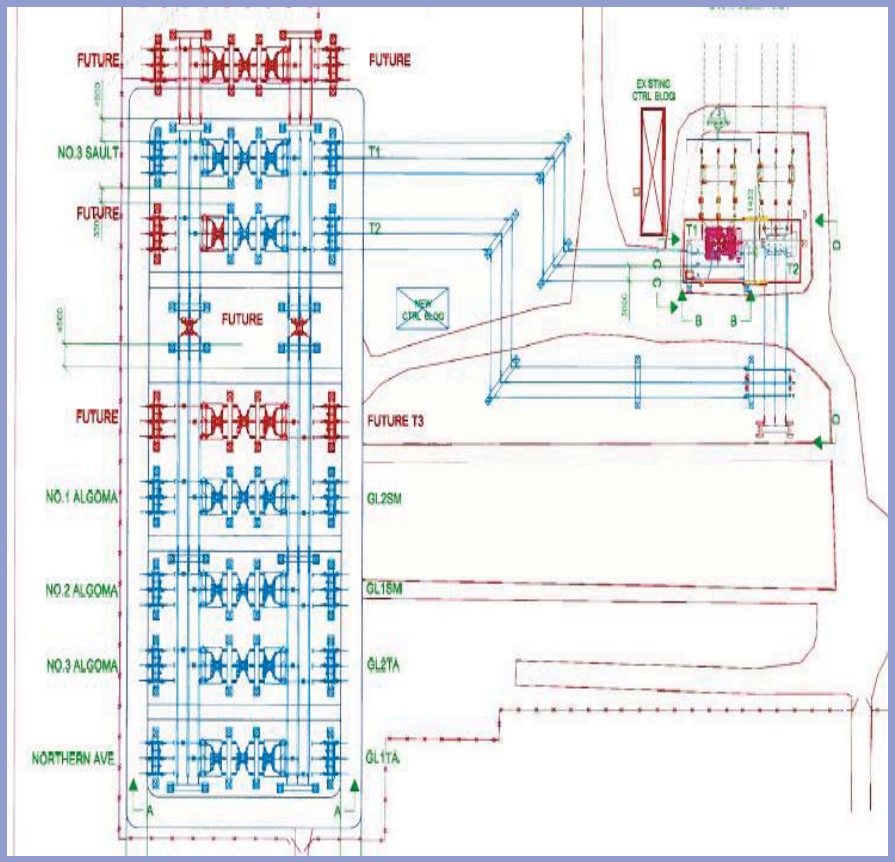
- Phase Two (2009) : - Proposed Single Line Layout - Figure



PROJECT PHASED APPROACH - con't

Great Lakes Power

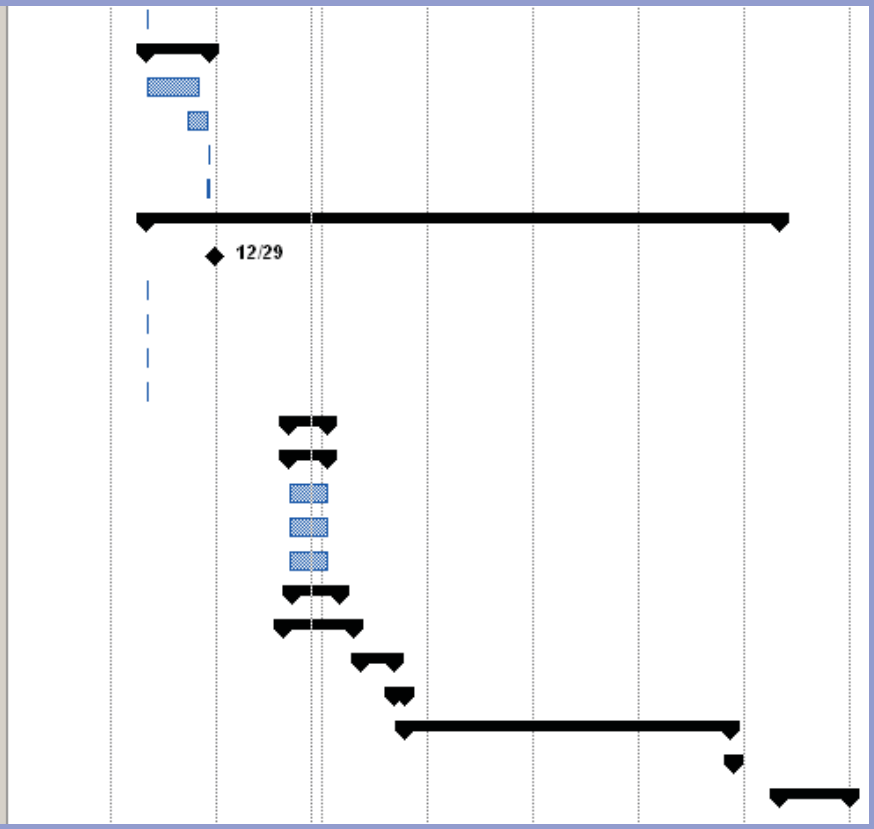
- Phase Two (2009) : - Proposed Conceptual Layout - Figure



THIRD LINE TS REDEVELOPMENT – Timeline

- Anticipated construction start is early 2010
- 80% of equipment in service by the end of 2010
- Project Completion in 2011 with the IESO 6 month Relay verification

Third Line TS Redevelopment Project	Mon 9/1/08	Mon 9/1/08
Needs Assessment	**Mon 9/1/08**	**Fri 12/19/08**
Independent review - Wardrop Eng. Inc.	Mon 9/1/08	Mon 12/1/08
Review possible Options	Mon 11/10/08	Mon 12/15/08
Assess recommended Option	Mon 12/15/08	Mon 12/15/08
Accept Final Report	Fri 12/12/08	Fri 12/19/08
Regulatory Requirements	**Mon 9/1/08**	**Wed 8/31/11**
Meet with IESO - obtain input	Mon 12/29/08	Wed 8/31/11
Submit Application to IESO for SIA	Mon 9/1/08	Mon 9/1/08
Submit supporting documentation	Mon 9/1/08	Mon 9/1/08
SIA (System Impact Assessment) modelling proces:	Mon 9/1/08	Mon 9/1/08
CIA (Customer Impact assessment)	Mon 9/1/08	Mon 9/1/08
IRF Development	**Mon 5/4/09**	**Fri 7/10/09**
Detailed estimating	**Mon 5/4/09**	**Fri 7/10/09**
Civil	Mon 5/4/09	Fri 7/10/09
Electrical	Mon 5/4/09	Fri 7/10/09
Protections	Mon 5/4/09	Fri 7/10/09
Environmental	**Mon 5/11/09**	**Fri 7/31/09**
Tender Development	**Mon 4/27/09**	**Mon 8/24/09**
Call for Tender	**Mon 9/7/09**	**Mon 11/2/09**
Award Contract	**Mon 11/2/09**	**Fri 11/20/09**
Construction Phase	**Mon 11/23/09**	**Mon 6/6/11**
Retirements	**Mon 6/13/11**	**Mon 6/13/11**
Project Windup	**Thu 9/1/11**	**Fri 12/30/11**



REQUIRED:

Great Lakes Power

- GLP Estimate, Option 5 – $23,500,000
- Permission to Proceed

IRF
Steelton TS & Batchawana TS
Ground Grid Refurbishments

Agenda

- Brief Project Description
- Current Situation – Why the Project is Required
  - Current Issues
    - Health and Safety
    - Environmental
    - Reliability
    - Operability
    - Maintainability
- Options Examined
- Proposed Solution
- Expected Benefits
- Regulatory Considerations
- Summary
- Questions

Brief Project Description

The scope of this project consists of Ground Grid refurbishments to address inadequate grounding at Batchawana TS and Steelton TS. This initiative will address all step & touch potential issues and increase public and worker safety.

The project consists of the preparation, co-ordination, construction, and modifications to the existing ground grid including resurfacing of the yard and installation of crushed stone, all as per engineered design drawings and specifications.

Substation Ground Grid

- Ground grid is a series of horizontal ground electrodes (buried bare copper conductors) supplemented by a number of vertical ground rods connected to the grid, and by a number of equipment grounding mats and interconnecting cables.
- Proper design of substation grounding provides a near zero resistance to remote earth.

Substation Ground Grid Con't.

- The grounding grid provides a common ground for the electrical and for all metallic structures at the station.
- It also limits the surface potential gradient. The vertical ground rods decrease the overall resistance of the substation.

Figure 1 – Ground Grid Connection

Substation Ground Grid Cont'd

Definitions

Grounding Conductor – the conductor used to connect the service equipment or system to the grounding electrode

Grounding Grid - a system of horizontal ground electrodes that consists of a number of interconnected bare conductors buried in the earth and that provides a common ground for electrical devices and metallic structures.

Touch Voltage – The potential difference between the ground potential rise (GPR) and the surface potential at the point where a person is standing while at the same time having a hand in contact with a grounding structure.

Current Situation – Why the Project is Required

- Substaton yard assessments have identifed the need for modifications to the existing ground grid at Batchawana TS and Steelton TS.
- The station requires a refurbishment program as per IEEE STD. 80-2000 to address health and safety, environmental, reliability, operablity and maintainability issues.
- An engineering study by ABB identified that the touch voltage exceeded tolerable limits.

Current Situation – Why the Project is Required Cont'd

Figure 2 & 3 – Substation yard condition

Current Situation – Why the Project is Required Cont'd

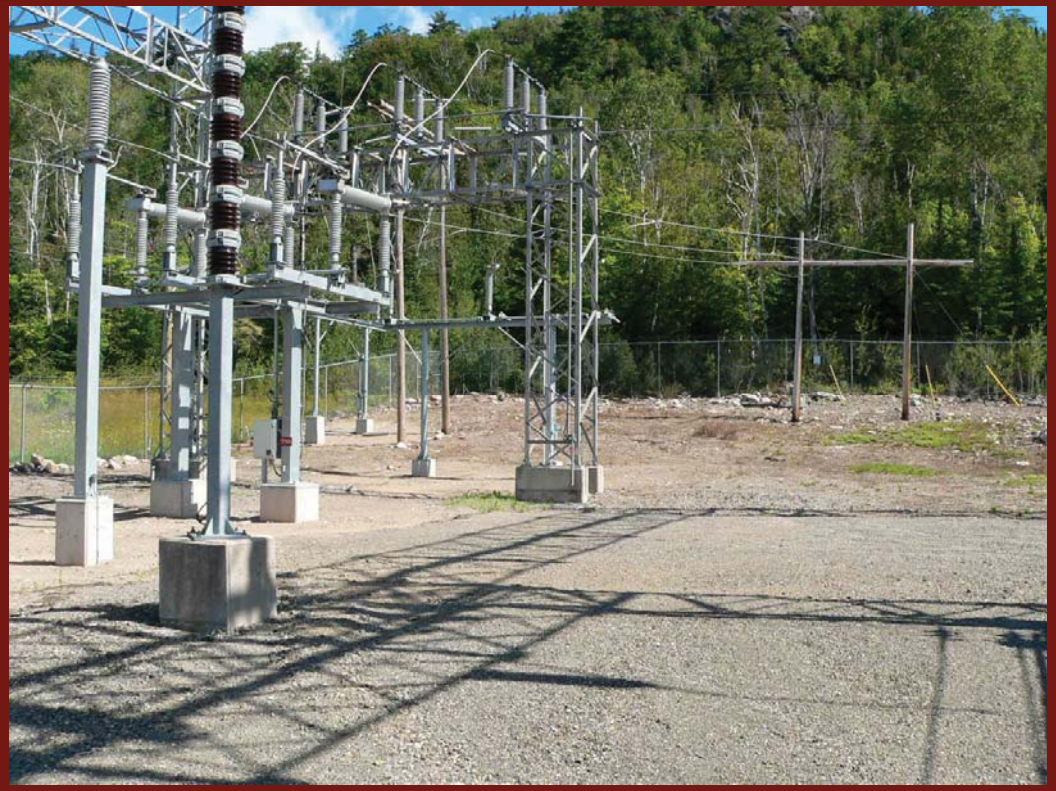
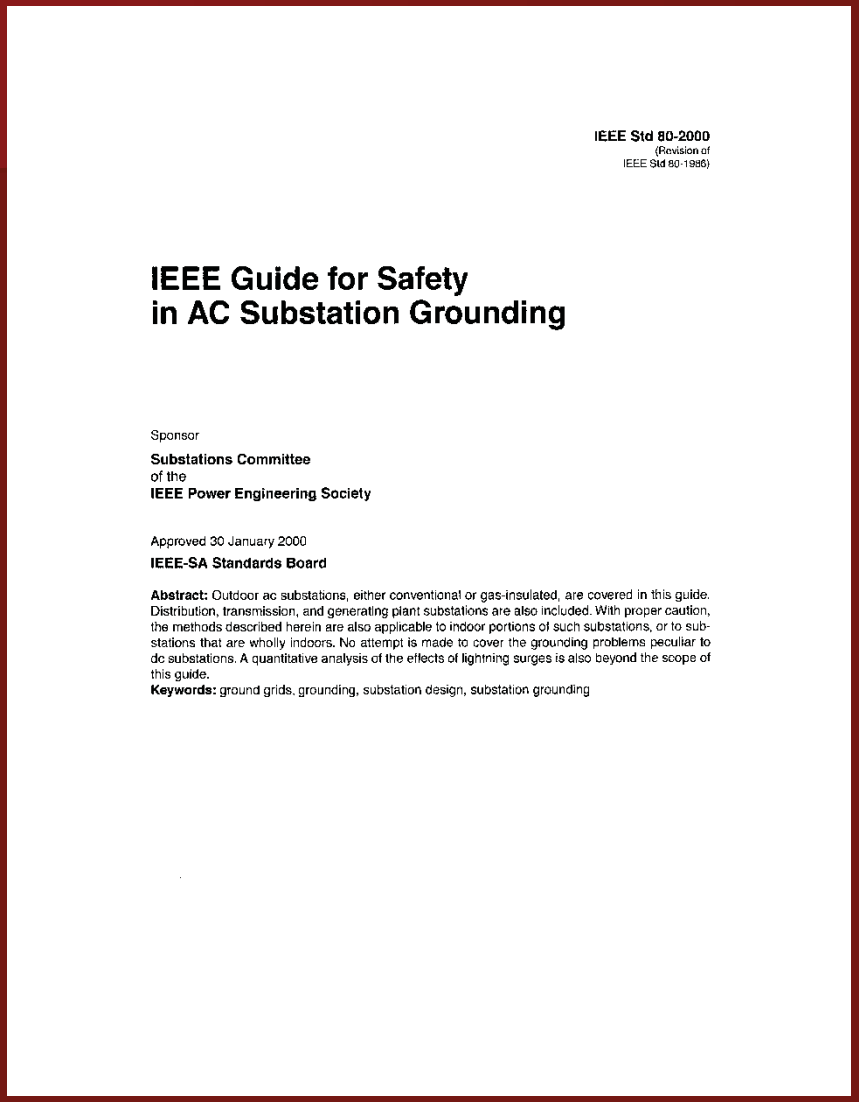


Figure 4 & 5 – Substation yard condition

Current Situation – Why the Project is Required Cont'd.



IEEE Std 80-2000
(Revision of
IEEE Std 80-1986)

IEEE Guide for Safety in AC Substation Grounding

Sponsor

Substations Committee
of the
IEEE Power Engineering Society

Approved 30 January 2000

IEEE-SA Standards Board

Abstract: Outdoor ac substations, either conventional or gas-insulated, are covered in this guide. Distribution, transmission, and generating plant substations are also included. With proper caution, the methods described herein are also applicable to indoor portions of such substations, or to substations that are wholly indoors. No attempt is made to cover the grounding problems peculiar to dc substations. A quantitative analysis of the effects of lightning surges is also beyond the scope of this guide.
Keywords: ground grids, grounding, substation design, substation grounding

Figure 6 – IEEE STD. 80-2000

Current Situation – Why the Project is Required - Con't

- Health & Safety Issues
  - A safe grounding design has the following two objectives:
    - To provide means to carry electric currents into the earth under normal and fault conditions without exceeding any operating and equipment limits.
    - To assure that a person in the vicinity of grounded facilities is not exposed to the danger of critical electric shock.

Current Situation – Why the Project is Required - Con't

- Environmental
  - Grading and drainage of the yard will ensure that water is carried away from the substation, maintaining the resistivity of the soils.
  - Addition of crushed stone will act as an insulator between the worker and the buried ground grid.
- Reliability
  - Fast clearing of faults, is made possible by good grounding, which improves the overall reliability of the substation.

Current Situation – Why the Project is Required - Con't

- Operability
  - Substation operability must be "built in" as much as possible due to the potential for high level current. Good practice in substation grounding are as follows:
    - Size and select proper conductors for anticipated faults.
    - Prepare the soil.
    - Eliminate step & touch potential.
    - Ground the foundation, fence, and all equipment.
    - Ground and bond all cable trays.
- Maintainability
  - Upgrading the ground grid will ensure that the equipment is protected from high level fault conditions and adversely affecting continuity of service.

Options Examined

- Option 1 –
  - Do Nothing:
    - This option is not acceptable due to the severe health & safety concerns present.
- Option 2 –
  - Proposed Solution:
    - This option provides the best solution in terms of safety, environmental, reliability, operability and mainatainability issues.

Proposed Solution

- The proposed solution consists of the preparation, co-ordination, construction, and modifications to the existing ground grid including:
  - Complete set of stamped engineering drawings and specifications suitable for construction.
  - Resurfacing of the yard with rough grading and removal of contaminated soil if discovered as per MOE guidelines.
  - Grounding of the perimeter fence.
  - Replacement of bonding connectors and perimeter grounds.
  - Installation of ground rods.
  - Grounding of all equipment.
  - Installation of crushed stone as per design specifications.
  - Final resistance testing for the installed ground grid to remote ground to meet design criteria.
  - Cleanup of site and all by-products prior to completion of work.

Proposed Solution Cont'd

Figure 7 & 8 – Ground Grid Installation at Mackay TS 2008

Proposed Solution Cont'd

Figures 9 & 10 – Adequate crushed stone and ground grid mats as shown at Gartshore TS.

Expected Benefits

- Expected benefits include:
  - Compliance with IEEE std. 80-2000.
  - Increase in overall worker and substation safety as the step and touch potential limits will be improved dramatically.
  - Increased Public with upgrades to perimeter fences.
  - Increase in reliability due to a decrease in potential damage to equipment from improper grounding.

Regulatory Considerations

- Regulatory Risks
  - Spending Between rate base approvals
    - Pros
      - “Like For Like”, “End of Life” replacements are allowed and expected.
    - Cons

Summary

- Clearly there are Regulatory and Health & Safety issues around ground grid design. Presently, the Batchawana TS and Steelton TS are non-compliant with IEEE and ESA standards. The reburbishment will ensure that GLP operates these stations within acceptable step and touch potential limits.

- In Conclusion, due to the large Health and Safety concerns currently present, GLP is recommending that the ground grids refurbishment projects move forward without delay, to comply with operating standards, increase public and worker safety, as well as significantly decreasing the environmental concerns.

Questions ?

IRF – Third Line TS Reactor Installation

Agenda

- Brief Project Description
- Current Situation – Why the Project is Required
  - Current Issues
- Proposed Solution
- Expected Benefits
- Regulatory Considerations
- Summary
- Options Examined
- Questions

Brief Project Description

- Third Line Transmission Station is the “heart” of transmission power supply to several major transmission customers; Essar Steel Algoma, City of Sault Ste. Marie, St. Mary’s Paper, and Flakeboard.

- The project consists of installing two banks of 60 HZ air-core dry type, 3 single phase series reactor units, stacked in three high vertical arrangement as well as the replacement of the existing capacitor banks.

Current Situation – Why the Project is Required

- Great Lakes Power system is subject to high voltage and harmonics which are inherent to any power system. The higher voltages and harmonics cause damage to equipment if not properly managed.

- In 2007 an engineering study was initiated due to historic equipment failures specific to the tertiary 34.5 system at Third Line TS. The outcome cited high voltages and harmonic resonance (7^{th} harmonic specifically) that had attributed to the failures. A recommendation was made to install series reactors to reduce harmonics as well as recommending the replacement of the existing capacitor banks with capacitors having a greater voltage rating as to account for the inherently high system voltages.

Proposed Solution

- The project consists of installing two banks of 60 HZ air-core dry type, single phase series reactor units, stacked in three high vertical arrangement on support structures as well as the replacement of the existing capacitor banks.
- The reactors with be physically connected to the 34.5 tertiary system on T1 & T2 in series with the existing 19.5 MVAR capacitor banks.
- The scope of work shall include the design, labor, materials, equipment and services, required to manufacture, factory test, deliver to site, and guarantee operation of the reactors and capacitor banks.

Proposed Solution, Cont'd.

Definitions.

"Series Reactor" – is defined as the complete reactor package including insulated coils, insulators and spider terminal assembly necessary for safe, efficient and convenient operation of the reactor.

"Reactor Support Structure" – is defined as the reactor manufacturer's optimum support hardware based on height requirements, size and weight of reactor and cost.

Proposed Solution Cont'd

The connection point of the series reactors.

Capacitor Bank No. 4
Third Line T.S.

Capacitor Bank No. 5
Third Line T.S.

Expected Benefits

- Expected benefits include:

1. Reduction of harmonic issues thus reducing the risk of equipment failure.
2. Installing equipment capable of handling large variations in system voltages as per the IESO Market Rules.
3. Increased reliability.
4. Increase in worker safety.

Regulatory Considerations

- Regulatory Risks
  - Non-compliance with the Transmission System Code should this project not be undertaken. Third Party engineering study has recommended the aforementioned changes where not moving forward would be a direct contravention of ”Good Utility Practice”.

Options Examined

- Option 1 –
  - Do Nothing:
    - This option is not acceptable and may ultimately result in equipment damage leading to system stability and reliability issues and an increased potential for personnel injury.
- Option 2 –
  - Proposed Solution:
    - This option provides the best solution in terms of safety, reliability and operability issues. Upon completion, the harmonic issues at Third Line TS will be resolved.

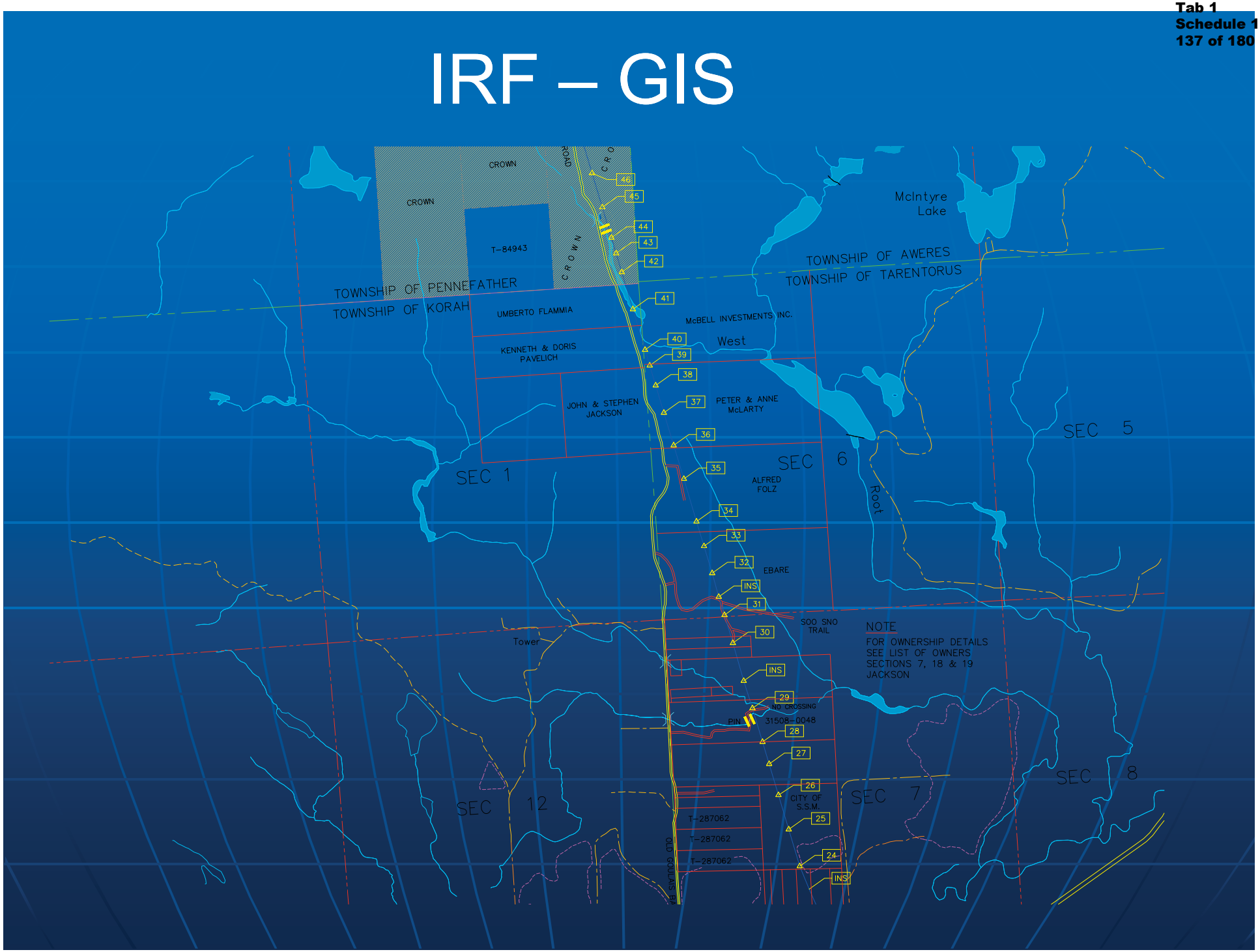
Summary

- In summarizing the issues, there are heath and safety, reliability and operability requirements that GLP must comply with. Identifying those issues and defining a solution to rectify them, will ensure employee safety and system reliability as per Great Lakes Power and OEB / IESO requirements respectively.

- In concluding, due to the potential for equipment damage, possible worker injury and impacts to the system, GLP is recommending that the Third Line TS Series Reactor Installation / Cap bank replacement project move forward without delay to increase safety and reliability of the system.

Questions ?

IRF – GIS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TOWNSHIP OF PENNEFATHER
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TOWNSHIP OF AWERES
TOWNSHIP OF TARENTORUS
McIntyre Lake
UMBERTO FLAMMIA
KENNETH & DORIS PAVELICH
JOHN & STEPHEN JACKSON
McBELL INVESTMENTS INC.
West
PETER & ANNE McLARTY
ALFRED FOLZ
EBARE
SOO SNO TRAIL
SEC 1
SEC 6
SEC 5
SEC 12
SEC 7
SEC 8
Root
Tower
NOTE
FOR OWNERSHIP DETAILS
SEE LIST OF OWNERS
SECTIONS 7, 18 & 19
JACKSON
NO CROSSING
PIN 31508-0048
CITY OF S.S.M.
T-287062
T-287062
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OLD GOULAIS
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Agenda

- Brief Project Description
- Current Situation – Why the Project is Required
  - Current Issues
    - Health and Safety
    - Environmental
    - Reliability
    - Operability
    - Maintainability
- Options Examined
- Proposed Solution
- Expected Benefits
- Regulatory Considerations
- Summary
- Questions

Brief Project Description

To purchase a comprehensive Geographical Information System (GIS) software package that can inter-relate many different assets and their associated attributes (such as documents, descriptions, etc.) and present them spatially in a map-based repository.

Current Situation – Why the Project is Required

- Currently, there is no system at GLP for the management of:
  - Transmission Assets
  - Land / Property
  - ROW
  - Easements
- Much of the asset records are housed in different areas throughout the company with no consistent reference to one another therefore rendering them invaluable.
- The primary objective of GIS software solutions at GLP is to house information that will enable the business to share asset, property, and vegetation data and display it spatially across the 13,000 square km's of GLP's service area.

Current Situation – Why the Project is Required - Con't

- Safety Issues
  - GIS is the foundation for presenting and analyzing data for more effective emergency response in areas such as;
    - Protection of the Assets
    - Public Safety
    - Worker Safety
    - Hazardous Materials
    - Adverse weather conditions

Current Situation – Why the Project is Required - Con't

Environmental

More effective management of:

- Natural resources.
  - Corridors and ROW
  - Herbicide application
  - Growth patterns
  - Partnerships with MNR and Algoma Forest Management of sensitive areas, Species at Risk. Eg. Wood Turtle, Osprey.
  - Wildlife preservation
- Property
  - Land Use/Ownership
  - Survey plans /documents
  - Easements
  - Licence of Occupation
  - Joint Use

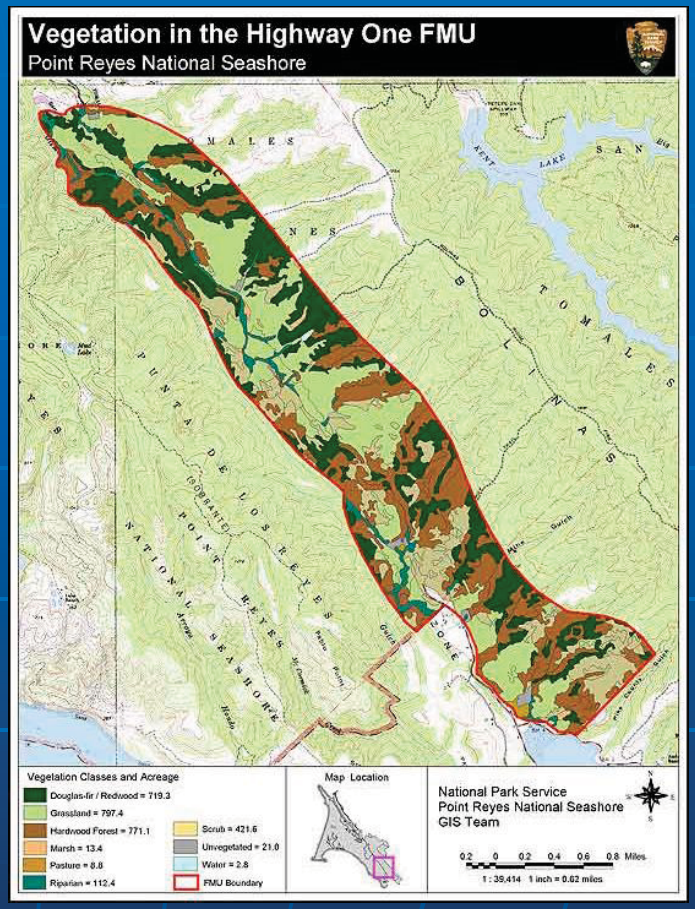

Fig.ure 1 - GIS Vegetation Management and species identification.

Current Situation – Why the Project is Required - Con't

- Reliability
  - Utility mandated to deliver electricity reliably.
    - Ensures reliability has a spatial attribute associated with it.
- Operability
  - Spatial inter-relationships become much more obvious and useful, thereby improving system coordination
  - Improvement in future planning
    - Reporting requirements
    - Condition Assessments
    - Capital Planning
- Maintainability
  - Incident Trend Analysis
  - Critical Infrastructure Protection
  - Maintenance Scheduling and Planning

Options Examined

- Option 1 –
  - Do Nothing:
    - This option is not acceptable. Currently, there is not a GIS for the GLP transmission system. Inaction will result in an increased risk of quality degradation in critical processes and applications for transmission operations.
- Option 2 –
  - Proposed Solution:
    - Implementation of full GIS software solution.

Proposed Solution

- The purchase and installation of a Geographical Information System (GIS) software solution.
- Since the amount of information at Great Lakes Power that can be presented spatially is very large, the initial GIS project has a limited scope intended to select a product, establish the necessary I.T. infrastructure, and populate it with only the highest priority data by the end of 2009.

Proposed Solution con't

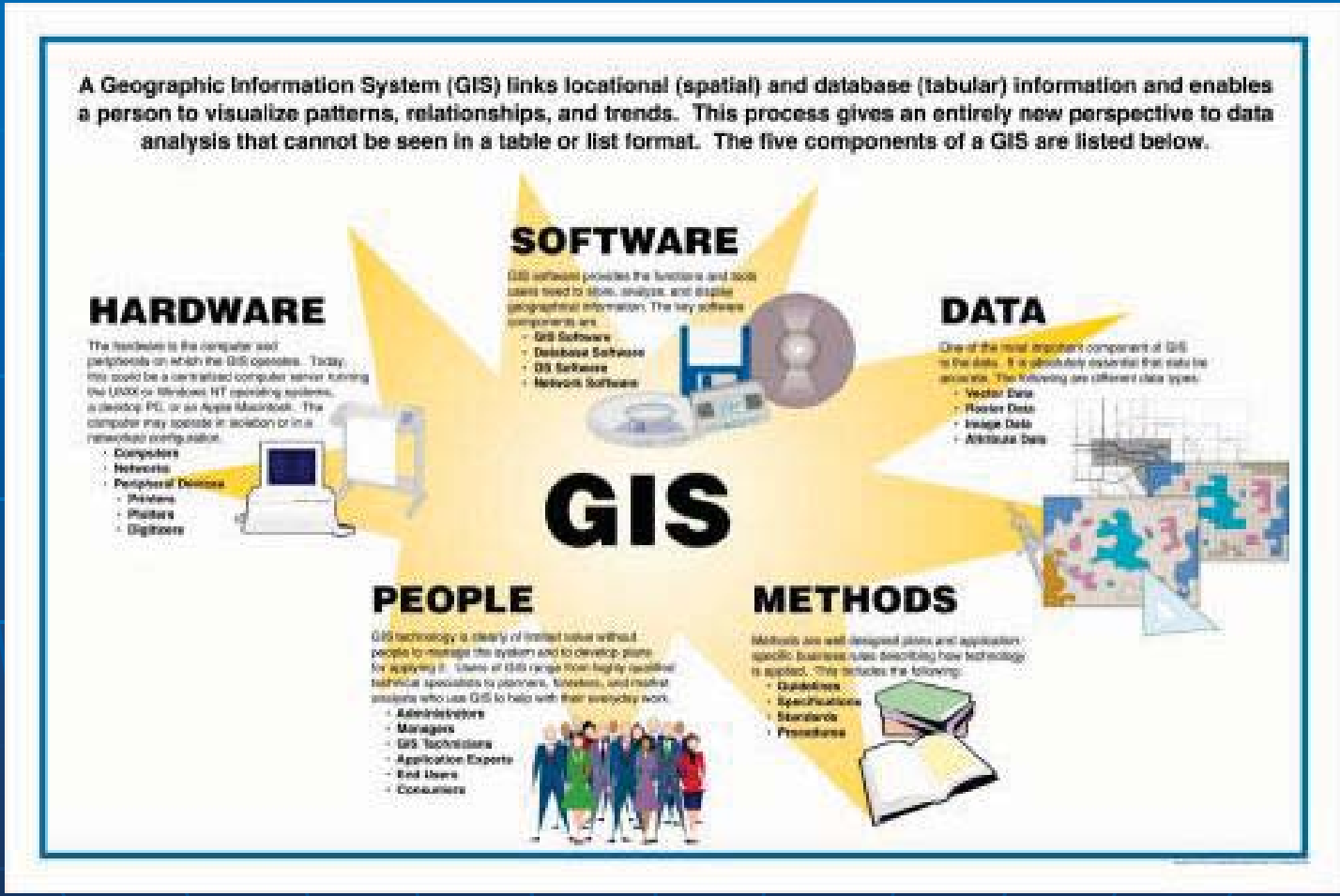

Figure 2 - The GIS Structure

Proposed Solution - Con't

- The data repository will support all applications that benefit from spatial data functionality.
- This support includes the provision of data to applications as well as managing the data storage and integrity of data on behalf of applications. The data repository will also integrate all spatial, as well as attribute and non-structured data.

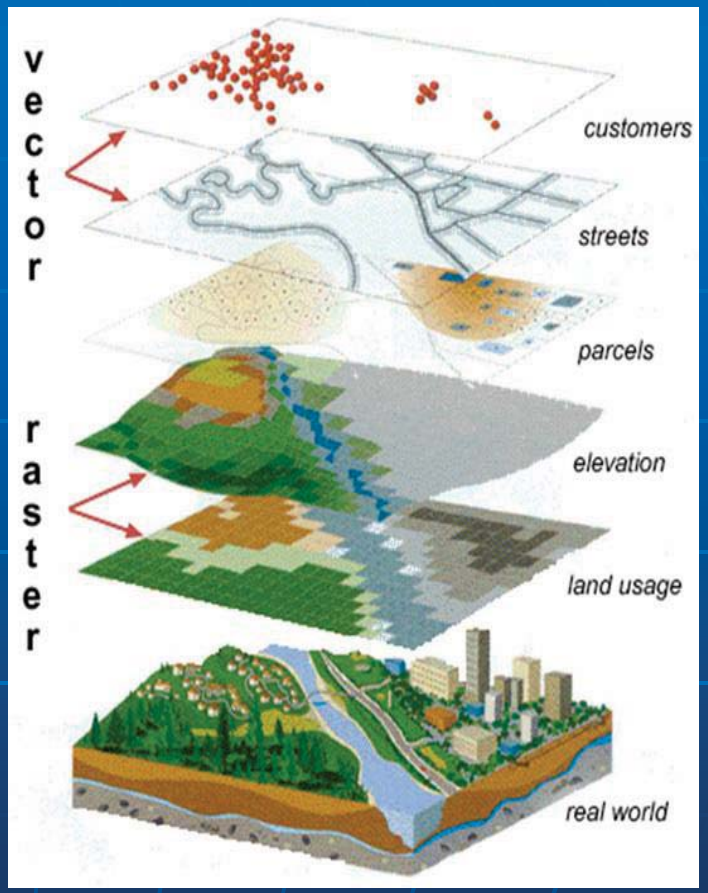

Figure 3 - Layering of information showing relationships between vector (CAD) imagery and raster (photo) imagery.

Proposed Solution - Con't

- These tools will support the following:
  - Environmental Management
  - Forestry Program Management
  - Outage planning and scheduling
  - Asset Investment Management
  - Work Planning
  - Capital and Maintenance Planning
  - Regulatory reporting requirements

Proposed Solution con't

- Phase Two includes:
  - Future projects to add more data to the environment based on business priorities and funding/resource availability.
  - The long-term goal is for a totally integrated, corporate level, management system of all spatial data within the GLP operations.

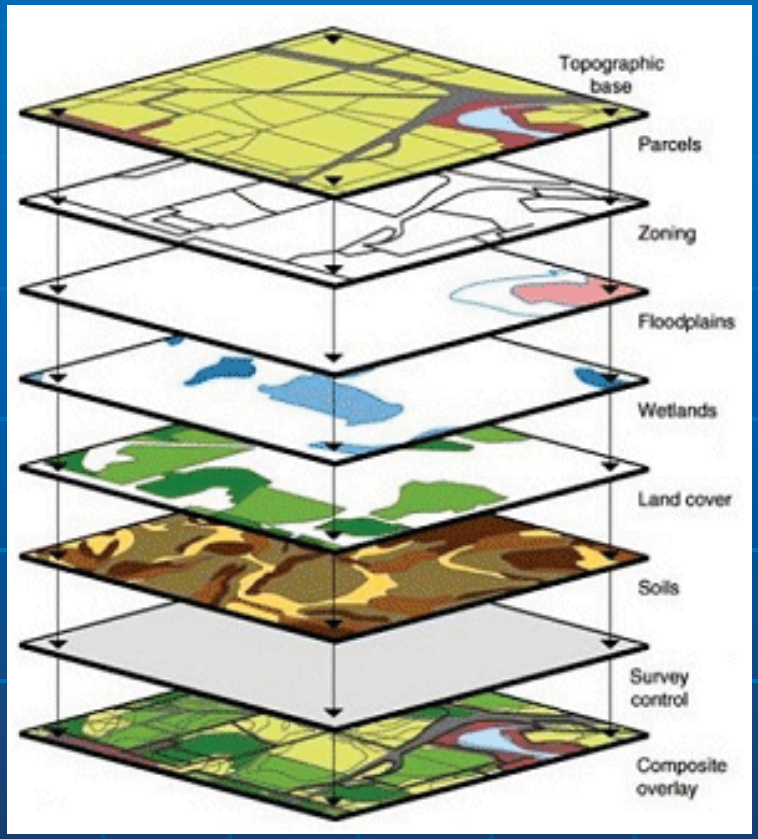

Figure 5 - Fully integrated system showing multiple layers.

Expected Benefits

- Expected benefits include:
  - Labor and cost savings
  - Efficiency in planning
  - Communication
  - Asset and property information ensured and in one local system.
  - Increase in regulatory requirement response time
  - Reduction in the loss of corporate intelligence through attrition
  - Enhanced Environmental management
  - Emergency Planning & Response Time
  - Reduced Maintenance Costs
  - Improvement of information and service to transmission customers

Regulatory Considerations

- Regulatory Risks
  - Pros – Good Utility Practice
    - Increase in reliable power to the customers
    - Improved Asset and ROW management
    - Outage Planning and Reporting
    - Reduction in Operating and Maintenance Costs

Summary

Enterprise GIS supports the consolidation of information systems and business processes across the business. It dramatically improves the effectiveness in areas such as, Asset Management, Work Flow and Planning such as field mapping, Health and Safety of workers, and the Public around Lines and Stations, and Environmental Protection of our Transmission Corridors. GIS provides strong support in decision making and analysis in such as identifying the location of an emergency. It enables records management data to be mapped for more effective incident reporting and trend evaluation.

In Concluding, it is recommended that the project move forward in order to improve the efficiency of daily business operations and redundancy of work . Anticipated request by regulatory agencies for the exchanges of digital information (not data) will be made possible

JT1.13 To provide table showing December 31, 1995 gross and net book values for transmission assets and what happened with the comprehensive revaluation.

Response to Undertaking JT1.13

Table JT1.13 A

	Balance as at 31-Dec-1995	1996 Comprehensive Revaluation	Effect of Comprehensive Revaluation on Dec. 31, 1995 Balances
Gross Value	$37,569,413	$84,100,000	$121,669,413
Depreciation	(11,056,000)	0	(11,056,000)
Net Book Value	$26,513,413	$84,100,000	$110,613,413

JT1.14 To provide the basis for the valuation.

Response to Undertaking JT1.14

GLPT has consulted with its auditor and has reviewed the 1996 files of Great Lakes Power Limited, Brascan and Great Lakes Power Inc. GLPT has not been able to locate any valuation document.

JT1.15 To provide the collective agreement for unionized employees.

[INSERT COLLECTIVE AGREEMENT (RECEIVED)]

AGREEMENT entered into this 18th day of May 2007 (to take effect January 1, 2007)

Between

GREAT LAKES POWER LIMITED

(hereinafter called the "Company")

- and -

POWER WORKERS' UNION
CUPE LOCAL 1000

(hereinafter called the "Union")

Article 1 RECOGNITION

1.1 The Company recognizes the Power Workers' Union – CUPE Local 1000 as the bargaining agent for all employees except foreman, persons above the rank of foreman, office staff and construction staff. The Company shall recognize and bargain with the regular committees as established by this agreement.

Article 2 RELATIONSHIP

2.1 It is recognized that the business of the Company is continuous and that the employees must be prepared to assist in maintaining service at all hours of the day or night, if available.

2.2 No employee shall be discriminated against by the Company or by the Union because he/she is or is not a member of the Union, because of Union activities or because of exercising his/her right provided by law or by this agreement.

2.3 Management recognizes the need to keep employees informed of planned technological changes that would impact significantly on jobs. Management also recognizes the need to consider re-deployment and retraining as preferred alternatives when introducing new technology.

2.4 Senior employees are expected to give assistance in training junior employees.

2.5 The Company and the employees covenant that they will co-operate to the fullest extent in carrying out the terms of this agreement. This will be accomplished by the process outlined in Article 17.

2.6 Human Rights

The Company will maintain a non-discrimination policy and actively pursue a non-discriminatory work environment.

Article 3 MANAGEMENT RIGHTS

3.1 The Company has and shall retain the exclusive right and power to manage its business and direct its working force including, but without limiting the generality of the foregoing, the right to hire, suspend, discharge for just cause, promote, demote and discipline any employee, subject to the terms of this agreement.

Article 4 UNION SECURITY

4.1 All employees, as a condition of employment, who have completed thirty (30) days employment, will be required to authorize deductions from pay in an amount equal to the current monthly union dues as determined by the Union.

4.2 During the term of this agreement, the Company agrees to deduct regular union dues from the wages of each employee in the bargaining unit. The current monthly dues will be deducted in equal amounts from each pay received in the calendar month, and shall be remitted to the Financial Officer of the Union within ten (10) working days of the final monthly deduction.

4.3 Notwithstanding Clause 4.2, in consideration of deductions of dues by the Company, the Union agrees to indemnify and save harmless the Company against any claim or liability arising out of or resulting from the collection of these dues.

4.4 Employees excluded from the bargaining unit shall not perform work normally done by employees within the bargaining unit unless such work is an emergency and regular employees are not available, or for testing purposes, or for instruction or training purposes.

4.5 When Management schedules a meeting with an employee to discuss work performance, the employee has the right to request a Union representative to attend.

4.6 Annually, the supervisor will review the employee file for letters of reprimand and the supervisor will determine whether the current behaviour warrants removal of the letter, if not a meeting will be arranged where the employee may have a Union representative in attendance and a plan shall be established with the employee's co-operation which, if followed, will ultimately result in removal of the letter.

Article 5 EMPLOYEE CATEGORIES

5.1 Definition of Employees

Temporary Employee: is an employee who is hired for a specific purpose and for a limited duration (up to nine (9) months). Any extension beyond nine (9) months will be by mutual consent of the Company and the Union. The Company may terminate his/her employment at any time by giving at least one (1) week's notice.

It is understood and agreed that only Article 4, Article 7, Article 8, and Article 21 and those benefits required by law shall apply to temporary employees.

Temporary employees will be hired at a job class which reflects the job to be done and the required skills/knowledge of the individual hired. A temporary employee may, with employer approval, be put into a job class category up to Class B in any Power Workers' Union – CUPE Local 1000 job class as outlined in this Collective Agreement.

At nine (9) months when a temporary job is to continue as per Article 5.1 or management's decision in other cases, the following will occur:

(a) The incumbent of a temporary position will be offered health benefit coverage equivalent to Blue Choice Hospital Health Plan. The Company will pay ninety per cent (90%) of the premium.

(b) Seniority will be established and will accumulate as from the date of hire i.e. in the event a temporary is hired into a regular job in Great Lakes Power Limited, he/she will bring seniority equivalent to the number of months of continuous service as a temporary prior to accepting the regular posting.

Probationary Employee: is an employee who is hired to determine his/her suitability for employment in a classified job. An employee shall be considered probationary for **six (6)** continuous calendar months. If the employee is retained, his/her seniority shall commence from his/her original date of employment.

Regular Employee: is an employee of the Company who has successfully completed the probationary period.

5.2 Seniority shall be defined as the length of service a regular employee has established with the Company from the day the employee last entered the employ of the Company. An employee shall lose seniority rating under any of the following conditions:

(1) the employee resigns;

(2) the employee is discharged and not reinstated;

(3) the employee is laid off for a period exceeding twelve (12) calendar months;

(4) the employee fails to return to work after layoff within seven (7) calendar days after being notified by registered mail to do so. If such failure to return is caused by sickness certified by a duly qualified medical practitioner, the time for return while prevented by illness shall be extended for a further period not to exceed a maximum of six (6) calendar months;

(5) the employee retires.

5.3 When an employee is placed on LTD his/her vacation and recognized holiday pay shall be prorated on the basis of time worked thereafter.

An employee, receiving benefits from the Workers' Safety and Insurance Board for illness or injury arising out of the duties of their job, shall also receive an additional payment from the Company which will be the lesser of ten (10%) per cent of the employee's normal wage or the amount necessary that, when combined with the pre-tax equivalent of the compensation payments, will bring the total equivalent gross payments from the two sources to one hundred (100%) per cent of the employee's normal wage. The Union will work with management and the injured worker to achieve the earliest reasonable return to work for the injured worker.

When an employee is receiving WSIB benefits for a period greater than one (1) year, his/her vacation and recognized holiday pay shall be prorated on the basis of time worked thereafter.

Article 6 STRIKES AND LOCKOUTS

6.1 There shall be no lockout by the Company and no interruption, work stoppage, strike, sit-down, or picketing of the operation of the Company's system by an employee or employees during the life of this agreement.

6.2 The Company agrees that hourly rated employees will not be required to cross picket lines except to perform duties required for the operation of the Company's system and the maintenance of machinery and equipment within the Company's system and under no circumstances will an individual employee or group of employees be required to use force in the crossing of a picket line.

Article 7 GRIEVANCE AND ARBITRATION PROCEDURE

7.1 Disagreements relating to the interpretation, application, administration or alleged violations of this agreement shall be considered fit matter for grievance and shall be promptly dealt with in the following manner:

All grievances and replies to grievances must be set out in writing in all steps and shall be addressed through normal line management.

Step 1

The alleged grievance must be submitted in writing to the supervisor responsible for his/her area and department within fifteen (15) working days of the event which gave rise to the grievance or, in the case of a monetary item, within fifteen (15) working days of receipt of the employee's pay. Within five (5) working days of submitting the alleged grievance, the employee, assisted by a steward, shall take up the matter with the supervisor responsible for his/her area. Failing settlement within five (5) working days of Step 1, the grievance may be processed within the next ten (10) working days to Step 2. Step 1 may be eliminated with reference to any grievance for discharge or suspension.

Step 2

Within ten (10) working days of notifying the Vice President of the Company or his/her alternate of invoking Step 2, the grievance committee of the Union shall meet with the Vice President or his/her alternate. The reply of the Company to the grievance at Step 2 will be made to the grievor and the Principle Steward or his/her alternate within ten (10) working days of the meeting. Failing settlement at Step 2, within thirty (30) calendar days from the date of the reply of the Vice President, or his/her alternate, the grievance may be processed to arbitration as defined in the current Labour Relations Act of Ontario.

7.2 Permission will be granted to stewards to deal with grievances arising in their own work areas. Time spent by the steward investigating and settling such grievances will be without loss of normal earnings. A steward will not absent himself/herself from his/her normal work area without permission of the supervisor in charge.

7.3 The Company shall grant leave without loss of normal earnings to employees who are members of a grievance committee acting under Step 2 of the grievance procedure and to employees when attending a meeting called by the Company. When a steward who is working away from his/her normal work area attends a meeting called by the Company or attends a meeting under this procedure, the Company will provide transportation, if available, or will pay mileage in order for the said steward to attend such meetings.

7.4 Grievances affecting more than one employee, or any grievance brought forward by the Company, or where differences arise between the Company and the Union concerning the interpretation or general application of this agreement which may be considered as policy matters, shall be submitted in writing by either party within seven (7) working days of the alleged occurrence and shall be dealt with in the manner provided in the grievance procedure commencing at Step 2. It is the intention of the parties that the filing of policy grievances by an employee or employees shall not be used to bypass the regular grievance procedure.

7.5 Local Union officers, stewards, and committee members who are employees of the Company, shall have the right to originate a grievance for an employee on behalf of employees concerned, in the manner prescribed in the grievance procedure. The grievors involved shall be listed on the grievance form.

7.6 The parties agree that all grievances shall be submitted to single panel arbitration. The arbitrator shall be selected from a pool of arbitrators that are mutually agreed to by the parties. It is agreed by the parties that the arbitrator shall not have the power to alter or to change any of the provisions of this agreement, or to substitute any new provisions for any existing provisions or to provide a decision which is inconsistent with the terms of this agreement, providing that they are not in conflict with any legislation affecting the parties.

7.7 The Union shall have the right at any time to have the assistance of representatives of the Power Workers' Union - CUPE Local 1000 when dealing or negotiating with the Company.

Article 8 WORK SCHEDULES AND WAGE PROVISIONS RELATING THERETO

8.1 Hours of Work

PART 1 – GENERATION DIVISION AND SYSTEM CONTROL DIVISION

(a) System Control Employees

(i) 7 day week

The Company requires certain employees to work rotating shifts on a seven (7) day per week schedule in its system control operations. Management will provide seven (7) days notice to affected employees when it is required to transfer the employee from/to the seven (7) day operation shift schedule. Rotational opportunities, such as training and project work, will be identified on the shift schedule and can be established outside the current schedule. Failure to give the appropriate notice to the employee will require applicable premium rate to be paid for all regular hours worked until such seven (7) days has elapsed after the original notice has been given.

A twelve (12) month schedule will be posted thirty (30) days prior to its starting date. The schedule will average forty (40) hours per week and will indicate the days, hours of work (shift) and position for each employee. The regular schedule will be prepared so that each employee's time is balanced to zero plus or minus eight (8) hours.

Rotational opportunities may exist within the department and assignments will be considered on a voluntary basis. The employee will be compensated at the appropriate rate. These rotational opportunities will be limited to ninety (90) days and not intended to fill a vacancy.

Normal Hours of Work

To work eight (8) hours per day so as to work forty (40) hours per week with, where possible, two (2) consecutive days off after completion of forty (40) hours but, can be adjusted through department consensus and management approval.

The shift shall normally be:

Day Shift	-	0800 hours to 1600 hours
Afternoon Shift	-	1600 hours to 2400 hours
Midnight Shift	-	2400 hours to 0800 hours

Current Schedule (Senior Operators/Second Operator Performing Outage Coordinator Duties

To work ten (10) hours per day on a seven (7) day shift schedule so as to work on average forty (40) hours per week.

Day Shift	-	0700 hours to 1700 hours

Current Schedule (First and Second Operators)

To work twelve (12) hours per day on a seven (7) day shift schedule so as to work on average forty (40) hours per week.

Day Shift	-	0800 hours to 2000 hours
Night Shift	-	2000 hours to 0800 hours

(ii) Other Employees (Day Workers)

Normal Hours of Work

To work eight (8) hours per day, five (5) days per week, Monday through Friday, so as to work (40) hours per week, 0800 hours to 1630 hours with one-half (1/2) hour allowance for lunch between 1200 hours and 1300 hours, but can be adjusted through department consensus and management approval. When an adjustment is in effect, Management reserves the right to return to normal hours, providing they give seven (7) calendar days notice. Failure to give the appropriate notice to the employee's will require applicable premium rate to be paid for all regular hours worked until such seven (7) days has elapsed after the original notice has been given.

(b) Sault Ste. Marie Employees

Normal Hours of Work

To work eight (8) hours per day, five (5) days per week, Monday through Friday, so as to work forty (40) hours per week, 0800 hours to 1630 hours with one-half (1/2) hour allowance for lunch between 1200 hours and 1300 hours, but can be adjusted through department consensus and management approval. When an adjustment is in effect, Management reserves the right to return to normal hours, providing they give seven (7) calendar days notice. Failure to give the appropriate notice to the employee's will require applicable premium rate to be paid for all regular hours worked until such seven (7) days has elapsed after the original notice has been given.

Current Schedule – Maintenance Employees

To work ten (10) hours per day on a seven (7) day shift schedule so as to work on average forty (40) hours per week.

The hours of work shall normally be from 0700 hours to 1730 hours with one-half (1/2) hour allowance for lunch.

(c) Wawa Employees

Normal Hours of Work

To work eight (8) hours per day, five (5) days per week, Monday through Friday, so as to work forty (40) hours per week, 0800 hours to 1630 hours, with one-half (1/2) hour for lunch between 1200 hours and 1300 hours, but can be adjusted through department consensus and management approval. When an adjustment is in effect, Management reserves the right to return to normal hours, providing they give seven (7) calendar days notice. Failure to give the appropriate notice to the employee's will require applicable premium rate to be paid for all regular hours worked until such seven (7) days has elapsed after the original notice has been given.

Current Schedule – Wawa Employees

To work ten (10) hours per day, four (4) consecutive days per week, Monday through Friday, with one-half (1/2) hour for lunch between 1200 hours and 1300 hours.

(d) Special Shifts When Necessary (Temporary Employees Only)

Temporary employees will work the established shift at straight time, up to forty (40) hours per week, after which the rates in 8.2 apply.

(e) Shift Schedule for Planned Generation Maintenance, Planned Major Maintenance and Associated Work

A shift schedule may be established at the discretion of the Business Unit (Sault Hydro, Wawa Hydro) for planned generation maintenance, and associated work. The following provisions shall apply to every such shift schedule:

(i) An outage schedule shall be posted annually giving the dates and proposed locations of work when the schedule will apply. Applicable rates shall apply as per Article 8.1 normal hours of work and Article 8.2 overtime. The employees will be given an opportunity to volunteer to work the outage schedule. Employees shall be assigned as necessary to obtain required crew compliment. Employees shall be assigned to the schedule with a minimum of twenty-one (21) days notice. It is recognized that employees beginning or ending a scheduled vacation period will not normally be included on the weekends preceding or following their vacation period.

(ii) Every employee will normally be required to work a maximum of five (5) weeks on the maintenance schedule. If an outage is cancelled with more than two (2) weeks notice the normal hours of work shall be resumed. If an outage is cancelled with less then (2) weeks notice, then the outage shall count as one of the five (5) required outages. The affected employees shall be given the option to work as scheduled or revert to the normal hours of work.

(iii) Each employee on the outage schedule will be scheduled to receive forty (40) hours of pensionable time per week so as to average approximately two thousand and eighty (2,080) pensionable hours per year.

(iv) Consecutive days off shall be scheduled during the normal work week (Monday to Friday) for each employee on the shift schedule.

(v) At the Company's request, employees who voluntarily work on time off scheduled in Article 8.1 (e) (iv) shall be paid at straight time-overtime, for the normal working hours (as defined in Article 8.1). Employees required to work due to a forced outage shall be paid at rates specified in Article 8.2.

(vi) The shift cycle may consist of shifts of eight (8) hours over five (5) consecutive days, ten (10) hours over four (4) consecutive days, or twelve (12) hours per day so as to average forty (40) hours per week, at the discretion of the Company in consultation with the affected employees.

PART 2 – TRANSMISSION & DISTRIBUTION DIVISION

(f) Normal Hours of Work

To work eight (8) hours per day, five (5) days per week, Monday through Friday, so as to work forty (40) hours per week, 0800 to 1630 hours, with one-half (1/2) hour for lunch between 1200 hours and 1300 hours but can be adjusted through department consensus with management approval. When an adjustment is in effect, Management reserves the right to return to normal hours, providing they give seven (7) calendar days notice. Failure to give the appropriate notice to the employee's will require applicable premium rate to be paid for all regular hours worked until such seven (7) days has elapsed after the original notice has been given.

(g) Exceptions to Normal Hours of Work

1. Equipment Mechanics

To work eight (8) hours per day, five (5) days per week, from Monday to Saturday, so as to work forty (40) hours per week, between the hours of 0700 hours and 1530 hours with one-half

(1/2) hour for lunch but, can be adjusted through department consensus with superintendent approval.

One person shift – Tuesday through Friday – 1300 to 2130 and, Saturday – 0700 to 1530 so as to work forty (40) hours per week, based on seniority.

2. Optional Hours of Work

To work ten (10) hours per day, four (4) consecutive days per week, Monday through Friday, with one-half (1/2) hour for lunch between 1200 hours and 1300 hours. Hours of work will be scheduled between the hours of 0700 to 1730 hours or 0800 to 1830 hours, so as to work on average forty (40) hours per week. These optional hours may be implemented when mutually agreed by impacted staff and the supervisor. Optional hours will be implemented when there is a supporting business case and no negative customer impact.

8.2 Overtime

All time worked continuous with and in excess of the current schedule shall be at the rate of time and one-half, except between the hours of 1800 hours and 0700 hours, when double time will apply. Double time rates will apply for all hours worked on an employee's regularly scheduled second and subsequent days off.

8.2.1 Rest Time

Employees should come to work adequately rested so they can perform their duties effectively and safely.

Day workers who work more than five (5) hours during the period between 2100 and the next regular scheduled shift shall be allowed a rest period of four (4) hours with compensation at the basic hourly rate. Double time rates will apply until a rest period is taken.

Effective May 18, 2007 – Day workers who work more than four (4) hours during the period between 2200 and the next regular scheduled shift shall be allowed a rest period of five (5) hours with compensation at the basic hourly rate. Double time rates will apply until a rest period is taken.

Employees may use vacation, banked time or unpaid leave for the remainder of the regular scheduled shift subject to supervisory approval.

8.3 On Call

8.3.1 Each employee when requested shall be available for "On Call" duty. These employees shall share this duty on a rotation basis. When "on call", the employee shall make himself/herself available within telephone or radio communication whether at his/her home or in the immediate proximity to his/her work centre in order that he/she may proceed, upon instruction, and without delay, to work as directed.

8.3.2 "On Call" duty for a regular work day shall commence at the normal quitting time on the day scheduled for "on call" duty and shall extend until normal starting time on the following day.

8.3.3 "On Call" duty for a weekend shall commence at normal quitting time on the last regular working day of each week and terminate at normal starting time on the first regular working day of the week next following.

8.3.4 "On Call" duty shall also include any holiday occurring on a Tuesday, Wednesday or Thursday and shall commence at normal quitting time on the day prior and extend until normal starting time on the day following that holiday.

8.3.5 An "On Call" schedule will be reviewed with the employees concerned and posted.

8.3.6 In addition to regular overtime pay, for any time worked and holiday pay, where applicable, an employee shall receive for all scheduled "on call" hours:

Effective January 1, 2007 - $ 1.75 per hour
Effective January 1, 2008 - $ 1.85 per hour
Effective January 1, 2009 - $ 1.90 per hour

8.3.7 Every effort will be made to so arrange a schedule that employees leaving or returning from vacation shall not be required to be "on call".

8.3.8 When the Company requests changes to the posted "on call" schedule the employee required to take additional on call periods will be paid double the "on call" rate for the additional coverage.

8.3.9 Generation Division, Sault Ste. Marie Maintenance employees scheduled for "on call" on a statutory holiday, will be permitted to work at regular hourly rate and take an alternate day off at a mutually agreed upon time by the employee and the supervisor.

8.4 Minimum Call-Out

Employees called out to work other than their normal hours shall be paid at the applicable premium rate with a minimum of four (4) hours' pay.

8.5 Shift Differential

When employees are required to work shifts, they shall receive a shift bonus as follows:

(a) Eight (8) Hour Shifts

Effective January 1, 2007 – eighty-six cents (86¢) per hour on evening shift, and ninety-eight (98¢) per hour on night shift, presently established as 2400 hours to 0800 hours.

Effective January 1, 2008 – ninety-one cents (91¢) per hour on evening shift, and one dollar and three cents ($1.03) per hour on night shift, presently established as 2400 hours to 0800 hours.

Effective January 1, 2009 – ninety-six cents (96¢) per hour on evening shift, and one dollar and eight cents ($1.08) per hours on night shift, presently established as 2400 hours to 0800 hours.

(b) Twelve (12) Hour Shifts

Employees who are scheduled to work extended hours and who work midnights from 1900 hours to 0700 hours will receive a shift bonus as follows:

Effective January 1, 2007 one dollar and twenty cents ($1.20) per schedule hour.

Effective January 1, 2008 one dollar and twenty-five cents ($1.25) per schedule hour.

Effective January 1, 2009 one dollar and thirty cents ($1.30) per schedule hour.

8.6 Temporary Group Leaders

8.6.1 When an employee is requested and agrees to be a temporary Group Leader or performs contract monitoring for a period of one (1) or more working days he/she will be paid at a Group Leader job class A, B, C, or minimum job class 17, depending on the size and complexity of the project, as determined by the Manager. In the event no one agrees, Management will appoint an employee. Temporary Group Leader

positions will be posted for projects exceeding four (4) weeks in duration with the appropriate wage rate identified. For clarity, contract monitoring may be completed by bargaining unit or non-bargaining unit employees. If intended to be filled by bargaining unit employee employees such contract monitoring projects exceeding four weeks in duration will be posted with the appropriate wage rate identified.

8.6.2 A roster will be posted each year where employees will be given the opportunity to apply for temporary Group Leader positions of a duration of four (4) weeks or less. Management will draw from this list to fill these positions as they arise.

8.7 Relief Supervisor

8.7.1 When an employee acts as a Relief Supervisor, he/she shall be paid a differential of five per cent (5%) of his/her normal rate converted to cents per hour in addition to his/her normal rate. It is understood that the appointment of a Relief Supervisor from the Union membership will be avoided whenever possible if it adversely affects the "on call" schedule or availability of personnel.

Article 9 RECOGNIZED HOLIDAYS

9.1 Statuary holidays for temporary employees and employees serving a probationary period will be prorated based on regular hours worked in the four (4) weeks proceeding the statuary holiday. After the completion of a three (3) months' probationary period employees will be paid for the following holidays, or if the day falls on a Sunday, for the day observed as the holiday, unless off on an approved leave of absence: New Year's Day, Good Friday, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day, Boxing Day and Easter Monday.

9.2 All time worked on any of the above named holidays will be paid at the rate of double- time in addition to the normal day's pay for all employees.

9.3 The Company reserves the right to determine the size of crew necessary for any or all of these holidays. Forty-eight (48) hours' notice will be given to the necessary crew except in the case of an emergency breakdown.

Article 10 VACATIONS

10.1

(a) All employees will receive vacation with pay on the following schedule;

After one (1) years' employment	- 2 weeks
After three (3) years' employment	- 3 weeks
After ten (10) years' employment	- 4 weeks
After fifteen (15) years' employment	- 5 weeks
After twenty (20) years' employment	- 6 weeks
After twenty-six (26) years' employment	- 6 weeks plus one day
After twenty-seven (27) years' employment	- 6 weeks plus two days
After twenty-eight (28) years' employment	- 6 weeks plus three days
After twenty-nine (29) years' employment	- 6 weeks plus four days
After thirty (30) years' employment	- 7 weeks

(b) With the mutual consent of the employee and his/her supervisor, employees will be allowed forty (40) hours leave of absence annually at their request for additional time off. It is understood that such requests for leave of absence will normally be granted. Such time off will be without pay and may be used at the employee's discretion with a minimum of one-half (1/2) of a shift off.

(c) Banked Time provisions will apply to all employees of Great Lakes Power Limited.

Employees who work overtime shall have the option of the following to a maximum of eighty (80) hours of banked time. Normally this eighty (80) hours will not be in addition to the forty (40) hours leave of absence in Article 10.1(b).

Being paid the overtime hours at the appropriate premium rates or banking the overtime at the appropriate premium rates to be taken as paid time off taken at a mutually agreeable time.

10.2 Vacations are not to be taken in periods of more than two (2) weeks at one time unless special arrangements are made.

10.3 Employees will have the month of January in each year to submit suggested vacations. Within two (2) weeks, the Company will post a vacation schedule for those employees covered by this agreement. Every effort will be made to allow employees to have at least two (2) weeks' vacation between June 1st and September 1st. The Company will attempt to grant preference of remaining vacation time as requested by the employees but the final decision regarding vacation schedules rests with the Company.

10.4 It is recognized that employees will not carry over vacations from one calendar year to the next. However, employees who are entitled to three (3) or more weeks' vacation, may be allowed to carry over one or two weeks' vacation respectively, when a special excursion is planned and approved by Management. This privilege will not be extended to any employee more frequently than once every five (5) years.

Article 11 SICK LEAVE

11.1 The Company agrees to pay eighty-five per cent (85%) of an employee's normal earnings for the first three (3) days of sick leave providing, if requested by his/her immediate supervisor, the employee submits with his/her application for sick benefit a certificate of a qualified doctor certifying to his/her illness. After three (3) days of sick leave an employee will receive eighty per cent (80%) of normal weekly earnings rounded up to the nearest one dollar ($1.00) provided he/she has satisfied Great-West Life requirements for the short term weekly benefits insurance.

11.2 If an employee is absent and requires a Doctor's certificate the Company will reimburse the employee for the cost of the Doctor's certificate upon proof of payment.

Article 12 PENSION AND INSURANCE

12.1 The existing pension plan (Pension Registration No. 0338053), revised in accordance with changes negotiated for this agreement, shall continue in effect. Regular employees hired after January 1, 1991 shall become a member of this Plan after three (3) months of continuous service. Credited service for pension purposes shall commence at that date.

12.2 The existing Group Insurance benefits as set out in the Group Plan 321032 with the Great-West Life and in the Group Plan 0087887-001 with RBC Insurance Company revised in accordance with changes negotiated for this agreement, shall continue in effect.

12.2.1 Under the above noted insurance plan or similar plan, the following basic benefits will be provided:

(1) Life Insurance

(2) Weekly Indemnity

(3) Long Term Disability

(4) Vision Care

(5) Dental Plan

(6) Extended Health Care and Drug Plan

LTD eligibility is as defined in the Group Plan with the RBC Insurance Company.

12.3 The Company agrees to pay ninety per cent (90%) of the premium costs of both the benefits plans listed in 12.2.1 above and one hundred per cent (100%) of the Employer Health Tax, with the exception of the orthodontics plan and major restorative plan where the Company will pay fifty per cent (50%) of the cost up to one thousand five hundred dollars ($1,500) upon ratification in each plan in each year.

12.4 Benefits For Retirees

Members who have retired according to the provisions of this Agreement will be eligible to participate in the Group Benefit Plan for Retirees 321032A with Great-West Life based on the terms and conditions specified in the plans:

i) Life Insurance three thousand dollars ($3,000) (basic only);
ii) Pay-direct Drug Insurance;
iii) Health Insurance.

Further, they will be eligible for re-imbursement directly from the Company (GLPL) as follows:

i) Basic Dental Services;
ii) One set of dentures;
iii) Vision Care Expense up to a maximum of three hundred fifty dollars ($350.00) effective *upon ratification* and four hundred dollars ($400.00) effective January 1, 2009 for two (2) consecutive calendar years.

12.5 The deductions from each employee will be calculated for single and married employees as separate groups, but will include a proportion of Union pensioners' premium pro rated over all active Union members.

12.6 Changes in the amount deducted will only be made periodically when changes in premiums or benefits warrant such changes, and will only be made following discussions with Union representatives. The employer will share information on experienced rated decrease in premiums incurred with employee group.

12.7 With the exception of (i) of this clause, after thirty-six (36) months on long term disability, if the employee is unable to return to work he/she shall lose seniority and be removed from the payroll. At this time, continuation of healthguard coverage shall be made available at the Company's expense.

(i) If the employee has fourteen (14) years' service when the thirty-six (36) months on long term disability is reached, the employee may either stay on LTD until age fifty-five (55) and then retire under the disability retirement option of the retirement plan or stay on LTD and be removed from the payroll.

12.8 It is acknowledged and agreed that additional benefits granted by the Company in this agreement satisfy the requirements of the refund provisions of the rebate section of the Employment Insurance Premium Reduction Program.

Article 13 JOB POSTING AND SELECTION

13.1 In making reductions, additions, or replacements to the work force, or in making promotions or demotions, seniority, ability and proficiency will be the governing factors, but where ability and proficiency are relatively equal, seniority with the Company from the last date of hire will govern. All such vacancies or additions, except for vacation relief, casual or emergency work, shall be posted on the bulletin boards

within ten (10) working days of becoming vacant for at least seven (7) calendar days, with such vacancies being posted in all areas on the same day. No applications for the positions posted will be accepted after the seventh day posting. Group Leader positions will be posted and selected within the Business Unit. If there are no successful applicants within the Business Unit the posting and selection provisions shall be extended to the Company.

An employee may decline promotion at any time without affecting his/her seniority or promotional rights.

13.1.1 Subject to all the provisions of this article, any employee who will be absent for more than seven (7) calendar days on an approved leave of absence of thirty (30) days or less may lodge in writing with his/her immediate management supervisor a request to be considered for specified vacancies that arise during his/her period of absence. This request will constitute sufficient reason for him/her to be considered as any other applicant.

13.1.2 The names of the successful applicants shall be posted on the bulletin board for at least five (5) calendar days within ten (10) working days following the last day of posting on the bulletin board.

13.2 An employee established in the bargaining unit who is promoted or transferred outside the bargaining unit for a period of more than one (1) year, but remains in the employ of the Company, may be reassigned to the bargaining unit, and shall retain overall seniority for vacation, pension, and benefit purposes but shall be deemed to be a new employee on the Union seniority list.

13.3 An employee established in the bargaining unit who is promoted or transferred outside the bargaining unit for a period of less than one (1) year, but remains in the employ of the Company, may be reassigned to the bargaining unit and shall retain his/her seniority from the date of his/her employment.

13.4 The Company shall notify the Union of all persons so promoted or transferred.

13.5 Where an applicant does not receive a position applied for, he/she shall, upon request to his/her supervisor, be counselled as to what steps should be taken to be more likely to succeed in future applications.

Article 14 LAYOFF AND RECALL

14.1 In the event of a layoff, employees in the bargaining unit shall be laid off in the reverse order of their seniority, provided the Company can retain a staff qualified to perform the work available. Employees shall be recalled on the basis of their seniority, provided they are qualified to do the work available.

14.2 Notice Period

The Company will notify the Union at least sixty (60) days prior to the effective date of layoff of designated employees.

The Company will give the employees who are to be laid off as much advance notice as possible and in no case less than six (6) weeks.

Article 15 LEAVE OF ABSENCE

15.1 General

15.1.1 All employees are required to give as much notice as possible to their immediate supervisor when, due to illness or otherwise, they are unable to report for work. Any employee absenting himself/herself from work without providing reasonable cause shall be subject to disciplinary action.

Any employee absenting himself/herself from work without providing reasonable cause, for more than two (2) consecutive work days, may be subject to dismissal.

15.1.2 If the Union requires a Union representative to be released from their normal duties to perform Union business, the Union will compensate the Company in the following manner:

(i) absences less than or equal to five (5) days - the employee's normal rate of pay;

(ii) all absences after five (5) days - normal rate of pay plus benefits totalling forty-two per cent (42%) will be reimbursed.

On giving sixteen (16) days notice to the Company such absences will be accommodated insofar as the regular operation of the department in which he/she is employed will permit.

Normally absences for the Principal Steward will not exceed twenty (20) days per year and ten (10) days per year to the Stewards.

Where delegates have incurred expenses in order to attend a Union Convention and, because of a Company emergency, are unable to attend the Convention, the Company shall reimburse the two (2) delegates for non-recoverable expenses.

15.1.3 An employee of the Company who is elected or selected for a position with the Union or any body with which the Union is affiliated or who is elected to public office, must make application for a leave of absence in writing at least three (3) weeks in advance of such leave. Approval will not be unjustly withheld; however, only one employee at any one time will be granted a leave of absence under this paragraph.

15.1.4 A personal leave of absence without pay in addition to leave provided under 10.1 (b) may be granted by the Company. The employee shall direct his/her written request for such leave to his/her immediate supervisor. A written reply shall be given.

15.1.5 In the case of any leave of absence without pay which exceeds thirty (30) days, the employee's seniority will be frozen for the duration of the leave of absence at the level attained prior to the leave of absence. In this case, all costs (employee and Company) of the normal indemnities will be payable by the employee. Any vacation credits will be pro rated on the time actually worked.

15.1.6 Employees called to Her Majesty's service or enlisting during a period when Canada is at war, shall be reinstated upon their return with all privileges and seniority ratings they had when leaving the service of the Company.

15.1.7 When in the Company's judgement the circumstances warrant such action a leave of absence with pay will be granted to a maximum of three (3) days per calendar year.

This leave is based upon reasons of personal emergency, such as severe illness in the immediate family which would necessitate remaining away from work until adequate arrangements could be made for outside help or in cases where an employee is faced with the effects of a severe storm, fire or flood.

15.2 Bereavement Leave

15.2.1 Effective *upon ratification*, whenever a death occurs to a member of the immediate family of an employee, the Company will compensate the employee for any time lost from work up to a maximum of four (4) consecutive work days which include the day of the funeral. The Company agrees to consider the granting of up to two (2) additional days with pay for traveling time, provided cause is shown for the need of this time. Compensation shall be at the regular hourly rate of the employee for a normal work

day. The term "immediate family", for the purpose of this paragraph, to be considered to include only the following:

(i) the spouse, parents, sister, brother, child, grandchildren, mother-in-law or father-in-law, or grandparents of the employee.

(ii) a relative or foster children residing in the household of the employee.

15.2.2 Whenever a death occurs to a member of the family who is not considered as immediate family, the Company will compensate the employee for one (1) day of lost time in order to attend the funeral. For purposes of this clause, family other than immediate shall be interpreted to mean: brother-in-law, sister-in-law, spouses' grandparents, aunt or uncle.

15.3 Jury and/or Witness Duty

The difference in wages between an employee's straight time wage, excluding premium pay, and the fee allowed will be paid by the Company to any employee required to serve on a jury or to be a court witness in the District of Algoma. Exceptions to this case shall be taken to Senior Management for consideration.

Article 16 ALLOWANCES

16.1 Travel

16.1.1 The Company will supply transportation, at its own discretion either in Company vehicles or by public transportation, for employees carrying out their normal duties when travelling between work centres. Time spent in travelling will be paid for at the applicable rate when an employee is required to travel between work centres. Employees will travel from their work centres to and from the job on the Company's time. The words "work centre" shall, for the purpose of this clause, be where the employee is normally reporting for work.

16.1.2 Employees working away from their regular work centre during the week will be allowed to return to that centre on Company time for the weekend, unless they are required for weekend work.

16.1.3 Except in the case of an emergency, when employees are required to be away from home overnight, every effort will be made to give at least forty-eight (48) hours' notice of such requirement.

16.1.4 Any employee covered by this agreement whose work requires him/her to be away overnight from where he/she normally resides, will be provided with room and board with a maximum of two (2) to a room when in permanent crew quarters.

16.1.5 Separate quarters shall be made available for all Operating and Maintenance crews when required to work at outlying stations, except in the case of an emergency.

The Company will provide recreational facilities (to be agreed upon by the Company and representatives of the Union) at permanent quarters established for work crews working outside the Sault area where space in these quarters is available.

16.1.6 Compensation for travel outside of normal working hours to receive training shall be paid as follows:

(i) Travel to training that is required by legislation or deemed mandatory by the Company is paid at applicable rates.

(ii) Travel to courses held within the Algoma District which have been identified by the supervisor and employee as developmental will be paid at straight time, up to a maximum of four (4) return trips per year and at applicable rates after four (4) trips per year.

(iii) Travel to courses held outside of the District of Algoma which have been identified by the supervisor and employee as developmental shall not be paid.

In all cases the employer pays for the course, course materials, meals and accommodations.

Developmental training is defined as all training with the exception of that which is legislated or deemed mandatory by the Company.

16.2 Tools and Clothing

16.2.1 The Company will supply regulation rubber gloves for all employees who are required to work on or near live lines or apparatus.

16.2.2 All employees will supply the personal tools of their trade. When equivalent conversion tools (metric, etc.) are required on Company work, they will be supplied by the Company. The Company will supply all other appropriate tools and equipment, also overalls and work gloves when, in the opinion of the Company, such are needed. Worn out or broken personal tools will be replaced by the Company at no cost to the employee when the broken or worn out tools are turned in for replacement.

Notwithstanding the above paragraph, employees hired after January 1, 1994 will supply the personal tools of the trade, both metric and standard sizes.

16.2.3 The Company will reimburse the employee for one hundred per cent (100%) of the cost of a pair of an approved electric shock resistant safety boots or shoes per year upon presentation of proof of purchase. The type of boot or shoe purchased must be appropriate for the nature of the work in which the employee is involved. Additional pairs may be purchased and will be equally subsidized upon demonstration of need and proof of purchase.

16.3 Employees forced to transfer within the Company will be reimbursed for their moving expenses to a maximum of five thousand dollars ($5,000).

16.4 Where an employee covered by this agreement is required to work/live under extreme conditions which include; no running water, lack of proper toilet facilities, limited road access and no electricity he/she will be paid a weekly allowance of one and one-half (1-1/2) hours pay per day (Job Class 17). The Company will endeavour to minimize the number of times employees are required to work under such conditions.

16.5 If mutually agreeable in lieu of actual meal expenses associated with an overnight stay, away from their normal work centre, an employee may elect a board allowance of sixty dollars ($60.00) per day effective *upon ratification*, seventy dollars ($70.00) per day effective January 1, 2008. The sixty dollars ($60.00) value is based on a breakfast allowance of ten dollars ($10.00) a lunch allowance of twenty dollars ($20.00) and a dinner allowance of thirty dollars ($30.00). The seventy dollars ($70.00) value is based on a breakfast allowance of fifteen dollars ($15.00) a lunch allowance of twenty dollars ($20.00) and a dinner allowance of thirty-five dollars ($35.00). On the first day away from the normal work center the meal expense will be prorated to include lunch and dinner and on the day the employee returns home to include breakfast and lunch unless the employee works past 1800 hours then the dinner allowance would apply.

Article 17 WORKING RELATIONS COMMITTEES

The Company and the Power Workers' Union – CUPE Local 1000 have agreed to work together to improve relationships and organizational effectiveness through co-operation and a commitment to

excellence. In this way employees can influence the decision making process in matters concerning our future. In working together we will demonstrate fair and equitable treatment to all employees.

We will adhere to the following Guiding Principles:

- Foster an open, honest forum of information exchange
- Encourage and respect differing opinions
- Actively promote decisions formed by consensus
- Respect rights and privileges of all parties
- Focus on decisions that are good for people and good for business
- Focus on our future rather than our past

17.1 Stewards: The Company will recognize eight (8) stewards.

17.2 Grievance Committee: The Company will recognize a Committee of not more than four (4) employees.

17.3 Negotiating Committee: The Company will recognize a Negotiating Committee of not more than five (5) employees as well as a representative(s) of the Power Workers' Union and an executive member of the Union.

The five (5) employees on the Negotiating Committee will be paid their regular hourly rate for time spent in negotiating a collective agreement during normal working hours up to a maximum of forty (40) hours per employee.

It is understood that negotiation means time up to but not including conciliation and mediation.

17.4 The Working Relation Committee shall be kept informed of the names and addresses of all officers, stewards and committee members of the Union. The Company will advise the Principal Steward of the Union of the names of the Company personnel to be notified with reference to the grievance procedure.

17.5 Senior Company representatives (2) and utility representatives (2) will constitute a working group which will meet regularly so that issues that do occur are resolved quickly and a positive relationship is established to minimize future issues. The working group will act as a sounding board for Company policies which might affect Union members. This will not circumvent the normal supervisory role in solving day-to-day issues.

Article 18 SAFETY RELATED CLAUSES

The parties are committed to the health and safety of all employees as demonstrated in Great Lakes Power Limited Joint Health and Safety Policy and Safety Work Management System.

18.1 Time will be scheduled during regular working hours for all employees to maintain their Company mandated safety training. Those employees not on duty will be paid straight time when called to attend such meetings.

18.2 The Union and the Company agree to observe the provincial health and safety regulations and the safety regulations prescribed and published by the Company from time-to-time. The Union will co-operate with the Company in encouraging employees to observe the safety regulations, and to work in a safe manner. The Company agrees to discuss and review safety concerns as they occur with the union

safety representatives. The union safety representatives shall assist, make recommendations to and co-operate with the Company to ensure the Safety Procedures and Programs are implemented. The Company will involve union health and safety representatives and/or other union members as required in System Safety Accident Investigations.

18.3 The Company will consult with the Union and supply safety clothing when, in the opinion of the Company, such is needed.

Article 19 CONTRACTING OUT

19.1 The Company will endeavour to provide involved staff with information on available work packages which have been bid by contractors and will consider crew ideas on cost savings, safety and customer services as well as staff interest before deciding to contract out or do internally. The following four (4) items will be discussed.

1. Estimated value of the work
2. Scope of the work
3. Location of the work
4. Estimated date of Commencement and Duration of the work

The Company will regularly inform the Principal Steward about these discussions.

19.2 The Company agrees that during the term of the current agreement with Power Workers' Union CUPE Local 1000 no regular employee of the Company shall be laid off or demoted as a result of the contracting out of work by the Company.

Article 20 GENERAL

20.1 Inclement Weather

When, in the opinion of the person in charge, weather conditions are such that, except in the case of an emergency, outside work should not be performed, employees reporting for work at their normal starting time at their work centres, will be paid their normal wages for the first day, and one-half (1/2) of their normal wages for any additional days for time not worked.

20.2 Where the Company requests an employee to acquire and/or retain a driver's licence for which a medical examination or driving test is a requirement, the Company shall pay for the cost of the examination and any travel time involved for such testing.

Article 21 WAGES AND CLASSIFICATIONS

21.1 Wage rates shall be paid as they appear in the following sections of the agreement and shall be for pay purposes only.

21.2 EMPLOYEE CLASSIFICATIONS

Senior Operator 26

System Control First Operator
- Class A 24
- Class B (training/orientation) 21

System Control Second Operator
- Class A 20
- Class B - Fourth Year 18
- Class C - Third Year 14

Class D - Second Year 10
Class E - First Year 4

Group Leader
Class A (Year 3) ..... 5 steps above the highest rate supervised
Class B (Year 2)..... 3 steps above the highest rate supervised
Class C (Year 1) ..... 2 steps above the highest rate supervised
The minimum job class for a Group Leader will be job class 17.

Trades Technicians
Class A1 18
Class A2 17
Class A3 16
Class B - Fourth Year 13
Class C - Third Year 12
Class D - Second Year 9
Class E - First Year 3

Electronic Technologist / P&C Technologist
Class A 20
Class B - Fourth Year 16
Class C - Third Year 13
Class D - Second Year 10
Class E - First Year 9

Planner 19

Customer Service Representative, Tool Repair Person, Forester
Class A 14
Class B - Fourth Year 12
Class C - Third Year 10
Class D - Second Year 7
Class E - First Year 6

Forester Designate A3 16

Stores Clerk
Class A 10
Class B - Fourth Year 7
Class C - Third Year 5
Class D - Second Year 4
Class E - First Year 3

Station Maintainer
Class A 11
Class B - Fourth Year 7
Class C - Third Year 5
Class D - Second Year 4
Class E - First Year 3

Meter Data Clerk
Class A 11
Class B 6
Class C 3

Meter Service Provider Technical Assistant 14

Civil Maintainer
Class A 6
Class B - Second Year 4
Class C..... 2

Labourer 2

21.3 Job Classes

Job Class	2007	2008	2009
1	18.67	19.23	19.81
2	19.53	20.12	20.72
3	20.51	21.13	21.76
4	21.36	22.00	22.66
5	22.27	22.94	23.63
6	23.12	23.81	24.52
7	24.06	24.78	25.52
8	24.51	25.25	26.01
9	24.93	25.68	26.45
10	25.85	26.63	27.43
11	26.29	27.08	27.89
12	26.74	27.54	28.37
13	27.59	28.42	29.27
14	28.51	29.37	30.25
15	29.32	30.20	31.11
16	30.10	31.00	31.93
17	30.80	31.72	32.67
18	31.46	32.40	33.37
19	32.18	33.15	34.14
20	32.89	33.88	34.90
21	33.55	34.56	35.60
22	33.89	34.91	35.96
23	34.25	35.28	36.34
24	34.92	35.97	37.05
25	35.57	36.64	37.74
26	36.24	37.33	38.45
Student 1	15.39	15.85	16.33
Student 2	15.80	16.27	16.76

21.4 Cost of Living Adjustment

If the average monthly CPI for Ontario for the twelve (12) months ending December 31, 2008 is greater than the average monthly CPI for Ontario for the twelve (12) months ending December 31, 2007, a one time lump sum payment will be made prior to March 31, 2009 based on the following table:

PERCENTAGE CHANGE IN CPI	PAYMENT AS A PER CENT OF GROSS EARNINGS
<3.00	0.00
>=3.00<3.50	0.50
>=3.50<4.00	1.00
>=4.00<4.50	1.50
>=4.50	2.00

Similarly, if the average monthly CPI for Ontario for the twelve (12) months ending December 31, 2009 is greater than the average monthly CPI for Ontario for the twelve (12) months ending December

31, 2008, a one time lump sum payment will be made prior to March 31, 2010 based on the following table:

PERCENTAGE CHANGE IN CPI	PAYMENT AS A PER CENT OF GROSS EARNINGS
<3.00	0.00
>=3.00<3.50	0.50
>=3.50<4.00	1.00
>=4.00<4.50	1.50
>=4.50	2.00

21.5 All employees covered by this agreement will be paid every second Thursday by 1500 hours by direct deposit to a bank account, but in the event the Thursday on which payday falls is a holiday, employees shall receive their pay the previous day. Cheque stubs will be forwarded to the employee's Work Centre.

21.6 When major changes are proposed to be made in any classification, or new classifications are requested by the Company, during the term of this agreement, wage rates and hours of work for the change shall be subject to negotiation.

Article 22 CLASSIFICATION CHANGES AND PROGRESSIONS

22.1 The wage rates, progression schedules, classifications and categories of employees covered by this agreement shall be those shown in Article 21.

22.1.1 All employees moving through an annual progression grid will have their performance monitored on an ongoing basis and documented at least annually by the employee's supervisor. Where an employee's performance is not satisfactory he/she shall be informed of the areas of work that are deficient. Progressions will be based on the recommendation of the employee's supervisor. When progression is withheld, the Company shall meet with the employee, who may request the presence of his/her steward, or another Union representative, and shall give the employee the reason for withholding progression. Two (2) months thereafter his/her general performance will be reviewed and if found satisfactory, the employee shall be granted the progression.

22.1.2 If his/her progress and general performance are still unsatisfactory, the employee shall:

(1) in the case of a new employee in the first training classification, be terminated;

(2) in the case of an employee above the starting classification in any category, remain in such class for at least one (1) year and then may again request a reclassification and recommendation from his/her supervisor;

(3) in the case of an employee who was previously transferred from another category, revert to his/her former job if it is available. If it is not available, he/she may be transferred to other available work, providing he/she is qualified. Failing this, his/her employment may be terminated.

Article 23 DURATION OF AGREEMENT

23.1 This agreement shall remain in effect from January 1, 2007 to December 31, 2009 and from year to year thereafter unless either party gives notice in writing to the other party not more than ninety (90) days and not less than thirty (30) days prior to December 31st in any year of their desire to alter same.

23.2 Working conditions during the term of this Agreement shall be outlined in this Agreement and any Mid-Term Agreement.

A Mid-Term is a modification of the Collective Agreement executed by the parties in the following format during the term of the Collective Agreement.

Mid-Term Agreement

Title _____

Number _____

Date _____

It is jointly agreed that the following Mid-Term shall form part of the Collective Agreement between the parties.

SIGNED ON BEHALF OF:

GREAT LAKES POWER LIMITED

_____
Vice President

_____
General Manager

POWER WORKERS' UNION
CUPE LOCAL 1000

_____
Principal Steward

_____
Steward

_____
Steward

_____
Steward

_____
Steward

_____
Steward

_____
Vice-President, Power Workers' Union