

**YUKON ELECTRICAL COMPANY LIMITED
(YECL)**

REFERENCE: Pages 2-11 through 2-15; Page 2-19

TOPIC: Power Generation

PREAMBLE:

The testing of YEC's forecast hydro, wind and diesel generation forecast as well as line losses.

QUESTION:

- a) In excel format for the information provided in Table 2.5, please provide the monthly data for 2005 (Approved and Actual), 2006 Actual, 2007 Actual and 2008 and 2009 forecast that supports the annual totals. Please break out the diesel generation that is related to (1) system peaks, planned operation for such things as maintenance or exercising the units and (3) unplanned operation due to loss of hydro availability.
- b) In excel format, please provide YEC's 1996/1997 351 GW.h long term monthly average hydro generation capability from its Whitehorse and Aishihik plants on the WAF system. If an update is available, please provide along with explanations for any changes. If an update is not available, please advise when it is expected to become available.
- c) To better understand the quantum of hours the two systems are at operating at various loads, please provide a WAF system and MD system load duration curve for 2005 to 2007 actuals as well as for the 2008 and 2009 forecast. While YEC answered a similar question as part of its 2005 Application (YECL-YEC-1-46), it would be more helpful if YEC labeled the Y axis in "Load (MW)" and the X axis in "Duration (Hours)"
- d) Given that YEC states that it does not track actual secondary peak usage. (Note 1 in Table 2.5), please explain how system planning as it relates to firm demand is to be accomplished without knowing the impact of secondary sales.
- e) Since 2005, please detail all instances and reasons where YEC has called upon Yukon Electrical to dispatch Yukon Electrical's diesel units in Haines Junction,

1 Teslin, Carmacks, Ross River, Stewart Crossing and Pelly Crossing. What
2 changes, if any, are expected during the test period?

3

4 f) Please provide a copy of the line loss study that was used to support the 2008
5 and 2009 generation forecast as well explanations as to why line losses increase
6 to 8.66% in 2008 from 8.13% in 2007 and then decrease to 8.42% in 2009.

7

8 **ANSWER:**

9

10 **(a)**

11

12 Please see Attachment 1 to this response which sets out 2005 to 2007 actuals (note that
13 sales values do not precisely agree with the values in Table 2.5, as the monthly values
14 do not include year-end adjustments that arise out of the audit process). Reasons for
15 diesel operation are not recorded in this format.

16

17 Forecast 2008 and 2009 are not available in this same format.

18

19 **(b)**

20

21 The breakdown of the 351 GW.h last used to set rates was from the 1996/97 GRA and
22 still used in the calculations for the Diesel Contingency Fund, as follows:

**Long Term Average Hydro Capability Totaling 351 GW.h as used
in the 1996/97 GRA (MW.h)**

January	30,407
February	27,722
March	26,992
April	23,818
May	24,702
June	30,960
July	30,772
August	30,872
September	31,800
October	32,503
November	30,765
December	29,775
Total	351,088

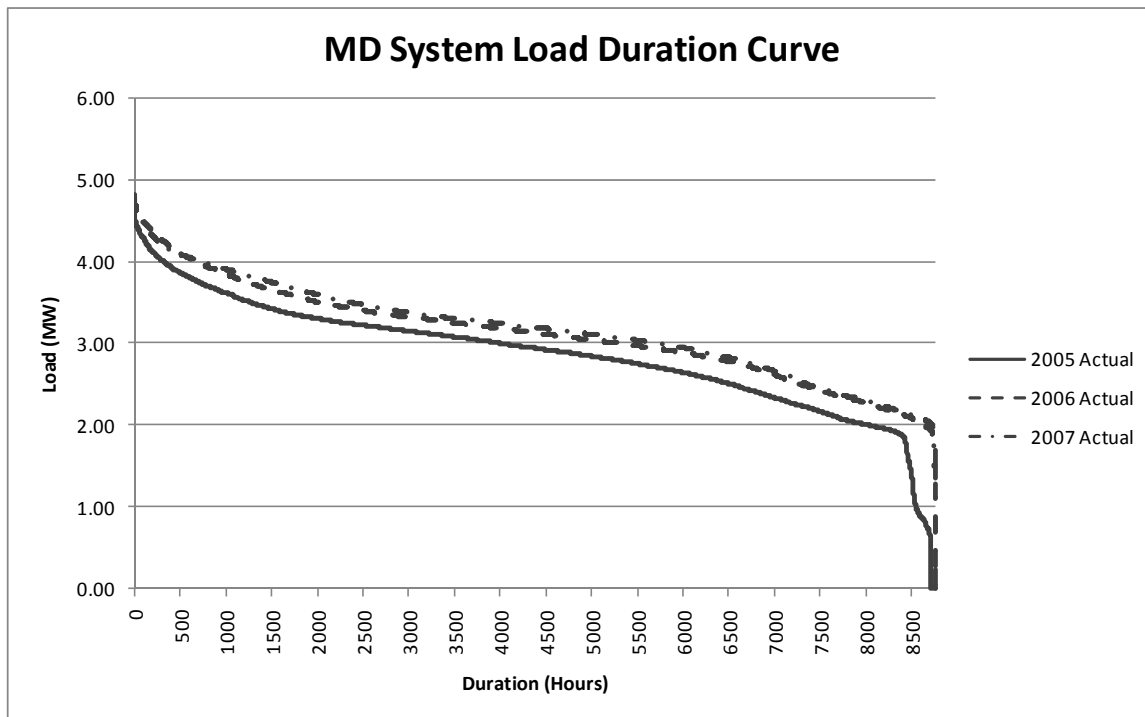
An updated approach to determining long-term average hydro values is available. The updated approach is able to address sensitivities related to load level as well as the full variability of hydrologic conditions, and as such does not develop a single number for all situations. At the approximate load level set out in the application (324 GW.h firm YEC load, net of wind generation), the results indicates that in over 90% of the possible flow scenarios, hydro generation can supply the full load (324 GW.h). In the remaining situations (extreme low flows) baseload diesel generation of up to 50 GW.h could be required. On average, this equates to a hydro supply of 321 GW.h and diesel generation of 3 GW.h.

The 351 GW.h value from 1996/97 does not include the Aishihik 3rd turbine at approximately 5 GW.h. With this system addition in place, a total YEC WAF load level of approximately 380 GW.h is consistent with a long-term average hydro capability of 356 GW.h (and an average diesel requirement of 24 GW.h).

(c)

For WAF, please see YECL-YEC-1-23 and YECL-YEC-1-50.

See chart below for Mayo-Dawson load duration curves for actual 2005-2007. Yukon Energy did not develop a Mayo-Dawson forecast load duration curve for 2008 and 2009.



(d)

Secondary sales customers are not firm customers and as such do not affect firm demand requirements. During critical times where diesel would need to be run secondary sales would be cut off per the requirements of Rate Schedule 32.

(e)

YEC does not keep records of times that YECL diesels were dispatched for grid support purposes, but estimates that it has occurred very few times in the past 5 years. It is not expected that this practice will change in the test period.

(f)

No line loss study has been performed.

Line losses for 2008 and 2009 were estimated using historical figures with adjustments for increases related to increased load with the connection of CSTP and higher loads on the Mayo-Dawson system.

- 1 These adjustments resulted in a slight increase in line losses compared to 2007. The
2 Minto mine was forecast to be connected in October of 2008, thus the net impact for the
3 year would be an increase as the new load would be served primarily from the Aishihik
4 Hydro Plant as Whitehorse Hydro would be fully utilized as it is every winter.
5
6 Upon review, there is a small error in the 2008 line loss calculation provided in Table 2.1.
7 Consistent with the approach to business planning in 2008, the loss factor should be
8 8.42%, the same as in 2009. Given the surplus hydro during 2008, there is no revenue
9 requirement impact from this change.

1 **REFERENCE: Major Projects Page 5-20**

3 **TOPIC: Capital Projects**

5 **PREAMBLE:**

7 Yukon Electrical is seeking more information on Mayo B hydro expansion.

9 **QUESTION:**

11 a) Please provide the detailed costs associated with the expenditures proposed
12 and or expended in the test years. Please include a breakdown of all costs by
13 labour, material, contractor and other. Please provide the details in regard to
14 any contracts for work associated with these expenditures and the process
15 used to select such vendors.

17 b) Please provide the detailed business case for the Mayo B Expansion,
18 including all options considered? Please provide the anticipated financing
19 arrangements for this project and identify any customer contributions that are
20 expected to be received. Identify the source and the amount of all such
21 contributions.

23 **ANSWER:**

25 **(a)**

27 The costs forecast in the GRA filing for Mayo B total \$1.7 million in 2008 and a further
28 \$6.5 million in 2009.

30 For 2008, the \$1.7 million was approved as an increase to capital budgets in place at
31 that time for hydro investigation work. The increase to \$1.7 million was comprised of:

- 32
- 33 • Pre-feasibility work to date - \$0.068 million
 - 34 • Mapping and Survey related work - \$0.097 million
 - 35 • Geotechnical investigations - \$0.247 million
 - 36 • Project management and coordination - \$0.234 million
 - 37 • Engineering - \$0.405 million

- Environmental and socio-economic field studies - \$0.195 million
- Environmental assessment, consultation and YESAB filing - \$0.300 million
- Power system modelling - \$0.100 million
- AFUDC and ES&G - \$0.050 million.

The \$6.5 million for 2009 is a high-level estimate that is oriented towards a project construction start date in early 2010, and an assumed planning stage budget to that time of approximately 10% of the overall capital cost. Specific budgets for each phase of Mayo B, similar to other major projects, are approved only once specific timelines and tasks are established and work from previous phases is largely addressed.

The capital budget approval and related GRA budgets were not based on specific contracts or vendors in place at that time.

(b)

Please see YUB-YEC-1-38.

1 **REFERENCE: Major Projects Page 5-21**

3 **TOPIC: Capital Projects**

5 **PREAMBLE:**

7 Yukon Electrical is seeking more information on the Western Copper Grid Connection.

9 **QUESTION:**

11 a) Please provide the detailed costs associated with the expenditures proposed
12 for 2009. Please include a breakdown of all costs by labour, material,
13 contractor and other. Please provide the details in regard to any contracts for
14 work associated with these expenditures and the process used to select such
15 vendors.

17 b) Please provide the detailed business case for the Western Copper grid
18 connection including anticipated load and energy use?

20 c) Please advise what rate YEC is proposing that Western Copper will be paying
21 for its energy usage. Provide a breakdown of the calculations and determinants
22 that will be used to make up the rate.

24 **ANSWER:**

26 **(a) and (b)**

28 As noted in the Application at page 5-12, it is expected that the Western Copper grid
29 connection will occur with no cost to ratepayers. Costs are to be fully recovered from
30 Western Copper, including the expenditures provided for in 2009 to address planning,
31 engineering, permitting/YESAA review and negotiation of a PPA. These funds will be
32 committed only after YEC has completed necessary discussion and arrangements with
33 Western Copper whereby Western Copper commits to fund these expenditures. Such
34 discussions have not yet occurred. No breakdown of these costs estimates is available
35 at this time.

1 The overall business case for Western Copper gird connection remains as previously set
2 out in review of the Minto PPA and the CSTP Part 3 Hearing, i.e., Western Copper will
3 pay for all connection costs plus a contribution to the CSTP as required per the Minto
4 PPA. Overall, on this basis, Western Copper will provide an added contribution to CSTP
5 costs.

6
7 **(c)**
8

9 Western Copper will be a major industrial customer and, as such, will be subject to the
10 Rate Schedule 39 tariff.

11
12 If Western Copper connects prior to December 31, 2012, it will pay the Rate Schedule
13 39 rate as provided for in OIC 2007/94 (and approved by Order 2008-13), which directs
14 that the Board must ensure that "rates charged to Major Industrial Customers from
15 January 1, 2008 until December 31, 2012 conform to Rate Schedule 39, Industrial
16 Primary," as attached as Schedule A to the OIC. The attached Schedule A provides for a
17 Demand Charge of \$15.00/kV.A of Billing Demand and an Energy Charge of 7.60
18 cents/kW.h for all energy used. A fixed charge is specified for Minto Mine, however, the
19 Attachment to the OIC provides that "the Fixed Charge is to be adjusted to provide for
20 fixed monthly charges as set out in any Power Purchase Agreement, or amendments
21 thereto, between a Major Industrial Customer and either Yukon Energy Corporation or
22 the Yukon Electrical Company Limited, as approved by the Board." The Rate Schedule
23 provides for escalation of these rates after 2009; it also provides for Rider F for fuel price
24 adjustments relative to the fuel price forecast filed November 20, 2006.

1 **REFERENCE: Major Projects Page 5-23**

2
3 **TOPIC: Capital Projects**

4
5 **PREAMBLE:**

6
7 Yukon Electrical is seeking more information on the Alexco Mine Feasibility and
8 permitting costs.

9
10 **QUESTION:**

11
12 a) Please provide the detailed costs associated with the expenditures (\$300,000)
13 proposed for 2009. Please include a breakdown of all costs by labour, material,
14 contractor and other. Please provide the details in regard to any contracts for
15 work associated with these expenditures and the process used to select such
16 vendors.

17
18 b) Please advise what rate YEC is proposing that Alexco Mine will be paying for its
19 energy usage.

20
21 c) Please confirm that Alexco will be paying the \$300,000 feasibility costs for this
22 project. Please advise what the total customer contribution is expected to be for
23 the connection of the Alexco Mine should it occur and who will be paying the
24 contribution.

25
26 d) Please provide a copy of the technical analysis conducted that shows the impact
27 on existing customers in Keno Hill as a result of the connection of Alexco to the
28 grid (voltage fluctuation, motor start studies, etc).

29
30 **ANSWER:**

31
32 **(a) and (c)**

33
34 As noted in the Application at page 5-23, the referenced Alexco Mine-related budget for
35 2009 provides for undertaking infrastructure planning, engineering, environmental and
36 permitting work and other forms of due diligence as may be required to connect this
37 customer in 2010. These funds will be committed only after YEC has completed

1 necessary discussion and arrangements with Alexco whereby Alexco commits to fund
2 these expenditures and any additional customer contribution is also identified. Such
3 discussions are underway, but have yet to be completed. No breakdown of these budget
4 cost estimates is available at this time, and no estimate of the total customer contribution
5 is available at this time.

6
7 **(b)**

8
9 Alexco will be a major industrial customer and, as such, will be subject to the Rate
10 Schedule 39 tariff. Please see response to YECL-YEC-1-6(c).

11
12 **(d)**

13
14 This referenced technical analysis has not been carried out to date. Alexco are not
15 sufficiently advanced in their engineering design to supply the information needed to
16 conduct this analysis. It will be done at a later date. Alexco will be required to meet the
17 technical interconnection requirements in the ESR's, Rate Schedule 39 and their PPA.

1 **REFERENCE: Page 8 of the Application**

3 **TOPIC: CSTP Connection of Minto Mine and Pelly Crossing Loads**

5 **PREAMBLE:**

7 "Net revenue losses due to delays in final connection, Minto Mine and Pelly Crossing.
8 (\$197,000 approximately).

10 **QUESTION:**

12 a) Please describe in detail what caused YEC to be delayed in connecting the Minto
13 mine load.

15 b) Please describe in detail all scope changes in the construction of the CSTP
16 to Minto Mines spur line and Pelly Crossing and the costs associated with
17 each change. For each scope change indicate what alternatives were
18 considered and ultimately selected and why.

20 c) Please provide a detailed explanation as to why customers through the Faro
21 Dewatering Account should compensate YEC, due to YEC's inability to execute
22 the planned Minto and Pelly connections on time.

24 **ANSWER:**

26 **(a)**

28 The CSTP Stage I/Minto Spur project was approved with a very aggressive in-service
29 date of September 30, 2008. There was a high degree of risk due to weather factors,
30 supply issues (over-heated economy at the time made sourcing of critical equipment on
31 a timely basis uncertain), and regulatory matters (first project through Executive
32 Committee screening of YESAB). The decision was made to proceed with this schedule
33 because there was a significant upside to early completion (approximately \$250,000 in
34 new revenues per month to the benefit of ratepayers).

1 Right-of-way clearing and line construction were generally completed on time; however,
2 the more complex work on substations took longer than anticipated. This was a result of
3 key engineering personnel shortages during the detailed design phase. This resulted in
4 some delays in the placement of orders for some of the major equipment. Also, some
5 manufacturers were not able to meet their delivery dates. Wherever possible,
6 management worked with suppliers to expedite delivery so as to maintain construction
7 schedules. The shortage of personnel also caused a delay in the provision of some of
8 the construction design details to the substation construction contractor which delayed
9 the field work.

10
11 **(b)**

12
13 Scope changes addressed here related to changes made after the initial construction
14 tenders and decision to proceed made in September 2007.

15
16 Material scope changes occurred due to the Final YESAB recommendation
17 requirements for route adjustments at Tatchun Creek (CSTP) and the Yukon River
18 crossing (MS). The final cost of these changes was \$1.811 million and \$0.218 million,
19 respectively.

20
21 The original design called for a more complex substation at Carmacks. This was
22 replaced by a simple switching station as a means to reduce project costs.

23
24 The original plan called for a 138kV to 25kV substation at Pelly Crossing to serve local
25 load. Based on the modest load at Pelly and the high tendered cost of this installation
26 (\$2.5 million), the decision was made to energize the 138kV transmission line at 25kV
27 and thereby defer the expense to Stage II.

28
29 **(c)**

30
31 Yukon Energy's test year revenue requirement comprises the costs to operate the
32 system. Revenues that are not derived from secondary sales customers or the Minto
33 mine must be recovered from other regulated ratepayers. Yukon Energy has proposed
34 to use the residual amounts in the Faro Dewatering Account (which are effectively
35 ratepayer funds that can only be applied under the direction of the Board) as opposed to
36 adjusting the rate proposal to increase the requested rates. In the event the Faro
37 dewatering account withdrawal is not approved as the source of these amounts, they

- 1 would necessarily be recovered the same as any other component of YEC's revenue
- 2 requirement, through firm rates.

1 **REFERENCE: Major Projects Over \$1 million- page 5-3**

2
3 **TOPIC: Capital Projects**

4
5 **PREAMBLE:**

6
7 Yukon Electrical wishes to better understand the need and cost benefits associated
8 with major capital projects proposed by YEC.

9
10 **QUESTION:**

- 11
- 12 a) Please fully explain YEC's capital approval process and authorities required to
13 be obtained for its capital projects.
 - 14
 - 15 b) If not explained in (a) above, please explain YEC's internal reporting process for
16 completed capital projects.
 - 17
 - 18 c) Please provide copies of all post completion reports for capital projects placed
19 in service during 2005-2008. Please ensure that the final actual costs and
20 approved costs are included in the reports.
 - 21
 - 22 d) Please provide detailed business cases for all projects in excess of \$1M, as
23 shown at lines 8-18 page 5-3 of the Application. Please include the cost of
24 alternatives considered and an NPV calculation for each option. In addition,
25 please provide copies of the tendering process used or proposed to be used for
26 each project and identify which vendors were invited to submit a bid. Indicate
27 what criteria were or will be used to evaluate the bids and how the final
28 selections were made.
 - 29
 - 30 e) In relation to the above projects, please identify any actual or expected scope
31 and or cost changes that have occurred and provide the reasons for these
32 changes.
 - 33
 - 34 f) Please provide a list of contribution requirements for any of the above-
35 mentioned projects and identify the party that is providing the contribution.

1 **ANSWER:**

2
3 **(a) and (b)**

4
5 The capital plan development and review process has recently been changed, and 2009
6 is the first year the new process will be used.

7
8 Items for future capital plans can be submitted by anyone within the Corporation.
9 Submissions are provided to Engineering Services, and if deemed reasonable, are put in
10 the "investigate" system. Engineering Services assigns a staff member to investigate the
11 item. This process confirms the issue/problem and develops a range of solutions,
12 undertaking a preliminary analysis of cost and benefits.

13
14 The item then goes into another list for consideration of inclusion in the next capital plan.
15 A cross departmental team (the Project Review Committee (PRC)) reviews all
16 submissions and prioritizes them according to their effect on the Corporation's goals and
17 priorities. An initial cut is made taking into account the total resource requirements for
18 the projects.

19
20 The remaining list is submitted to Senior Management. This list is amended or approved
21 by Senior Management and then submitted to the Board of Directors for approval.

22
23 Upon approval by Board of Directors, projects are assigned to YEC staff and/or
24 consultants to perform the detailed analysis including costing, scheduling and benefits.
25 Once the best solution is selected, an Application for Expenditure is developed that
26 includes the final project scope, estimate and schedule. This becomes the standard
27 used to evaluate project execution. Any changes to the scope, estimate or schedule of
28 the project must be approved by Management prior to any continued spending.

29
30 Progress on the all projects is reported on monthly, giving spending and commitments to
31 date, schedule adherence, projected costs and any issues. Capital spending and
32 execution updates are given to Senior Management and the Board of Directors every
33 quarter.

1 **(c)**

2
3 For project completion reports please see Attachment 1 to this response.
4

5 **(d)**

6
7 For the business cases for these projects, please see Section 5.2.1 of the Application
8 and CW-YEC-1-29.
9

10 As regards tendering processes used or proposed to be used for each project as well as
11 vendors invited and criteria to evaluate bids and how final selections were made, Yukon
12 Energy has policies regarding competitive processes that it follows when awarding
13 contract work to third parties; these policies are provided in response to PWP-YEC-1-
14 42(a).
15

16 **(e)**

17
18 These projects are described in section 5.2.1 of the Application. There have not been
19 any scope changes to any of the projects since the Application was filed. Any cost
20 changes that have occurred for these projects, beyond what is addressed in the
21 Application (at section 5.2.1), have been reviewed in the following responses:
22

- 23 • **CSTP/MS** – See response to YECL-YEC-1-9(b).
- 24 • **Faro Mirrlees Diesel** – See response to YUB-YEC-1-36(d).
- 25 • **Whitehorse Mirrlees** – Costs for WD3 are still expected to approximate the
26 amounts estimated in the GRA. (see YUB-YEC 36(e); business case for Mirrlees
27 is discussed in YUB-YEC-1-34(e)).
- 28 • **Minto Diesels** – Since the GRA filing there have not been any scope or cost
29 changes to the Minto Diesels. (see response to LE-YEC-1-52; the business case
30 of the Minto Diesels is discussed in YUB-YEC-1-34(d)).
- 31 • **Aishihik 3rd Turbine** – See response to YUB-YEC-1-36(h).
32

33 **(f)**

34
35 Contribution requirements as currently known for these projects are listed in the
36 Application, Section 5.2.1, and the relevant parties identified.

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Post-Completion Project Report

Project Title:	L170 Line Assessment		
Project Manager:	Albert Schwarz	Business Plan \$:	\$140K
PID #:	P05-039	Pre-start Estimate:	\$188K
Work Order #:	C06032	Project Final Cost:	\$214K
Project Start Date:	March 6, 2006	WO Closed Out?:	Yes
Project Completion Date:	Sept 30, 2007	Turnover to?:	Leo Poile
Planned Start Date:	Summer 2007	Turnover Complete?:	YES
Planned Completion Date:	Dec 2007		

yr later to get costs in line

1. Project Description:

Description of problem and why this should be undertaken:

This line is getting old; it is now about 30 years since it was built. We should have an assessment done for future planning and prioritizing of the work needed to maintain it. The best patrol that can be done is from the ground structure by structure.

As part of the scope of the TX line assessment project, various stakeholders within YEC have different requirements which will need to be captured for the project tender. A preliminary list of stakeholders and associated needs that can be met by this project include:

- Land Base (Roxanne S/W) – collection of UTM location data for each structure, as well as at least one digital photographs of each structure.
- Operations/Transmission (Jack Weir) – Prioritized list of issues and maintenance requirements for the entire line, assessment of brushing for entire line, digital photo of each issue. Evaluate remaining life expectancy of TX line, structures, insulators, and components. Place/replace structure tags. Provide data for understanding effectiveness of past maintenance practices (Fixes that did not fix...)
- Tech Services (Alex Love), Planning (Hector Campbell) – Infrastructure Plan Report – Details 20 year life-cycle plan for the TX line, including upgrading and major repair or replacement options. Evaluate remaining life expectancy of TX line, structures, and components. Data to be used for capital project planning.

2. Outstanding Deficiencies (description & responsibility)

None. Reports and data accepted by operations as meeting their stated needs.

3. Components that went well?

We chose and hired an excellent contractor who was able to work with us, and understand and anticipate our needs as the project progressed.

Excellent quality of work.

Expanded the scope of the project to assess L170 to riverside and L172 to Mac Sub with contract change orders, as the contractor completed the original scope of work earlier than expected.

4. Problems encountered?

Cost of entire line assessment out of budget.

Tried to hire a contractor on a fixed charge basis where the scope of the difficulties that the contractor might encounter are largely unknown – bidders were either very high to cover contingency, or reluctant to bid.

Timing of tender documents needs to be early enough in the year to allow contractors to arrange for the years work ahead of time...tenders in 2006 went out too late for a successful year.

5. Reasons for cost and/or time variances?

Timing of tenders in 2006 was too late to solicit competitive bids for that year.

Ballpark estimate for costs was far too low (by about half).



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Post-Completion Project Report

Project Title:	South Fox Lake PT Substation		
Project Manager:	Albert Schwarz	Business Plan \$:	\$92K ✓
PID #:	P05-076	Pre-start Estimate:	\$92K ✓
Work Order #:	C05111	Project Final Cost:	Approx \$100K ✓
Project Start Date:	Oct 2005	WO Closed Out?:	Yes
Project Completion Date:	Sept 2007	Turnover to?:	Leo Poile
Planned Start Date:	Oct 2005	Turnover Complete?:	Yes
Planned Completion Date:	Dec 2006 (power to the community).		

1. Project Description:

The following is taken verbatim from the PID:

*Scope is continuous
- phase ⇒ add unnecessary
work required.*

1) Description of problem and why this should be undertaken:

Design and Construction of a PT Substation is required at South Fox Lake to provide service to NWtel, as well as future service to the community. This substation/customer connection project has been requested by NWtel, and they have agreed to carry the bulk of the costs of the project put forward in our estimate to them.

Associated with this PT Substation is the construction of distribution to the NWtel site under project C04079 (about \$40k).

An \$8K YEC investment per customer under RESP is included in the budgeting of the projects (C04079, C05111, C06037).

Update, Nov. 3, 2006

The scope and budget for this project have changed now that the community of South Fox Lake (SFL) has decided to purchase power distribution from Yukon Energy.

The cost of the PT Sub is expected to increase to \$200K with the changes required to support power distribution to the community. These changes involve the upgrade to a 100 KVA transformer (from 25KVA), and addition of step-up transformer, disconnect switch, splitter box (for YM-2 connection), and associated plumbing, labor, and electrical wiring.

The cost of the project includes an estimated \$25k in costs to pay for the actual station service voltage transformer used at the PT sub. This is an estimated cost of the salvage value of the PT sub salvaged from Takhini sub earlier this year – this piece of equipment will be re-used in the South Fox Lake project to help keep costs down.

Costs for the project are now expected to be as follows:

Total PT Sub Construction Cost \$200k

RESP Contribution (23 Lots) \$ 92k

NWtel Contribution \$ 16k (taken from \$55k total NWtel contribution)

YEC Investment \$ 92k

Thus the total project cost to YEC for this project will be an RESP investment of \$92k. (Cont'd next page)

The remainder of the NWtel investment (\$55k - \$16k = \$39k) will be applied to the cost of the distribution projects to supply power to the community. Should the cost of the PT sub be lower than expected, more funds will be available to reduce distribution infrastructure costs. The intent is that the cost of the PT sub is fully covered by either Customer, RESP contributions or company RESP investments.

2. Outstanding Deficiencies (description & responsibility)

None.

PID P07-xxx has been submitted for the construction of a fence to protect the PT-Sub from the public (And vise-versa).

3. Components that went well?

Able to supply power by committed dates to NW-tel and Community.

Budget surprisingly close, considering the way the project was implemented (initial construction of 2400V secondary, later PPT replacement and cutover to 14.4 secondary).

Reasonably good PT Sub and platform design.

4. Problems encountered?

Scope change (and associated budget and schedule issues, not to mention stress) is a continuing issue.

When defining the work to be done for a project of this size, a list should be included in the PID defining the specific items to be included in project scope, and those specifically excluded. More up-front work should be done to define the (internal) customer's needs, and the work to be done before starting such a project.

Also, when construction is split into various phases, or rework is performed, costs quickly escalate beyond reasonable estimates. In this case, we took this path because of time constraints and parts availability, but the budget impact of breaking up a job is higher than it looks on paper, because of extra planning and setup time, mod/demob costs, and so on.

5. Reasons for cost and/or time variances?

Primarily changes in scope.

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Post-Completion Project Report

Project Title:	Purchase and Installation of Time Synchronizers		
Project Manager:	Craig Church	Business Plan \$:	\$27,000 ✓
PID #:	P04-055	Pre-start Estimate:	\$32,000
Work Order #:	C07009	Project Final Cost:	\$48,500 ✓
Project Start Date:	March 2007	WO Closed Out?:	Yes
Project Completion Date:	August 2007	Turnover to?:	Al Porter
Planned Start Date:	November 2006	Turnover Complete?:	Yes
Planned Completion Date:	August 2007		

Installation - longer

Ravi → Craig - D's ideas

1. Project Description:

No accurate time sequencing of events or actions from different relays or equipment, especially during disturbances. Since different relays record different times, events are almost impossible to relate each other in time domain. Such time sequencing is extremely helpful in analyzing problems and to implement corrective measures. Lack of such corrective measures results the problems remaining without addressing and causes repetitive system disturbances. When all the relays have same exact time on them, the events can be correlated and analyzed to suggest corrective measures. This enables YEC to improve system reliability.

2. Outstanding Deficiencies (description & responsibility)

The alarm contacts on the SEL-2401 and SEL-2407 are not connected at any of the sites because currently they do not act as intended. The alarm contacts only operate (open) when power is lost to the unit, and will close when power is restored or when satellite lock is re-established (depending on the setting). However, if the satellite lock is lost without power being lost the unit will not alarm regardless of the setting, therefore the alarm connections to SCADA were not connected because they did not provide any new alarm. (I.e. If power was lost to the unit it would mean that DC power had been lost and the DC system would alarm)

It was the intent to connect the Hathaway 1200 DFR in Mayo to the time synchronizer system, however, the required card needed for that connection did not exist nor was it easy to track down/purchase. Therefore we were unable to connect it.

3. Components that went well?

Installation went very smoothly, great job done by electrical maintenance.
Timeline was accurate.

The background research done on the various types of relays (and corresponding connection types) saved time during on site installations.

4. Problems encountered?

Availability of parts, specifically RG-58 connectors (T-connectors and BNC terminations) were not as easily obtained as originally expected. Similarly RG-6 terminations (TNC connectors) for the GPS antennas were not readily available.

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COPY

Post-Completion Project Report

Project Title:	Office Space Renovations		
Project Manager:	Bill Haydock	Business Plan \$:	\$0 in 2007
PID #:	P06-048	Pre-start Estimate:	\$60,500 ✓
Work Order #:	C06109	Project Final Cost:	\$72,387.49 ✓
Project Start Date:	December 2006	WO Closed Out?:	Yes
Project Completion Date:	July 2007	Turnover to?:	Ken Sawyer
Planned Start Date:	October 2006	Turnover Complete?:	Yes
Planned Completion Date:	March 2007		

1. Project Description

YEC was running out of space for its employees in 2006. As part of a recent re-organization, plans were made and carried out under this project to free up some space by utilizing the file storage double-wide to house the electrical section. The electrical leadhand also moved over there. This work involved demolition of some walls and the construction of others. A separate section was built for the Purchasing department, but was later used for two other employees.

The office section of P126 was renovated to contain the mechanics and the power line technicians, including the construction of two offices for their respective leadhands.

Most of the files were moved off site, but some that need to be regularly accessed were moved up to the single-wide trailer at the WH4 turnaround (This movement/storage of files did not form part of this project).

2. Outstanding Deficiencies (description & responsibility)

There is a potential issue with heating/cooling in the two offices in P126. The extent of this issue, if there is one, will not be known until next year, after a complete winter and summer has gone by. Some system re-design may be required.

One office in P126 does not have baseboards. The baseboard is here, and has been given to Ken, but the office occupant doesn't want it installed. It has been agreed that Ken will ensure baseboard installation occurs when this occupant moves out.

3. Components that went well?

The actual construction components. Wall construction, mechanical and electrical components went well, although in a fairly piece-meal fashion as new requests or requirements popped up.

4. Problems encountered?

There were far too many "participants" in this project, and too many people looking at too many alternatives during the initial phase. Even during construction, people were changing their minds or requesting extras that were not part of the original scope.

5. Reasons for cost and/or time variances?

The project went approximately 20% over budget. The major reason for this was the length of time the planning process took. There were new variations of walls and cubicles/pods/workstations that had to be developed at a rate of about one a week, every time somebody wanted to see how something new would work. This all took time and money. (the last straw was when somebody asked me to take down an existing wall and build a new one 12" away because somebody's office was too big. I declined to do this change).

The other reason for the delay is that the files didn't actually get moved out of the doublewide until the middle of December 2006. This effectively meant that no work could start until January due to the Christmas season.

I can honestly say that this was the least fun project I have done in the last few years.

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COPY

Post-Completion Project Report

Project Title:	Portable Diesel Gen Set		
Project Manager:	A. Love	Business Plan \$:	\$80,000
PID #:	P05-070	Pre-start Estimate:	\$87,300 revised to \$61,300
Work Order #:	C06102	Project Final Cost:	\$60,084 ✓
Project Start Date:	Oct 01, 2006	WO Closed Out?:	Yes
Project Completion Date:	Dec 31, 2006	Turnover to?:	Elect Maint
Planned Start Date:	Aug 01, 2006	Turnover Complete?:	Yes
Planned Completion Date:	Dec 31, 2006		

1. Project Description:

To purchase a mobile Gen Set of about 100 kW rating for use at YEC substations and PT sites. The Gen Set will help to provide good customer service by providing power to remote sites during planned and un-planned line outages.

2. Outstanding Deficiencies (description & responsibility)

Secondary containment – this has been addressed as a deficiency that Elect maint will address by installing a spill kit.

3. Components that went well?

The gen set purchased is much lighter and hence easier to tow than the previous unit.

The purchasing dept. did an excellent job of soliciting 10 competitive bids for evaluation.

Elect Maint did a very good job on testing and commissioning the unit – this included setting up a load bank to test it.

4. Problems encountered?

The secondary containment was difficult to deal with. A unit with built in double wall tanks was very long delivery so we had to take a single wall tank unit. For secondary containment there are options such as belly pans and insta berms, but each of these pose their own problems. In the end we settled on including a spill kit with the gen set to deal with any leaks.

At light loading (< 10 kW) the engine spits oil into the exhaust and poses an operational and fire risk. This problem will be alleviated when the new small gen set is received in the fall of 2007.

5. Reasons for cost and/or time variances?

Project came in under budget. Once the project was started the cost estimate was revised to \$61,300 based on budgetary estimates, and the final costs are \$60,084.

Final Cost Breakdown Gen Set \$43,000 (72%)
 Labour \$3,500 (6%)
 Materials \$5,000 (8%)
 ES&G \$5,300 (9%)



COPY

Post-Completion Project Report

Project Title:	Marshall Creek and Dimok Timber Metering Transformers		
Project Manager:	Albert Schwarz	Business Plan \$:	C06131 – \$0 C07027 - \$0
PID #:	P04-199	Pre-start Estimate:	C06131 \$48K – Contrib. C07027 \$37k – Contrib.
Work Order #:	C06131 Marshall C07027 Dimok	Project Final Cost:	Not All costs In Yet.
Project Start Date:	Dec 2006	WO Closed Out?:	C06131 -Yes C07027 -Yes
Project Completion Date:	Dec 2007	Turnover to?:	Leo Poile
Planned Start Date:	Dec 2006	Turnover Complete?:	Yes
Planned Completion Date:	Oct 2007		

Service @ Haines Jct could have saved \$

1. Project Description:

Installation of Metering transformers and bypass switches at two new YEC-YECL POS locations

2. Outstanding Deficiencies (description & responsibility)

'A' Ground was not installed at transformer pole due to the cost of digging and excavating in frozen soil. Transformers are grounded through MGN and single ground rod – OK until spring, when this deficiency will be rectified.

3. Components that went well?

- Purchasing worked well with engineering to arrange for timely tendering and purchasing of equipment.
- Linemen and Electricians, and metering tech worked well together on the installation. Good feedback to engineering from the field r.e design.

4. Problems encountered?

- A unique structure had to be designed for these installations – not in our current distribution standard. However, we have no current process to handle managing unique updates or changes to our standard...
- A purchasing spec was created including a technical specification for purchase of metering transformers and spares – can we not qualify a vendor and use them for future purchasing instead of re-tendering for purchases of 1-2 units, which is expensive and time consuming for all?

5. Reasons for cost and/or time variances?

Construction took longer than expected due to short days/cold weather. We should have housed linemen at Haines Junction instead of driving daily to/from Whitehorse.

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Post-Completion Project Report

Project Title:	Metering 2006 Blanket WO		
Project Manager:	Albert Schwarz	Business Plan \$:	\$25K
PID #:	P04-189	Pre-start Estimate:	\$28K
Work Order #:	C07026	Project Final Cost:	\$25K
Project Start Date:	Jan 2007	WO Closed Out?:	Yes
Project Completion Date:	Dec 2007	Turnover to?:	Gary Jones, Leo Poile
Planned Start Date:	Jan 2007	Turnover Complete?:	No
Planned Completion Date:	Dec 2007		

1. Project Description:

Upgrade to specific metering sites to provide for collection of power quality data from all YECL POS locations. Includes installation of communications facilities, new meter installations, etc.

2. Outstanding Deficiencies (description & responsibility)

Handover – Though the meters themselves are the responsibility of the metering tech (Gary Jones), the ION energy management database system is still the responsibility of Technical Services.

3. Components that went well?

Managed to establish physical connection to Callison, Mayo, and Dawson meters through IT, though actual connectivity will be commissioned in 2008.

Developed a meter reading screen for operations, and need to expand on this in 2008 to create usable tool for operations month-end reports.

4. Problems encountered?

- Could not get NWtel service connected at Ross River or Haines Junction Subs. Did purchase Meters for these sites, though these can be considered active spares for the time being.
- Need to understand PQ reporting requirements in 2008 – suggest instead of collecting data indefinitely, we create year-end PQ reports for each POS, and file these for use at later rate hearings.
- Raw data takes up much server space – a standard report may be more accessible, and allows for benchmarking and comparison...

5. Reasons for cost and/or time variances?

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Post-Completion Project Report
December 4, 2007

COPY
\$10,000 in disposal costs

Project Title:	Keno Transformer (S257 T1) Replacement		
Project Manager:	T. Allan Hammond	Business Plan \$:	\$85,000
PID #:	P05-081	Pre-start Estimate:	\$85,000
Work Order #:	C07022	Project Final Cost:	\$65,000
Project Start Date:	May 2007	WO Closed Out?:	In progress
Project Completion Date:	Sept 2007	Turnover to?:	EM (88), T&D (82)
Planned Start Date:	March 2007	Turnover Complete?:	No
Planned Completion Date:	Nov 30/07		

YECL A distr system & used existing transformer from Mayo/Dawson

1. Project Description:

Replace 2300V/200 kVA transformer with 14.4 kV/200 kVA transformer; modify substation to accommodate, including: constructing a platform to house the new transformer, installation of a new metering structure, testing and commissioning of the new equipment, and re-gravelling the substation.

YECL upgraded Keno distribution to 14.4 kV prior to substation rebuild.

2. Outstanding Deficiencies (description & responsibility)

Cable guard for #2/0 ground on pole required (to be addressed by Mayo T&D);
Modify ground grid to suit extended rear fencing (to be addressed by Project Manager in 2008).

3. Components that went well?

Installation by YEC employees; assembly of parts at Kulan warehouse; non stock materials ordered well in advance of projected start date.

Technical assistance from Technical Services, EE Team was very helpful in completing this project.

Mayo T&D Team able to secure special equipment locally.

4. Problems encountered?

Difficult to get date commitment by T&D. Original date for install was August 27 and was changed to Sept 21 (almost 1 month). This date was also in danger of being changed on very short notice.

The meter installation overseen by YEC employee. When parts arrived, they required modification as it was not clearly communicated to the vendor what was required.

5. Reasons for cost and/or time variances?

Initial budget (for a new transformer) included \$10,000 for transformer disposal in 2007. The outgoing transformer was not part of the Yukon Government waste round up. These funds cannot be carried over for this purpose.



COPY

Post-Completion Project Report

Project Title:	Rocky Point Remediation		
Project Manager:	R. Gee	Business Plan \$:	\$250,000
PID #:	P05-009	Pre-start Estimate:	\$256,000
Work Order #:	C06089	Project Final Cost:	\$206,482
Project Start Date:	July 1, 2006	WO Closed Out?:	Yes
Project Completion Date:	Aug 29, 2007	Turnover to?:	n/a
Planned Start Date:	Jan 1, 2006	Turnover Complete?:	n/a
Planned Completion Date:	July 31, 2007		

Challenger Construction - Ice Roads started to weaker.

1. Project Description:

The construction project component of the project involved rehabilitating the Rocky Point berm with larger, angular rip rap material. This involves developing a new quarry site, carrying out a drill and blast operation in order to produce suitable size material, trucking the rip rap to site, excavating and placing the material. Other aspects of the project included:

- Regulatory approval and permitting: YESAA approval, YTG Quarry permits, YTG Land Use permit, CAFN Land Use permit, DFO discussions
- Engineering design: specifications, drawings
- Contractor tendering
- Permit close outs

2. Outstanding Deficiencies (description & responsibility)

n/a

3. Components that went well?

The construction contractor on the project was Challenger Construction. This was my first time working with them and they proved to be organized, cost effective, and fair.

4. Problems encountered?

The weather is always a wild card factor in a project that is in a remote area and utilizes ice roads for hauling. Construction began in March 2007 and the weather was cold. However, by the end of the project in April, the weather had warmed considerably and the ice roads were getting in very poor condition.

The original berm design section was not obtained due to the inability of the excavator to reach the design elevation. A field decision was made to not bring out a concrete breaker but rather to extend the berm further out into the lake.

The contractor had trouble finding the bedrock. As they began stripping, what was thought to be a large bedrock knob was actually only a thin tip. Fortunately, the rock was just large enough to provide the sufficient quantity of rip rap.

5. Reasons for cost and/or time variances?

Total cost was under budget. Time was close to as planned.

Reasons for cost difference:

- Permitting and approvals performed internally rather than contracted out
- Total construction days was shorter than planned
- Contractor costs were below estimated

6. Recommendations to Improve Project

When ice roads are required for a project, plan for a completion date of March. Then if the inevitable delays of a project start to creep in, there is adequate time to complete the project even in the event of a warm spring. The problem with this is that if you plan the construction for February and March, it could be very cold and result in additional costs. However, at least the project will be completed if the weather turns warm.

1 **REFERENCE: Distribution Projects Page 5-14**

2
3 **TOPIC: Capital Projects**

4
5 **PREAMBLE:**

6
7 Yukon Electrical wishes to better understand the specific tasks and type of
8 expenditures that are associated with Land Management and Easement Projects shown
9 at line 15-19 on page 5-14.

10
11 **QUESTION:**

12
13 a) How much was spent on this type of activity by YEC in each of the years 2005,
14 2006, and 2007?

15
16 b) In relation to the above projects, what were the specific tasks that were
17 undertaken with respect to this project? Please provide a breakdown by labour,
18 material contractor, and other costs associated with these expenditures. Does
19 YEC pay for easements and if so at what level? For all of the above information
20 please separate this information between land tenure for Crown land and that for
21 private lands.

22
23 c) Please identify any easements YEC is seeking for existing facilities. Please
24 explain why such easements are required.

25
26 d) What are the estimated costs associated with completing this project? What is
27 the estimated cost per kilometer of distribution line for this activity once the
28 project is completed?

ANSWER:

(a) and (b)

For assessment of spending on Land Management and Easement Projects in each of the years 2005, 2006, and 2007, please see chart provided below:

Land Management and Easement Project – spending by year and by land type

(\$000s)	2005	2006	2007	Crown Land	Private Land
Labour	59	80	78	22	195
Material	0	1	0	0	1
Contractor	31	19	0	7	42
Other	18	13	12	5	38
Total	108	113	90	34	276

YEC does not pay for easements.

(c)

YEC seeks easements from property owners in order to allow ready access by utility employees for construction and maintenance of equipment owned by the utility.

The following table notes the registered easements YEC has for existing facilities:

Registered Easements

	Dawson	Mayo	Faro	Total
2005	0	0	8	8
2006	79	65	239	383
2007	71	67	18	156
Total	150	132	265	547

(2008 to date – 164 Total registered Dawson, Mayo, Faro)

1 The table below notes the outstanding easements YEC is seeking:

2

3

Outstanding Easements

4

	Dawson	Mayo	Faro	Total
Primary	733	238	103	1,074
Secondary	827	154	134	1,115
Total	1,560	392	237	2,189

5

6 (d)

7

8 The estimated final cost of this project is approximately \$1 million. The estimated cost
9 per kilometer of distribution line for this activity is not known and cannot be provided.

1 **REFERENCE: Distribution Projects Page 5-15 Vehicle Purchases**

2
3 **TOPIC: Capital Projects**

4
5 **PREAMBLE:**

6
7 Yukon Electrical wishes to understand the costs associated with vehicle purchases.

8
9 **QUESTION:**

10
11 a) For 2005 - 2009, please provide a detailed breakdown of the costs for each
12 service body unit.

13
14 b) Was a tendering process used in the purchase of the units? If so how many
15 bids were received and what were the various prices provided by vendors? If
16 not, why not?

17
18 c) Did YEC dispose of the old service bodies being replaced? If so, please provide
19 the salvage value or expected salvage value of each unit and where is the
20 salvage value recorded?

21
22 **ANSWER:**

23
24 **(a)**

25
26 Details on the costs related to each unit are provided below:

1

2005 Descriptions		Actual Spending (\$000)
Unit 67 1 ton 4X4	Service body	60
Unit 68 1 ton 4x4	Service body	60
Unit 69 1 Ton 4x4	Service body	60
Unit 70 1 ton 4x4 no winch	Service body	58
Unit 71 1/2 ton 4x4	Operator pool	34
Unit 72 1/2 ton 4x4	Operator pool	34
Unit 73 Midsize 4dr sedan	Pool	26
Unit 74 1 ton 4x4	Service body	61
Misc Accessories		13
Total		404

2

2006 Descriptions		Actual Spending (\$000)
Unit 76 1 ton 4x4	Service body	65
Unit 77 1 ton 4x4	Service body	65
Misc Accessories		7
Total		137

3

2007 Descriptions		Actual Spending (\$000)
Unit 78 1 ton 4x4	Service body	63
Unit 79 1 ton 4x4	Service body	63
Unit 80 1 ton 4x4	Service body	63
Unit 81 1/2 ton 4x4	Pool	30
Unit 82 4x4 SUV	Pool	34
Unit 83 3/4 ton 4x4	Distribution Tech	34
Unit 84 1 ton 4x4	Service body	70
Unit 85 1 ton 4x4	Service body	66
Misc Accessories		19
Total		442

2008 Descriptions	Budget (\$000)
Service Vehicle	76
Service Vehicle	76
Pool Vehicle	56
Total	209

2009 Descriptions	Budget (\$000)
Service Vehicle	77
Service Vehicle	77
Pool Vehicle	57
Pool Vehicle	57
Total	268

Note that 2008 actual spending is provided in response to UCG-YEC-1-83(a).

(b)

Yukon Energy tenders for the purchase of all units. The number of bids varies depending on timing of tender (i.e. manufacturers tend not to bid when they are re-tooling for next year's models) and type of unit.

(c)

Salvage proceeds received in 2005 were \$51,641, and are as noted in the table below:

G/L	Date	Amount	Description	Asset Number
	12/8/2005	(15,517)	1998 Dodge Pick up	50
	12/8/2005	(6,150)	1996 Dodge 3/4 Ton Pick Up	29
	12/8/2005	(1,600)	1992 Plymouth Acclaim Car	25
	12/8/2005	(13,788)	1996 Dodge 3/4 Ton Service Body	43
	12/8/2005	(14,586)	1996 Dodge 3/4 Ton Service Body	48
Salvage Proceeds received in 2005		<u>(51,641)</u>		

No vehicles were sold from 2006 through 2008.

The proceeds from these sales are included in Other Revenues (see Tab 7, Page 7-15 line 50). See also response to YECL-YEC-1-34(a).

1 **REFERENCE:**

2
3 **TOPIC: Transmission Standards**

4
5 **PREAMBLE:**

6
7 Yukon Electrical would like to better understand the rational for the standards
8 adopted by YEC for transmission infrastructure.

9
10 **QUESTION:**

- 11
- 12 a) Please list the third party consultant YEC engaged when selecting the design
13 standard for the Mayo/Dawson 69KV line and the costs associated with this
14 vendor.
- 15
- 16 b) Please provide the rational for the type of structures and transmission voltage
17 selected for the Mayo/Dawson 69KV transmission line.
- 18
- 19 c) Please provide the same detail as in (b) above for the structures selected for the
20 CSTP.
- 21
- 22 d) Please provide a list of the external consultants procured by YEC to design,
23 construct, and site manage the CSTP project. In addition, please provide the costs
24 associated with each of the external consultants.
- 25
- 26 e) Please provide all contracts that YEC established for the construction of the
27 CSTP/Minto Mine Spur, including contracts with First Nations and Valard
28 Construction.

29
30 **ANSWER:**

31
32 **(a)**

33
34 YEC used BC Hydro International (BCHIL) as its design consultant on this project. The
35 costs are not relevant to this proceeding as the project costs were extensively reviewed

1 at the 2005 Required Revenues and Related Matters hearing and accepted into rate
2 base as part of \$1.649 million in feasibility studies.¹

3
4 **(b)**

5
6 Issues relating to design, construction and costs of the Mayo Dawson line were fully
7 canvassed at the 2005 Required Revenues and Related Matters hearing and therefore
8 not relevant to this GRA.

9
10 **(c)**

11
12 The CSTP Stage I was the first phase of a possible two phase project to connect the
13 WAF grid with the MD grid. This entailed a new transmission line approximately 250 km
14 in length for both phases. This length at any lower voltage would have resulted in
15 unacceptable line losses. Any higher voltage would have resulted in capital costs which
16 were too high. Since the connection was to the existing WAF grid at 138 kV, it was
17 determined that this would be the best choice.

18
19 The choice of structure design was made based on industry practice. This design is a
20 standard for utilities in Canada

21
22 **(d)**

23
24 Consultants and contractors retained to design, construct and site manage the
25 CSTP/MS are listed below. Contract costs as provided are current YEC Board approved
26 amounts for Stage One CSTP/MS [design costs exclude preliminary engineering costs
27 allocated to Stage Two CSTP] and are not necessarily final amounts resolved with each
28 contractor.

¹ See YUB-YEC-1-19, filed during the Required Revenues and Related Matters hearing.

Role	Consultant/ Contractor	Contract Cost (000's)
Design*	Wardrop	1.372
Survey	Challenger	0.810
Line Construction	Valard	19.844
Substation	F&M	
Construction	Installations	4.684
Site Management	Wardrop	1.348
Commissioning	Magna Electric	0.349
	Pelly	
Clearing	Construction	3.465

1

2

3 **(e)**

4

5 Contracts with third parties are treated by Yukon Energy as confidential. Yukon Energy
6 is prepared to provide the Board with copies of the contracts on a confidential basis if the
7 Board believes they are relevant or necessary to allow the Board to gain a satisfactory
8 understanding of the matters that need to be considered in this Application.

1 **REFERENCE:** **Table 3.6 and Table 3.7**

3 **TOPIC:** **Transmission and Distribution Costs**

5 **PREAMBLE:**

7 Yukon Electrical needs more information in order to fully understand costs.

9 **QUESTION:**

11 a) For each of Transmission and Distribution, please provide details of costs for
12 2005-2009 by activity such as:

- 13 i Supervision and Engineering;
- 14 ii Overhead line maintenance;
- 15 iii Underground line maintenance;
- 16 iv Substation maintenance.
- 17 v Brushing;
- 18 vi Meter and meter testing;
- 19 vii Service to outside parties;
- 20 viii Transformer repair and maintenance; and
- 21 ix Street light maintenance.

23 b) For each of Transmission and Distribution, please provide year end actual and
24 forecast details for 2005-2009 of:

- 25 i Km of line; and
- 26 ii Number of Substations
- 27 iii Number of customers served off of each line.

29 **ANSWER:**

31 **(a)**

33 Please see tables below for each of non-labour expenses and labour expenses.

Transmission and Distribution Costs - Non-Labour

\$000s

	2005 Approved Non-labour	2005 Actual Non-labour	2006 Actual Non-labour	2007 Actual Non-labour	2008 Forecast Non-labour	2009 Forecast Non-labour
Trans Supervision	3	0	1	1	1	1
Trans Line Brushing	100	158	117	239	257	377
Trans Overhead Lines	126	89	153	161	127	132
Trans Lines Substation	104	93	83	69	122	102
Transmission	333	340	354	470	507	612
Distribution Supervision	8	1	1	1	5	5
Distribution Brushing	31	14	72	1	40	46
Distribution Lines/Substations	108	127	200	66	65	63
Distribution Meter/Meter Testing	16	12	33	18	21	47
Distribution Transformer	0	0	0	3	0	0
Distribution Street Lights	8	9	4	8	17	17
Distribution	171	163	310	97	148	178

Transmission and Distribution Costs - Labour

\$000s

	2005 Approved Labour	2005 Actual Labour	2006 Actual Labour	2007 Actual Labour	2008 Forecast Labour	2009 Forecast Labour
Trans Supervision	32	21	20	20	33	34
Trans Line Brushing	23	8	5	5	4	5
Trans Overhead Lines	104	74	116	123	123	127
Trans Lines Substation	271	191	167	145	306	316
Transmission	430	295	307	293	466	482
Distribution Supervision	37	41	30	38	48	49
Distribution Brushing	21	16	10	8	18	19
Distribution Lines/Substations	286	266	299	359	397	409
Distribution Meter/Meter Testing	35	26	28	31	38	38
Distribution Transformer	2	0	0	1	2	2
Distribution Street Lights	14	5	5	9	3	4
Distribution	395	354	372	446	505	521

(b)

Year end actual and forecast details for each of Transmission and Distribution for 2005-2009 are as follows:

- (i) Km of line - approximately 600 kms
- (ii) Number of Substations – 17
- (iii) For the number of customers served off of each line and substation please see chart below.

Substation	Substation Description	Approximate Number of Customers Served
S146	Faro Reactor Substation	
S150	Whitehorse Substation at Hydro Site	YECL 13 YEC Customers
S162	Faro Mine Substation	1 YEC Customer
S163	Carmacks Substation	YECL
S164	Takhini Substation (Mayo Road, near Whitehorse)	YECL L170 29 YEC Customers L171 77 YEC Customers
S167	Aishihik Hydro Substation	YECL L355 5 YEC Customers
S170	McIntyre Substation (Whitehorse area)	YECL
S171	Riverside Substation (Whitehorse area)	
S249	Mayo Hydro Substation	351 YEC Customers
S250/P158	Callison Substation / Dawson Diesel (Dawson)	1230 YEC Customers
S251	Stewart Crossing Substation	YECL
S252	Pelly Crossing Substation	YECL
S253	Minto Landing Substation	
S254	Minto Mine Substation	Minto Mine
S255	Carmacks Substation	
S257	Keno City Substation	YECL
870S	Faro Substation	YECL 318 YEC Customers

1 **REFERENCE: Pages 5 -18 & 5 - 19**

2
3 **TOPIC: Transmission Projects**

4
5 **PREAMBLE:**

6
7 Transmission Projects \$100,000 to \$1 million over the test period

8
9 **QUESTION:**

10
11 Yukon Electrical would like to better understand the types of activities and process
12 YEC uses to complete transmission maintenance.

13
14 a) Please provide details (labour, material contractor and other) of the \$155k spent
15 in 2008. Outline the specific tasks undertaken.

16
17 b) Please provide the details (labour, material contractor and other) of the \$220k
18 planned in 2009. Outline the specific tasks undertaken.

19
20 c) Lines 14 through 30 on page 5-18 and lines 1 through 15 on page 5 -19 suggest
21 various patrol, inspection and testing procedures to be executed on various
22 components of the transmission system. Please provide copies of YEC's
23 transmission maintenance procedures and programs and the associated cost of
24 each program. (Pole test and treat, Insulator sample test program, etc.)

25
26 d) What problems have been experienced on the transmission system since 2005?
27 How were they rectified?

1 **ANSWER:**

3 **(a) and (b)**

5 A breakdown of the capital projects is provided in the table below:

6 **Transmission Projects under \$100k**

\$000s	2008 Forecast	2009 Forecast
Mayo - Dawson Transmission Line Drawings	50	
Transfer Trip S171 / P127	45	
Ross River Upgrades	30	
S170 Transformer Protection Upgrade	25	
L174 Protection Coordination	5	
Transmission Line Assessment and Repairs		75
S164 Reactor Replacement		75
Blocking Switches		50
PT Substation Fencing - South Fox Lake		20
Total	155	220

9 A description of the projects is as follows. All of the projects are estimated based on all-
10 in costs, and detailed breakdowns of the cost components are not available except
11 where noted:

- 13 • **Mayo Dawson Transmission Line Drawings:** Project objective involves use of
14 consultant to update marked-up site drawings and have internal draftspeople
15 update electronic drawings.
- 17 • **Transfer Trip S171/P127:** Installation of transformer trip protection scheme
18 between substation S171 and hydro plant P127 – prevents transformer damage
19 under certain fault scenarios. Internal Labour estimated at \$30k, Materials at
20 \$10k, other expenses at \$5k.
- 22 • **Ross River Upgrades:** Replace deficient structures on L356 Ross River
23 transmission line.

- 1 • **S170 Transformer Protection Upgrade:** Replace obsolete protection relays in
2 substation S170.
- 3
- 4 • **L174 Protection Coordinator:** Implementation of revised protection settings to
5 improve customer service.
- 6
- 7 • **Transmission Line Assessment and Repairs:** Line patrol and assessment of
8 identified deficiencies.
- 9
- 10 • **S164 Reactor Replacement:** Preventative maintenance testing of oil indicates
11 equipment could be end of life – at minimum oil requires reclamation or
12 equipment may need to be replaced.
- 13
- 14 • **Blocking Switches:** Addition of equipment to allow for protective relay testing
15 without the need for service interruption to customers. Internal labour estimated
16 at \$28k, materials at \$8k, and other costs at \$14k.
- 17
- 18 • **PT Substation Fencing – South Fox Lake:** Addition of fencing around PT
19 substation to discourage vandals/protect the public. Internal labour estimated at
20 \$12k, materials at \$6k, and other costs at \$2k.

21
22 (c) and (d)

23
24 Please see LE-YEC-1-60, LE-YEC-1-34, YUB-YEC-1-37 (d) and (e).

25
26 YEC does not have specific written procedures for transmission maintenance. Broken
27 cross-arms / sway-braces, insulation failures and tree contacts are the primary cause of
28 transmission interruptions on the YEC grid.

29
30 Beyond emergency repairs and the noted capital projects, each line has an aerial patrol
31 once per year, followed by a ground patrol of areas of concern identified by the aerial
32 patrol. YEC's practice has been to isolate and effect repairs identified from these patrols.
33 Danger trees are removed as soon as reasonably possible.

REFERENCE: Page 2-3 lines 9-11; Page 2-5 Table 2.1; Page 2-16 Table 2.2

TOPIC: Primary Wholesale Sales to Yukon Electrical

PREAMBLE:

Absent Pelly Crossing, wholesale sales are forecast at 238,439 MW.h in 2008 and 264,626 MW.h in 2009, with percentage growth rate of approximately 1.38% in 2008 over 2007 actuals, and 2.39% in 2009 over forecast 2008.

Difference in “ongoing sales” forecast (MW.h) between YEC and YECL (-1,293 MW.h (2008); 3,164 MW.h (2009))

QUESTION:

- a) In excel format for each of the WAF and MD grids, please provide the forecast monthly wholesale sales for 2008 and 2009 as compared to actuals for 2005, 2006 and 2007.
- b) Other than adjusting for the impact of YEC changing its secondary sales forecast from that originally provided to Yukon Electrical and YEC using actual wholesale sales for the period January 1 - June 30, 2008, please confirm YEC is relying on Yukon Electrical's 2008 wholesale purchased power forecast for purposes of its own 2008 wholesale sales forecast. If not, please explain why.
- c) Please confirm that YEC's 2008 “ongoing sales” wholesale sales forecast is 1,293 MW.h lower than what was forecast by Yukon Electrical. If so, please explain why.
- d) In excel format, please provide the details of the wholesale sales WAF load growth for the 2001-2004 period averaging 2.2% per year as well as the more recent experienced growth rate in WAF wholesale sales from 2004 - 2007 of 2.5% per year. Please explain what YEC believes have been the major underlying drivers of this growth.

- 1 e) Please provide the annual average wholesale sales growth rate and
2 associated details for the period 1996 to 2007 as well as the annual
3 average growth rate for the period 1986 - 2007. Please explain the
4 underlying reasons for the differences in these longer term growth rates relative
5 to the 2.39% ongoing WAF and MD sales (excluding Pelly) growth rate used by
6 YEC for 2009.
7
- 8 f) Other than simply looking at historical averages for the period 2001 -2007,
9 please detail all other work YEC has performed to understand the underlying
10 load drivers of the recent historical growth rate and why these factors are
11 reasonable to use on a go forward basis to determine a wholesale load
12 growth for 2009 and beyond. More specifically, please detail and provide an
13 analysis of the new load that is driving the 6,157 GW.h of ongoing WAF and
14 MD load growth between 2008 and 2009.
15
- 16 g) Did YEC discuss its wholesale sales forecast assumptions with Yukon
17 Electrical prior to the filing of its own Application? If not, why not?
18
- 19 h) Did YEC consider adjusting its 2009 wholesale growth forecast, that appears
20 to be based on simply trending recent past growth, to reflect past "one of" load
21 growth changes experienced in the Whitehorse area including government
22 commercial customers such as the Canada Games Centre, the Copper Ridge
23 Extended Care Facility, the Athletes Village at Yukon College or non-
24 government commercial customers such as Wal-Mart, Superstore and
25 Canadian Tire? If yes, please quantify. If not, please explain why not.
26
- 27 i) Please confirm YEC uses temperature forecasts to forecast its sales load for
28 purposes of determining surplus hydro availability for secondary sales
29 customers. If not, please explain why not. If yes, please detail what YEC has
30 learned with respect to the relationships between WAF and MD loads and
31 temperature.
32
- 33 j) Did YEC prepare its 2008 and 2009 wholesale sales forecast on a
34 temperature normalized basis? If not, please provide.

k) Please provide 2001 - 2007 actual wholesale sales and annual growth rates on a temperature normalized basis.

l) Please comment on the impact of the worsening world and Canadian economic situation and outlook on YEC's wholesale sales forecast and, more specifically, on current and new forecast retail customers served off the WAF grid.

ANSWER:

(a)

Please see table below.

WAF Grid Monthly Wholesale Sales for the Years 2005-2009

MW.h

Month	Actual 2005	Actual 2006	Actual 2007	Forecast 2008	Forecast 2009
January	26,230	26,359	25,517	27,529	28,445
February	21,632	21,188	24,331	25,303	26,128
March	20,503	23,851	24,450	22,760	23,512
April	17,498	19,818	20,328	19,402	20,058
May	17,818	17,844	18,304	18,371	18,982
June	16,452	17,017	16,680	18,537	19,142
July	17,281	16,799	17,685	18,100	18,677
August	16,358	17,544	17,524	17,900	18,475
September	17,640	19,010	19,105	19,600	20,243
October	20,323	19,317	20,278	20,860	21,377
November	21,743	26,921	22,383	23,883	24,476
December	23,549	25,340	27,473	25,854	26,496
Total	237,028	251,007	254,059	258,098	266,011

MD Grid Monthly Wholesale Sales for the Years 2005-2009
MW.h

Month	Actual 2005	Actual 2006	Actual 2007	Forecast 2008	Forecast 2009
January	33	100	98	83	100
February	30	83	97	79	98
March	26	92	99	72	100
April	23	63	76	55	77
May	14	56	61	46	62
June	10	40	46	128	47
July	11	46	52	52	53
August	15	46	54	46	46
September	17	50	52	50	51
October	19	69	60	69	70
November	100	109	71	109	110
December	93	100	87	100	102
Total	390	854	855	891	916

(b)

Confirmed, on an annual basis. However, Yukon Energy does not necessarily use the same monthly distribution of wholesale sales forecast as YECL.

(c)

Confirmed. Please see Table 2.1 in Tab 2. Yukon Energy's forecast is different than YECL's as Yukon Energy's filing was able to incorporate actual sales from January to June of 2008.

(d)

Please see table below. Note that the 2.2% growth rate for 2001-2004 was provided in the 20 year Resource Plan hearing, at a time when Yukon Energy had Fish Lake generation readily available, and this value reflects YECL "native" load (i.e., with Fish Lake generation added back). The 2.5% value was calculated for this GRA at a time when YEC did not have YECL Fish Lake generation readily available, and thus was

calculated off of simple WAF wholesale sales (i.e., YECL WAF native load net of Fish Lake generation). With the Fish Lake generation included, as noted in the table below, the YECL native load growth over the period 2004 to 2007 is 2.9% per year, and over the period 2004 to 2008 is 2.8%.

WAF Grid Wholesale Sales for the Years 2001-2008

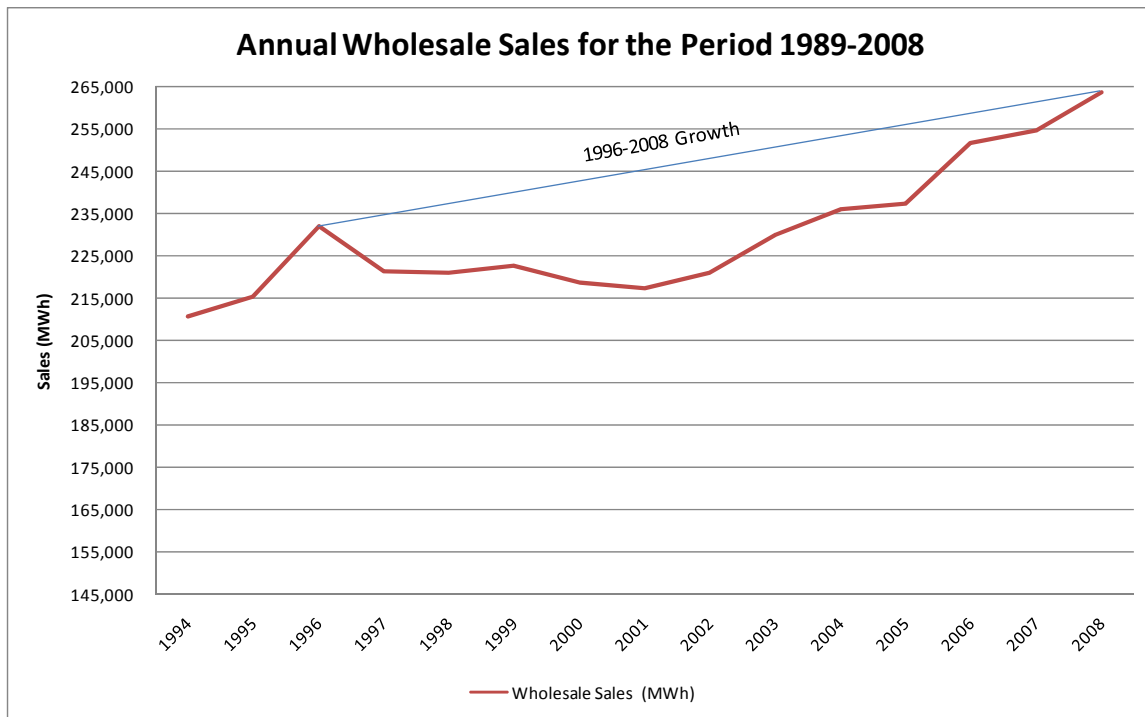
	MW.h							
<i>With Fish Lake</i>	2001	2002	2003	2004	2005	2006	2007	2008
Sales								
Wholesale Primary	217,138	220,647	229,731	235,718	237,028	251,007	254,059	262,951
Fish Lake	9,165	8,576	4,948	6,034	6,900	8,200	9,030	6,551
Total	226,303	229,223	234,679	241,752	243,928	259,207	263,089	269,502
Average growth rate 2001-2004				2.2%				
Average growth rate 2004-2007 and 2004-2008							2.9%	2.8%

<i>w/o Fish Lake</i>	2001	2002	2003	2004	2005	2006	2007	2008
Sales								
Total	217,138	220,647	229,731	235,718	237,028	251,007	254,059	262,951
Average growth rate 2001-2004				2.8%				
Average growth rate 2004-2007 and 2004-2008							2.5%	2.8%

(e)

The long-term compounded growth in wholesales as requested, from 1986 (fiscal year ending March 31, 1986, when the assets were owned by NCPC) to 2008 actuals is 2.71% (from 146.6 GW.h to 263.8 GW.h).

The period from 1996 to 2008 is not representative of a reasonable data set for Yukon. The mathematics show a growth rate over this period of 1.07% per annum (from 1996 at 232.1 GW.h to 2008 at 263.8 GW.h). However, as shown in the chart below this is heavily skewed by the closure of the Faro mine and the massive impacts on Yukon that occurred between 1996 and 2001 (when, as noted in the YEC Resource Plan, approximately 10% of Yukon's population left the territory). Since that 5 year hiatus on growth in Yukon, the loads have been steadily climbing at a rate that more readily approximates the levels shown in YEC's GRA, and slightly above that used in the 2006-2025 Resource Plan (which applied 1.85% as the annual average growth rate).



(g)

No. Yukon Energy's GRA load forecast was not completed as of the date of YECL filing its GRA. YEC's basic WAF load forecasting approach, and concerns with YECL's past wholesale forecasts tending to be too low, have been reviewed in the past during the Resource Plan Hearing. Once YEC's current wholesales forecast for 2009 was prepared for its own Application, YEC was not aware of any useful basis to review this forecast with YECL in the midst of YECL's own GRA review.

(f), (h), (j) and (k)

YEC's WAF forecasts for the Resource Plan Hearing as well as for the current Application have focused on wholesale loads, and have been prepared based on adoption of average growth rates as noted in each instance which appear to be reasonable in light of information available to YEC. These forecasts have proven to be useful for YEC planning purposes, keeping in mind that actual individual annual wholesale loads are subject to considerable variability due to weather and other factors. As noted above (YECL-YEC-1-19(f)), Yukon Energy is not provided with YECL's customer specific data and therefore cannot carry out (even if it so wanted to) detailed assessments of the underlying customer class growth underlying wholesale growth.

1 Based on review of the recent YECL GRA filings which set out considerable information
2 beyond what is available to YEC, it is not apparent that overall wholesale forecasting at
3 least for the current Application would necessarily be improved through prior access to
4 such additional information. By way of example, references to the nature of "one-off"
5 general service load increments in Whitehorse do not appear to explain why the higher
6 growth rates that these customers help to drive have become the norm rather than the
7 exception.

8
9 YEC has not prepared its wholesale forecasts on a temperature normalized basis.
10 Please see CW-YEC-1-3(d) which sets out the 2.5% wholesale growth that YEC used to
11 determine the forecast 2009 wholesale loads. Please see YECL-YEC-1-19(d) in regards
12 to the justification for the 2.5%. YEC cannot provide meaningful temperature normalized
13 analysis of wholesale loads without access to detailed information on the individual
14 customer class information underlying the wholesale loads. Based on review of the
15 recent YECL GRA filings which set out a range of WAF customer class temperature
16 normalized assessments far beyond what is available to YEC, YEC does believe that
17 overall wholesale forecasting at least for the current Application would necessarily be
18 improved through prior access to such additional information.

19
20 **(i)**

21
22 Not confirmed. YEC does not have temperature forecasts for the test years. YEC's
23 approach to forecasting secondary sales interruptions is set out in detail in YECL-YEC-
24 1-23(b) which uses 8 years of monthly load duration curves to represent an average of
25 the overall load response that has been experienced in each specific month of the year.
26 Incorporated into this actual load response is the effects of weather. In short, by using a
27 long term average load shape for each month YEC's approach to forecast availability of
28 secondary sales does in effect consider weather conditions over a long period of time
29 (i.e. normalized). In respect of surplus hydro the relevant consideration for forecasting
30 secondary sales in the test years is the surplus hydro capacity that exists or is
31 constrained from time to time over the course of a year. This factor is the fundamental
32 basis for the analysis contained in YECL-YEC-1-23(b).

33
34 **(i)**

35
36 Please see response to PWP/HML-YEC-1-29.

1 **REFERENCE:** Page 2-8, Page 2-16 through to Page 2-18

2
3 **TOPIC:** Residential and General Service Sales Forecast

4
5 **PREAMBLE:**

6
7 Residential sales are forecast to be 11,155 MW.h in 2008 and 11,183 MW.h in 2009 and
8 General Service sales are forecast to be 18,193 MW.h in 2008 and 19,543 MW.h in 2009.

9
10 **QUESTION:**

- 11
12 a) Please confirm if YEC believes its Residential and General Service retail sales are
13 impacted by temperature? If so, please quantify. If not, please explain why not.
14
15 b) Please confirm YEC prepared its Residential and General Service sales forecast
16 on a temperature normalized basis. If not, please explain why.
17
18 c) Please provide an update on YEC forecasted sales with Alexco and the due
19 diligence it has done with respect to forecasting the load.
20
21 d) Please provide the forecasted peak demand for Alexco and the due diligence
22 YEC completed to confirm this forecast.

23
24 **ANSWER:**

25
26 **(a)**

27
28 Yes. However, these impacts are not considered material since Residential and General
29 Service retail sales make up the minority of YEC's sales. It is noted that approximately
30 90% of YEC's sales are to wholesale and industrial customers.

31
32 The forecast methods applied by YEC are discussed in LE-YEC-1-7.

33
34 **(b)**

35
36 No. Please see response to LE-YEC-1-7 as to approach adopted.

1 **(c)**

2

3 Please see response to LE-YEC-1-7.

4

5 **(d)**

6

7 For 2009 Alexco is not an industrial customer, but rather a General Service Non-
8 Government customer, and as such its peak demand is not forecast individually.

1 **REFERENCE: Page 2-9 to Page 2-10**

3 **TOPIC: Secondary Sales Forecast**

5 **PREAMBLE:**

7 Secondary sales are forecast to be 20,557 MW.h in 2008 and 16,613 MW.h in 2009.

9 **QUESTION:**

- 11 a) Please confirm that YEC prepared the secondary sales forecast based on
12 normalized temperatures. If not, why not.
- 14 b) In excel format, please provide and supporting data that was used to prepare
15 the daily and monthly secondary sales forecasts that total 20,557 MW.h and
16 16,613 MW.h for 2008 and 2009 respectively.
- 18 c) In excel format, please provide the load and supply data that resulted in YEC
19 determining there would be 1,740 hours of secondary sales interruption in
20 January, February and December of 2009.
- 22 d) In excel format, please explain and detail how YEC determined the
23 maximum potential secondary sales in 2009 is forecast to be 22,000 MW.h
24 reflecting the sum of connected loads, less an unavailability factor related to
25 customer equipment.
- 27 e) Please explain and detail the work done by YEC when it advised Yukon
28 Electrical in early 2008 that forecast secondary sales for 2008 and 2009 were
29 16,853 MW.h and 6,954 MW.h respectively as compared to YEC's October 2008
30 GRA forecast of 20,557 MW.h and 16,613 MW.h respectively. Please ensure
31 this response highlights the major changes in assumptions and the associated
32 reasons.
- 34 f) Please confirm which secondary sales customers were SCADA connected
35 customers in 2005, 2006, 2007 and which customers are forecast to be SCADA
36 connected in 2008 and 2009. What is the forecast impact, if any, of the additional
37 customers being SCADA connected?

1 g) In a manner similar to YECL-YEC-1-46 (2005 YEC Application IR response),
2 please prepare a chart that compares monthly 2005 WAF surplus hydro
3 availability to the forecasts for 2008 and 2009.
4

5 **ANSWER:**

6
7 **(a)**
8

9 YEC does not prepare its secondary sales forecast based on analytical “normalized”
10 temperatures for the following reasons:
11

- 12 • Many secondary sales customers do not use their boilers as their sole heating
13 source. In larger installations the electric boiler often operates at a designated
14 level (i.e. 85 to 90% of its capacity) with a primary heat source picking up the
15 difference. Therefore temperature fluctuations are addressed by the primary heat
16 source boiler.
17
- 18 • One factor driving secondary sales is whether the owner operates the unit to its
19 full operating potential. There are many instances observed over the past 4 years
20 where secondary sales have not been at the levels Yukon Energy would expect
21 based on the installed capacity of customers. It is not apparent to YEC why these
22 installations were not operating near their full levels, but Yukon Energy has been
23 asked by YECL to not contact these customers when such situations are evident,
24 and Yukon Energy has complied with this direction.
25
- 26 • Many secondary sales customers in fact have an inverse relationship with
27 temperature. There are two heat pumps that use less secondary sales when it
28 gets colder, while there is a process operator that uses more secondary sales as
29 the weather gets warmer.
30

31 Based on the above factors, YEC is of the view that historic averages by customer,
32 adjusted for availability factors, are the best indicators of secondary sales potential.

1 **(b) and (c)**

2
3 Please see Attachment 1 to this response. This Excel files summarizes the data used to
4 derive "standard" monthly load duration curves, using actual hourly loads from two
5 datasets – February 1998 to January 2003, and January 2004 to December 2007. For
6 each month, the standard load duration curve is a composite of 9 years of past data. The
7 file also shows the estimates prepared on the basis that for each hour where secondary
8 sales must be interrupted, due to actual peaking diesel use had it not been interrupted, it
9 is assumed 4 hours of secondary would be interrupted to deal with notification periods,
10 day/night load variance, and other interruptions not forecast in this model related to
11 diesel required for other purposes, such as unscheduled hydro outages.

12
13 Secondary sales forecast data provided in the attachment are for the WAF grid, which
14 combined with secondary sales for MD grid, total to 20,557 MW.h and 16,613 MW.h for
15 2008 and 2009 respectively.

16
17 It is noted that there is a misprint in the Application. The correct hours of secondary
18 sales interruption is 1704.

19
20 YEC does not assume that these hours of interruption will be in January, February and
21 December of 2009 only. As noted on page 2-10 of the Application (footnote 10), the hours
22 of interruption are concentrated in January, February and December of 2009, but they
23 happen in other months of the year as well.

24
25 **(d)**

26
27 The 22 GW.h reflects an approximate cumulative value of historic monthly averages for
28 established customers plus an estimate for the newest customer to connect to
29 secondary sales. It is assumed that the historic averages by customer reflect an element
30 of unavailability for breakdowns or maintenance as this should be an annual or
31 intermittent event that would impact sales in past years. It is not possible to accurately
32 forecast what level of unavailability will occur as we cannot forecast equipment
33 breakdowns. So in some years the actual sales will exceed the forecast sales while in
34 other years they fall short.

35
36 There is no Excel format analysis for this adjustment.

1 **(e)**

2
3 The forecasts provided in early 2008 to YECL were based on an early assumption that
4 all WAF secondary sales would have to be interrupted once CSTP was in service, with
5 the exception of the months of May through September 2009, as set out in the following
6 table:

8 **YEC 2009 secondary sales forecast as of early 2008**

	Secondary sales kW.h
May 2009	1,890,050
June 2009	1,543,250
July 2009	971,800
August 2009	1,118,800
September 2009	1,430,150
total	<u>6,954,050</u>

11 **(f)**

12
13 Only the Whitehorse General Hospital was SCADA connected for 2005 through 2008. It
14 represents an approximate load of 1 MW. There is one other government building in
15 discussions regarding becoming SCADA connected in 2009. If connected, it would
16 represent a load of approximately 0.4 MW.

17
18 The benefit of SCADA connected customers is that they can be dropped off or
19 reconnected to the system on very short notice as the need arises.

21 **(g)**

22
23 It is not possible to provide a chart at the present time that outlines surplus energy
24 availability as requested. The availability of surplus energy is not specifically linked to
25 any given month, but rather to the quantity of water in storage and otherwise required to
26 be spilled, as well as the relative water conditions on the system at any given point in
27 time.

28
29 As noted at page 2-9 to 2-10 of the Application, the key constraint at the present time
30 with respect to secondary sales is peaking diesel which is set out in detail in response to
31 YECL-YEC-1-23(b).

1 **REFERENCE: Page 12 - Workshop Presentation Faro Dewatering Account**

2
3 **PREAMBLE:**

4
5 Yukon Electrical wishes to understand the customer impact of using the Faro
6 Dewatering Account to pay for unrelated YEC costs.

7
8 **QUESTION:**

9
10 a) Please provide the details of all of the withdrawals / inputs that YEC has made on
11 the dewatering account since its inception.

12
13 b) Please provide a continuity schedule demonstrating a) above.

14
15 c) Please provide the percentage of rate increase that each withdrawal represents
16 to customers had it been provided through traditional regulatory means.

17
18 **ANSWER:**

19
20 The preamble to the question is not clear. The Faro Dewatering amounts have not been
21 used to pay for "unrelated YEC costs". Amounts in regulatory liabilities held by YEC
22 (including the deferred Faro dewatering revenues) are funds held for the benefit of
23 ratepayers and only applied pursuant to a specific direction of the YUB.

24
25 **(a) and (b)**

26
27 Please see table provided below. Amounts indicated as "sales to ARM" are sales to the
28 party in charge of site maintenance at the Faro mine site from time to time over the
29 period 1998-2004 (when the total amount of these sales was being deferred).

1 Continuity Schedule of the “Faro Dewatering Account”

Year	Opening Balance	Invoice	Labour charges	Year End Flex Note Adjustment	Faro Mine Trust Transfer	Ending Balance
1998	0.00	(297,924.00)	3,153.79			(294,770.21)
1999	(294,770.21)	(171,204.00)	655.84			(465,318.37)
2000	(465,318.37)	(257,440.00)		124,883.00		(597,875.37)
2001	(597,875.37)	(559,944.00)	2,726.96	94,875.00		(1,060,217.41)
2002	(1,060,217.41)	(442,200.00)	3,067.85	73,329.00		(1,426,020.56)
2003	(1,426,020.56)	(421,053.60)	2,074.16	70,725.74		(1,774,274.26)
2004	(1,774,274.26)	(353,324.40)	1,090.64	58,623.31		(2,067,884.71)
2005	(2,067,884.71)				292,000.00	(1,775,884.71)
2006	(1,775,884.71)				292,000.00	(1,483,884.71)
2007	(1,483,884.71)				292,000.00	(1,191,884.71)
2008	(1,191,884.71)				0.00	(1,191,884.71) note 1

Note 1:

There is no YUB Board Order to enable YEC to make an annual withdrawal from the Income Stabilisation Trust account for 2008

(c)

There have been no withdrawals from the account related to imposing rate increases on customers, whether “traditional” or otherwise. Yukon Energy has not had a rate increase since 1998 (related to the closure of the Faro mine) which pre-dates any deferred Faro dewatering revenue amounts.

On the basis of total base rates, such as Rider J is applied, the \$0.292 million annual withdrawal allowed Yukon Energy to avoid the need for a rate increase of approximately 0.8% through each of the years 2005 to 2007.

1 **REFERENCE: Introduction Page 1-3**

3 **TOPIC: 20 Year Resource Plan**

5 **PREAMBLE:**

7 Throughout its application YEC refers to the 20 Year Resource Plan

9 **QUESTION:**

- 11 a) Has the 20 Year Resource Plan been approved for implementation? If so under
12 which authority has it been approved? Please provide a copy of the approval.
- 14 b) What aspects of the 20 year plan have been implemented and what have been
15 the costs associated with implementing each aspect of the Plan?
- 17 c) Did YEC consult with Yukon Electrical on the 20 Year Plan? If not, why not? If
18 so, please provide all documentation in YEC's possession regarding such
19 discussions.
- 21 d) Does YEC support ongoing consultation with Yukon Electrical on system
22 planning matters, as Yukon Electrical serves the majority of the customers in the
23 Yukon? If not, why not? If so, please provide the details of how YEC plans to
24 include Yukon Electrical and its customers in the system planning process?
- 26 e) Will the proposed 3rd wheel at Aishihik increase the maximum amount of MW that
27 YEC will be able to supply to the grid? If so, how many additional MWs will be
28 generated? How long would this increased amount of MW be sustained?

30 **ANSWER:**

32 **(a)**

34 The 20 Year Resource Plan was reviewed in detail by the Board and interested parties
35 and the YUB provided its views and recommendations relative to all sections of the
36 report to the government.

1 **(b)**

2
3 The 20 Year Resource Plan Recommendations and Proposed Actions have been
4 pursued as follows:

- 5
6 • Chapter 3: Yukon Energy operates with updated Capacity Planning Criteria. No
7 specific costs are associated with this item.
8
- 9 • Chapter 4 Proposed Actions (costs as noted for capital projects in Tab 5)
 - 10 - Item 1: Aishihik 3rd turbine is being pursued – see YUB-YEC-I-27(b).
 - 11 - Item 2: Marsh Fall/Winter Storage remains an attractive project as noted in
12 YUB-YEC-I-27(a).
 - 13 - Item 3: Carmacks-Stewart Transmission Project Stage I is now in service,
14 and Stage II remains a project under active planning.
 - 15 - Item 4 and 5: Mirrlees Life Extension Project is underway, with units at Faro
16 and Whitehorse in service in the test years, and two additional units at
17 Whitehorse scheduled for beyond the test years.
 - 18 - Item 6: Ongoing monitoring of loads, including industrial, is an active YEC
19 assignment. Major loads including Alexco, Western Copper, the Faro
20 reclamation activities, and other potential customers are tracked. No specific
21 cost for this activity is identified.
 - 22 - Item 7: Other small enhancement projects have been pursued – the Southern
23 Lakes study is complete largely in relation to Marsh Lake. Re-runnering hydro
24 units is an active opportunity YEC continues to review, and will implement in
25 the event economically feasible. YEC has rejected the concept of a 1 MW
26 diesel at Carcross as new capacity is not required on the WAF system at this
27 time.
- 28
29 • Chapter 5 Proposed Actions (costs as noted in Tab 5)
 - 30 - 10 MW scenario:
 - 31 ▪ Aishihik Diversions and Atlin Storage are projects that are being
32 considered for advancement (see page 5-20).
 - 33 ▪ System-wide water and load dispatch model development is completed
 - 34 ▪ Assessment of the Southern Lakes has been initiated with hydrology
35 studies; the potential for water control structures has an initial focus on
36 Atlin Lake.
 - 37 ▪ Mayo Hydro enhancements are in active planning.

- WAF new small hydro has been investigated (e.g., Drury), with the conclusion that Mayo B is preferable in the near-term.
- DSM: Activities focus on support for Yukon Government initiatives.
- 25 MW scenario: In addition to 10 MW scenario
 - Update WAF hydro information for larger potential generation (e.g., Hoole Canyon).
 - Prepare initial pre-feasibility concept on major wind generation development.
- 40 MW and 120-360 MW Scenarios – no activity.
- Pre-commitment activities:
 - Monitoring industrial load developments – see above.
 - Southern Lakes Hydrology – see above.
 - Other existing Hydro Facility Enhancements – see above.
 - Level 1 and 2 assessments to identify preferred 5-30 MW scale Yukon hydro sites – see above.
 - Ongoing monitoring of hydrology – being undertaken at this time in conjunction with potential resources in the Aishihik area.

(c)

Yukon Energy sought the involvement of YECL in Resource Plan activities, both prior to and during the regulatory hearing. From July 2005 through November 2005, Yukon Energy provided both written requests and in person discussions requesting YECL's cooperation in the exercise of developing a 20-Year Resource Plan. Attached (attachments YECL-YEC-1-26(c) 1-4) is all correspondence YEC could readily locate in regards to those attempts at consultation.

In regards to the regulatory review, in its September 25, 2006 letter to the YUB, YECL noted that it would "...no longer actively participate in the current review of YEC's 20 Year Resource Plan; but will focus its attention on the significant regulatory projects that are expected to be brought before the Yukon Utilities Board under Part 3 of the Act."

(d)

Yukon Energy routinely works with YECL on distribution planning matters where the two utilities interface. As part of any next update to the major Resource Plan, Yukon Energy

1 expects opportunities for involvement of YECL and customers, in the event they elect to
2 participate.

3
4 As the primary generator and transmitter of power in Yukon, Yukon Energy is required to
5 maintain day-to-day responsibility over ongoing system planning activities in these
6 functions.

7
8 **(e)**

9
10 The proposed third wheel at Aishihik is 7 MW. Yukon Energy has not yet proposed an
11 operational plan for the unit. Opportunities to generate will be sustained as long as there
12 is water in Aishihik Lake above the minimum level of Yukon Energy's licence.

13
14 Details regarding the expected Aishihik 3rd Turbine impacts on displacing diesel
15 generation under various load and timing scenarios were reviewed during the Resource
16 Plan Hearing and the CSTP Part 3 Hearing. See UCG-YEC-1-17(a) for further
17 information.



0310-03-04

July 18, 2005

Doug Tenney
The Yukon Electrical Company Limited
100, 1100 First Avenue
Whitehorse, YT
Y1A 3T4

Dear Doug,

Yukon Energy is currently undergoing planning with respect to major generation and transmission infrastructure. This planning process is intended to determine the bulk power requirements of the WAF and Mayo-Dawson systems, as well as potential for future interconnection to isolated systems.

In this regard, given the large part of our load accounted for by Yukon Electrical, we have identified below specific information from YECL that would assist with respect to our current planning for bulk power supply in Yukon. We have attempted to address these requirements in a form that we assume is readily available from Alberta Power as it was produced in past YUB hearings (and is expected to be required in future for YUB proceedings). However, if the same data is more easily produced in a different format using today's computer systems, that would be acceptable as well.

1. **Actual Loads:** The actual loads and customer numbers by customer class and community for the last 3 fiscal years. It may be helpful if it can be produced in the form of CI-YEC/YECL-23 from the 1993/94 GRA as it relates to YECL, particularly Tables 5 to 7 (energy loads, losses and supply by rate schedule), Tables 8 to 10 (showing demand loads, losses and supply by rate schedule; please confirm that these are coincident peak values), Tables 11 to 13 (showing customer numbers by rate schedule), and Table 17 (losses and supply by community).
2. **Forecast Loads:** Please provide any current forecasts of the loads and customer numbers similar to the actuals provided in bullet 1 above, to the extent that this information is available within YECL. Please also provide any long-term load growth assumption used by YECL in its planning exercises to ensure consistency between the two utilities.
3. **Generator Complement:** Please provide an update of the interrogatory response UCG-YEC/YECL-1-73 from the 1996/97 GRA indicating the YECL diesel generator inventory and planned retirement dates (we do not require the data in the final column on book value). Please also indicate any planned additions or replacements to any of the diesel units on each system.

4. ***Fish Lake Hydro:*** Please provide the actuals for Fish Lake hydro for the last three years. In addition, please provide any new assumed long-term average output, any planned improvements to change the average output, any assumed low flow reliable winter period output at time of WAF peak, or if there are any established retirement dates. This would include any impacts on the reliable low flow peak to increase or decrease the currently assumed 1 MW of peak winter capability.

We are attempting to deal with this bulk power planning exercise expeditiously. If some material can be provided easily, while other material will require some time, we would appreciate receiving what is readily available as soon as possible, preferably within the next two to three weeks. Please let me know if there is anything we can do to help clarify and deal with the above.

Sincerely,

A handwritten signature in black ink, appearing to read 'D Morrison', with a large, sweeping flourish extending from the end of the signature.

David Morrison
President



COPY

**YUKON ENERGY
CORPORATION**
P.O. Box 5920
WHITEHORSE
YUKON Y1A 5L6
(867) 393-5300

September 12, 2005

Doug Tenney
The Yukon Electrical Company Limited
100, 1100 First Avenue
Whitehorse, YT
Y1A 3T4

Dear Doug,

On Wednesday August 24th, 2005 during our meeting at Yukon Energy's offices, you indicated that YECL was not willing, for reasons of commercial competition (as I understood your position), to share any of the YECL load and generation information that YEC had requested in its letter of July 18th. I have reviewed this matter further and I would like you to reconsider your position. I sincerely hope with the further explanation provided below YECL will better understand why Yukon Energy is seeking YECL's cooperation in YEC's bulk power planning exercise and as a result will provide the information requested.

As originally noted in our July 18th letter, YEC is attempting to deal with its generation and transmission resource planning exercise in an expedited manner hence the reason why we were requesting the information be provided quickly. However, given your initial reaction to YEC's request I think it would be helpful to explain in more detail why YEC needs the information requested.

As was indicated in our July 18th letter, Yukon Energy has undertaken a major review of its present and future generation and transmission infrastructure systems needs including a complete condition assessment of our major infrastructure and a review of the capacity planning criteria presently in use for Yukon's grid systems. It is our expectation that this exercise will ultimately lead to a review by the YUB of Yukon Energy's twenty year resource use plan.

The last time that the YUB reviewed such major capital plans and projects, it recommended in its December 7, 1992 Report to Commissioner in Executive Council (in the Load Forecasts section) that the Utilities provide detailed support for their load forecasts:

... the Board agrees with the position of the City of Whitehorse, and recommends that a more rigorous approach to forecasting use per customer be taken by the

Companies. In future general rate applications or review of capital plans, the Companies should be able to provide detailed support for such forecasts.

Obviously, we are interested in ensuring that such "detailed support" is available for any YUB review of our capital plans that involves forecasting use per customer and other similar planning elements relevant to Yukon bulk power system planning.

Given that YECL represents the majority of Yukon Energy's load on WAF and is also a regulated utility, necessary information that would be provided in the normal regulatory review process was accordingly requested from YECL to assist in Yukon Energy's planning. Cooperation with Yukon Electrical is a critical precondition if we are to provide the "detailed support" recommended by the YUB. Our request focused on the integrated WAF and Mayo-Dawson grids and potential for future interconnection to isolated systems, specifically requesting typical information that YECL would provide in any GRA (and in fact, as indicated in the letter, is based on requests from the 1993/94 GRA and the 1996/97 GRA, which YECL fully responded to at that time). With regard to loads, we attempted to focus our request on customer class information. We were not attempting to obtain confidential information on any individual customers.

Hopefully with this further explanation Yukon Electrical will reconsider its decision. However, if you have any further questions or concerns in this regard, please let me know as soon as possible so that we can assist in moving forward in a timely way.

On a related note, before we conclude our current planning exercise, Yukon Energy would like to meet with you to brief Yukon Electrical on the matters being discussed as part of this resource planning process. Such a meeting would also allow us to obtain YECL's input on these matters. Please let me know about Yukon Electrical's interest and availability for such a session.

Sincerely,



David Morrison
President



**YUKON ENERGY
CORPORATION**
P.O. Box 5920
WHITEHORSE
YUKON Y1A 5L6
(867) 393-5300

November 25, 2005

0310-03-04

COPY

Mr. Doug Tenney
The Yukon Electrical Company Limited
100, 1100 First Avenue
Whitehorse, YT
Y1A 3T4

Dear Doug,

I am writing to remind you of the September 12th, 2005 letter I sent you as a follow-up to our Wednesday August 24th, 2005 meeting at Yukon Energy's offices.

At our August 24th, 2005 meeting, you indicated that YECL was not willing, for reasons of commercial competition (as I understood your position), to share any of the YECL load and generation information that YEC had requested in its letter of July 18th. In my September 12th, 2005 letter, I asked you to reconsider this position and to cooperate with our current generation and transmission resource use planning by providing readily available information that historically has been provided by YECL in past GRAs.

As noted, Yukon Energy's request was consistent with the YUB's recommendation from its December 7, 1992 Report to Commissioner in Executive Council (in the Load Forecasts section) that the Utilities provide detailed support for their load forecasts. As I also indicated in my September 12th, 2005 letter, with regard to loads, we attempted to focus our request on customer class information. We were not attempting to obtain confidential information on any individual customers.

We have obviously carried on without the YECL data. However, I would still appreciate a response to clarify Yukon Electrical's position on these matters before we finish our current work and any filings with the Yukon Utilities Board, and in particular to confirm if YECL is now taking the position that any such data will no longer be made available and/or to clarify under what conditions it will be provided in future.

Yours truly

David Morrison
President



The Yukon Electrical Company Limited
An **ATCO** Company

December 7, 2005

Mr. David Morrison
President
Yukon Energy Corporation
PO Box 5920
Whitehorse, Yukon
Y1A 5L6

Re: Generation and Transmission Planning in Yukon

Dear Mr. Morrison:

On July 18, 2005, you wrote to Yukon Electrical requesting a variety of information including actual load, forecast load, generation inventory and generation planned retirement dates for both grid and non-grid communities for use in "our current planning for bulk power supply in Yukon." On August 24, we had an opportunity to meet face to face to discuss this request. During this meeting, I believe that I informed you that given the current structure of the electric industry in the Yukon, that Yukon Electrical wanted to have an opportunity to participate in any new generation or transmission facilities required in Yukon. To allow for this and to serve the public interest, Yukon Electrical believes that planning should be conducted jointly rather than by only one utility. As such the provision of all of the information requested by Yukon Energy would put Yukon Electrical at a competitive disadvantage.

It should also be remembered that on an annual basis, Yukon Electrical does provide Yukon Energy with a three year forecast of our purchase power requirements on the Whitehorse-Aishihik-Faro grid as well as actual and forecast Fish Lake Hydro generation.

On September 12, Yukon Energy wrote back in response to the August 24th meeting. Yukon Energy reiterated that it was in the midst of "a major review of its present and future generation and transmission infrastructure system needs including a complete condition assessment of our major infrastructure and a review of the capacity planning criteria presently in use for the Yukon's grid systems." (emphasis added) Again, Yukon Electrical took this to mean that Yukon Energy alone was planning the system requirements.

The September 12th letter went on to state, as justification for why Yukon Electrical should now provide the data requested, that the YUB in its December 7, 1992 Report to Commissioner in Executive Council regarding sales forecasts stated "In future general rate applications or review of capital plans, the Companies should be able to provide detailed support of such forecasts." It should be remembered, that at the time that the YUB made this comment, the two companies were jointly managed and thus had joint



THE YUKON ELECTRICAL COMPANY LIMITED
An **ATCO** Company

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-26(c) Attachment 4

system planning. Effective January 1, 1998, the joint management ceased and to-date, no process for joint planning has been implemented. As well, as YEC intends on filing its capital plan with the YUB, it should be ready and able to defend its sales forecast no differently than it did in its 2005 Required Revenues and Related Matters Application.

It should be clear that Yukon Electrical believes that joint planning of the generation and transmission requirements of Yukon needs only to address:

- the current and forecast load,
- the current capacity of the system including planned retirements, and
- the planning criteria to be used in determining the need for new generation and transmission on the system.

The companies' specific plans to satisfy these requirements do not need to be shared as part of joint planning but rather will be the subject of review by the YUB as part of any energy project certification application by either company.

Yukon Energy, in its September 12th letter, offered to meet with Yukon Electrical prior to the completion of its exercise in order to obtain "Yukon Electrical's input" on these matters. At that time, Yukon Electrical believed, correctly or incorrectly, that the offer, should have taken place when the terms of reference and scope of the exercise were being developed. However, it is important that the planning of the Yukon's electrical requirements moves forward. To this end, Yukon Electric would like to meet with Yukon Energy so that both companies can share customer class actual and forecast sales data by community as well as generation capacities and planned retirement dates. Further discussion will be required for customer class coincident peak data as this information is not readily available and must be estimated in any event.

I trust that this clarifies Yukon Electrical's position and I want to inform you that Yukon Electrical is available to meet at your earliest convenience. Please call if you require any further clarification or wish to set a time to meet.

Yours truly,
THE YUKON ELECTRICAL COMPANY LIMITED
An **ATCO** Company

Doug Tenney
General Manager

Cc Sett Policicchio, President ATCO Electric



Printed on recycled paper

1 **REFERENCE: Page 3-13, Lines 5-6 and Page 4**

2
3 **TOPIC: Reserve for Injuries and Damages (RFID)**

4
5 **PREAMBLE:**

6
7 Page 3-13 The Reserve for Injuries and Damages ("RFID") is an account
8 maintained as approved by the Board, in order to address uninsured and uninsurable
9 losses as well as the deductible portion of insured losses.⁷

10
11 ⁷ Yukon Energy noted during the 2005 rate review process that it applies the
12 following corporate accounting practice with respect to the Reserve for Injuries
13 and Damages (RFID):

14
15 • It is a contingency reserve set up to address the cost of uninsured/uninsurable
16 losses.

17
18 • Uninsured losses are defined as losses that could be covered by insurance but
19 which Yukon Energy has chosen not to insure because the probability, frequency
20 and/or dollar value of losses do not justify the premium.

21
22 • Uninsurable losses are those losses for which coverage is not available in the
23 conventional insurance market.

24
25 • The RFID is also used to pay the insurance policy deductible in the event of a
26 claimed loss.

27
28 Page 4: To increase the annual appropriation to the RFID to \$150,000 from the
29 current \$50,000 starting in 2009.

30
31 **QUESTION:**

32
33 a) Please provide details of the process that is followed when charging items to the
34 RFID, including an outline of all approvals required prior to charging items to the
35 RFID.

1 b) Please provide a continuity schedule for the period 2005-2008 of the RFID
2 showing:

- 3 i Opening balance;
- 4 ii Claims (itemize all claims to reserve);
- 5 iii Provision charged to O&M;
- 6 iv Other (itemize all transfers, etc.; and
- 7 v Closing RFID balance.

8
9 c) For all claims itemized above please provide:

- 10 i Description of claim;
- 11 ii Date when incident happened;
- 12 iii Explanation of why it qualified to be charged to RFID; and
- 13 iv Evidence of appropriate sign offs and approvals for incident to be charged
14 to the reserve.

15
16 **ANSWER:**

17
18 **(a)**

19
20 Charges to the RFID are at the discretion of the CFO. Generally, after the CFO
21 authorizes, a work order is set up in the financial system for tracking costs associated
22 with a given event.

(b)

Continuity Schedule – YEC Reserve for Injuries and Damages

	2005 (\$000)	2006 (\$000)	2007 (\$000)	2008 (\$000)
Opening Balance	797	-33	500	463
Additions				
Computer Stolen	4			
Third Party Vehicle Damage - Mayo	1			
Service Truck Fire Loss	1			
Dawson Hse H2O Damage	6			
Marsh Lake Dam Repair	2			
YUB Board Order 2005-12 transfer from Reg Liability	-743			
Takhini Substn Break-In		15		
Kulan Break In		32		
L171 Lightning Arr Failure		11		
L171 Insulator Failure		35		
Whitehorse Hydrant Leak		36		
Unit 63 Vehicle Theft		2		
WH1 Hub and Blade Repair		302		
Aishihik Cable Repair		200		
L174 Broken Pole			39	
Marsh Lake Water Damage			17	
Kulan Warehouse Water Damage			7	
L172 Insulator Failure				40
Rock Creek Crossing				11
Polaris Ranger & Trailer Replacement				9
Repair Outage Damage				25
Streetlight damage				1
Total	-730	633	63	86
Annual Provision	-100	-100	-100	-50
Closing Balance	-33	500	463	500

(c)

2008

L172 Insulator Failure

- **Description of Claim:** Vandalism damage to line insulation.
- **Date of Incident:** Night of May 4, 2008.
- **Explanation:** Loss to uninsured asset.
- **Sign offs and approvals:** There was approval from the CFO.

1 **Rock Creek Crossing**

- 2 • **Description of Claim:** The line crossing at Rock Creek got washed away due to
- 3 high water.
- 4 • **Date of Incident:** May/June 2008.
- 5 • **Explanation:** This incident was not an insured event.
- 6 • **Sign offs and approvals:** Approved by the CFO.

7
8 **Polaris Ranger & Trailer Replacement**

- 9 • **Description of claim:** Two miles south of Moose Creek a company truck pulling
- 10 a trailer with a Ranger ran into some icy conditions. The trailer with the Ranger
- 11 broke free from the vehicle and rolled into the ditch, resulting in both the trailer
- 12 and the Ranger being completely destroyed.
- 13 • **Date of Incident:** April 17, 2008.
- 14 • **Explanation:** This loss was claimed under insurance. RFID was charged for loss
- 15 of use and replacement cost above insurance proceeds.
- 16 • **Sign offs and Approvals:** There was sign off from the CFO on the proof of loss.

17
18 **Repair Outage Damage**

- 19 • **Description of Claim:** Outage caused by problems with the WH-4 governor.
- 20 • **Date of Incident:** October 12, 2008.
- 21 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 22 not claimed due to insurance policy deductible exceeding total value of loss.
- 23 • **Sign offs and Approvals:** Approval by the CFO for all charges to this work
- 24 order.

25
26 **Streetlight Damage**

- 27 • **Description of Claim:** YEC line vehicle struck a streetlight and knocked it down
- 28 (this streetlight owned by YECL).
- 29 • **Date of Incident:** August, 2008.
- 30 • **Explanation:** Cost of damage was below deductible for liability insurance policy.
- 31 • **Sign offs and Approvals:** Approved by CFO.

1 **2007**

2
3 **L174 Broken Pole**

- 4 • **Description of Claim:** There was a broken pole on the Aishihik Transmission
- 5 Line.
- 6 • **Date of Incident:** First two weeks of February, 2007.
- 7 • **Explanation:** Uninsured event.
- 8 • **Sign offs and Approvals:** There was approval from the CFO.
- 9

10 **Marsh Lake Water Damage**

- 11 • **Description of Claim:** High water damaged the Lewes Control Structure.
- 12 • **Date of Incident:** July/August, 2007.
- 13 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 14 not claimed due to insurance policy deductible exceeding total value of loss.
- 15 • **Sign offs and Approvals:** There was approval from the CFO.
- 16

17 **Kulan Warehouse Water Damage**

- 18 • **Description of Claim:** A water tank at the Kulan Warehouse broke causing
- 19 water damage.
- 20 • **Date of Incident:** September 9, 2007.
- 21 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 22 not claimed due to insurance policy deductible exceeding total value of loss.
- 23 • **Sign offs and Approvals:** There was approval from the CFO.
- 24

25 **2006**

26
27 **Takhini Substation Break-In**

- 28 • **Description of Claim:** Persons unknown broke into substation building and
- 29 vandalized equipment.
- 30 • **Date of Incident:** January, 2005.
- 31 • **Explanation:** Below deductible.
- 32 • **Sign offs and Approvals:** Approved by CFO.

1 **Kulan Break-In**

- 2 • **Description of Claim:** Persons unknown entered YEC yard in Kulan industrial
- 3 park; broke into storage container and stole various line maintenance tools and
- 4 equipment.
- 5 • **Date of Incident:** April, 2005.
- 6 • **Explanation:** Loss below deductible limit.
- 7 • **Sign offs and approvals:** Approved by CFO.
- 8

9 **L171 Lightning Arrestor Failure**

- 10 • **Description of Claim:** Line arrestor prematurely failed, required emergency
- 11 repair.
- 12 • **Date of Incident:** August, 2005.
- 13 • **Explanation:** Loss below deductible.
- 14 • **Sign offs and Approvals:** Approved by CFO.
- 15

16 **L171 Insulator Failure**

- 17 • **Description of Claim:** An insulator on the L171 line prematurely failed.
- 18 • **Date of Incident:** May 19, 2006.
- 19 • **Explanation:** Uninsured Loss.
- 20 • **Sign offs and Approvals:** There was approval from the CFO.
- 21

22 **Whitehorse Hydrant Leak**

- 23 • **Description of claim:** Leak in underground piping for hydrant system at
- 24 Whitehorse Rapids Generation Station.
- 25 • **Date of Incident:** Late July 2006.
- 26 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 27 not claimed due to insurance policy deductible exceeding total value of loss.
- 28 • **Sign offs and Approvals:** There was approval from the CFO.
- 29

30 **Unit 63 Vehicle Theft**

- 31 • **Description of Claim:** Unit was stolen and successfully recovered; claim is for
- 32 damages incurred.
- 33 • **Date of Incident:** December, 2006.
- 34 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 35 not claimed due to insurance policy deductible exceeding total value of loss.
- 36 • **Sign offs and Approvals:** Approved by CFO.

1 **WH1 Hub and Blade Repair**

- 2 • **Description of Claim:** Hub failure in adjustable turbine blade.
- 3 • **Date of Incident:** March 20, 2006.
- 4 • **Explanation:** The amount of the loss was unknown at the time of the incident;
5 insurer was advised of a potential loss. Subsequent to the repair, the total loss
6 was determined to be \$302,000. At that time, the deductible on YEC's property
7 insurance policy was \$250,000; our broker advised against making a claim for
8 the \$50,000 differential as this would have a negative effect on future premiums
9 (insurers look at claimed losses in five previous years when pricing policies).
- 10 • **Sign offs and Approvals:** There was approval from the CFO.

11
12 **Aishihik Cable Repair**

- 13 • **Description of Claim:** A Failure in cable leading from turbine to switchgear.
- 14 • **Date of Incident:** January 2006.
- 15 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
16 not claimed due to insurance policy deductible exceeding total value of loss.
- 17 • **Sign offs and Approvals:** There was approval from the CFO.

18
19 **2005**

20
21 **Computer Stolen**

- 22 • **Description of Claim:** Computer Stolen.
- 23 • **Date of Incident:** Q1 2005.
- 24 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
25 not claimed due to insurance policy deductible exceeding total value of loss.
- 26 • **Sign offs and Approvals:** There was approval from the CFO.

27
28 **Third Party Vehicle Damage - Mayo**

- 29 • **Description of Claim:** YEC employee struck a third party vehicle while backing
30 out of a parking spot.
- 31 • **Date of incident:** May 2005.
- 32 • **Explanation:** Insured event under automotive liability insurance policy; not
33 claimed as total value of loss was below the policy deductible.
- 34 • **Sign offs and Approvals:** There was approval from the CFO.

1 **Service Truck Fire Loss**

- 2 • **Description of claim:** Electrical short in winching mechanism caused fire and
- 3 total loss of vehicle.
- 4 • **Date of Incident:** October, 2004.
- 5 • **Explanation:** Costs for uninsured contents lost in fire.
- 6 • **Sign offs and Approvals:** There was approval from the CFO.
- 7

8 **Dawson Hse H2O Damage**

- 9 • **Description of Claim:** Water line failure damages.
- 10 • **Date of Incident:** May 2005.
- 11 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 12 not claimed due to insurance policy deductible exceeding total value of loss.
- 13 • **Sign offs and Approvals:** There was approval from the CFO.
- 14

15 **Marsh Lake Dam Repair**

- 16 • **Description of Claim:** Repair vandalism damages to Marsh Lake Structure.
- 17 • **Date of Incident:** October, 2005.
- 18 • **Explanation:** Insured loss (sudden, accidental breakdown of insured property),
- 19 not claimed due to insurance policy deductible exceeding total value of loss.
- 20 • **Sign offs and Approvals:** There was approval from the CFO.

1 **REFERENCE: General**

2
3 **TOPIC: Affiliate Agreements**

4
5 **PREAMBLE:**

6
7 Yukon Electrical is interested in understanding the relationship between YEC, YDC and
8 YTG.

9
10 **QUESTION:**

- 11
12 a) Please provide a copy of all agreements that exist between YEC and YDC as
13 well as YTG pertaining to affiliate transactions, governance, code of conduct,
14 etc. Also, please provide a breakdown of any funds that YEC has received or
15 anticipates receiving from or paying to YDC and or YTG for the years 2005 to
16 2009 and provide the details of each transaction.

17
18 **ANSWER:**

19
20 **(a)**

21
22 YEC has an agreement to provided corporate and financial services to YDC on a cost-
23 recovery basis. See Attachment 1 to this response. The table below covers payments to
24 and from YEC and YDC and YG.

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-30

	2005	2006	2007	2008	2009
Payments from YDC					
Services	244	216	157	- ¹	-
Rate Stabilization Fund	358	432	310	216	110
Other contribution agreements	34	25	25	-	-
Rural Electrification Support		86			
Debt financing - Minto Mine contributions				16,081	1,919
Contributions to CSTP ¹			4,000	2,957	
Settlement of MDTs outstanding claims				3,000 ⁴	
Payments to YDC					
Interest	3,780	4,164	4,311	5,612	5,386
Principle	861	1,001	977	1,254	3,649
Financial system lease	177	177	177	177	150
Payments from YTG²					
Contributions to CSTP ¹		450		10,000 ³	
Contributions to Aishihik Third Turbine				1,500 ³	3,500

NOTES

1. YEC does not in practice forecast Services provided as all services are billed at full cost - therefore no financial impact to the organization.

2. YEC engages in normal commercial transactions with YTG as part of operations (e.g. new services, WCB premiums, etc). These payments are not included in this analysis.

3. Contributions received from YTG via YDC.

4. Settlement paid by YDC on YEC's behalf.

1

INTER-COMPANY ARRANGEMENTS ON SERVICES

THIS ARRANGEMENT is made effective as of September 1, 2005:

BETWEEN:

YUKON ENERGY CORPORATION

("YEC")

AND

YUKON DEVELOPMENT CORPORATION

("YDC")

RECITALS

- A. YEC is engaged in the generation, transmission and distribution of electricity in the Yukon Territory and owns and controls certain assets in connection therewith;
- B. YDC is engaged in assisting in the sustainable energy development of the Yukon and owns all of the shares of YEC ;
- C. YDC requires certain financial, accounting and corporate services;
- D. YEC has agreed to provide those services to YDC on the terms set out below, and
- E. It is understood that this agreement replaces the original Inter-company Agreement on Financial Services effective January 1, 2002.

ARRANGEMENT

The parties wish to confirm their understanding of their arrangement as follows:

1 Description of Services.

- 1.1 YEC will provide financial, accounting and corporate services ("Services") for YDC as specified in Schedule A, and may provide or facilitate the provision of other financial management systems and services as required by YDC on a mutually acceptable and full cost recovery basis.
- 1.2 The Services will be performed by appropriately qualified personnel coordinated through the Chief Financial Officer (YEC) and the Chief Executive Officer (YDC) and/or their delegates.

2 Facilities and Equipment.

- 2.1 Unless otherwise agreed, the Services will be performed and provided from the offices of YEC.

3 Relationship of Parties.

- 3.1 YEC will at all times be an independent contractor and will be solely responsible for paying the salary, wages and related benefits of its financial services personnel and for withholding and remitting all statutory deductions relating thereto.

4 Termination

- 4.1 This Arrangement will commence as of the effective date and continue indefinitely, but either party may terminate this Arrangement by providing to the other party not less than 6 months notice in writing to that effect or full equivalent payment in lieu with such termination being effective at the beginning of YDC's next fiscal year.
- 4.2 This Arrangement may be terminated by either party immediately if the other party fails to adequately perform any of its material obligations under this Arrangement, provided that the deficiency has been brought to the other party's attention in writing and the deficiency has not been remedied to the first party's satisfaction within 3 months after the delivery of the notice.
- 4.3 If this Arrangement is terminated, YEC will deliver forthwith to YDC all books, documents, records, manuals and all other relevant documentation, including all electronic files and data that are maintained either in whole or in part relating to the performance of the Services.

5 Payment of Fee

- 5.1 YDC will pay YEC a fee for the Services provided (the "Fee"). The amount of the Fee will be equal to the full cost incurred by YEC in providing the Services, it being agreed that YEC shall not suffer a loss or realize a profit as a result of providing the Services.
- 5.2 YEC will invoice YDC for the Fee, with sufficient and appropriate documentation to support the amount of the Fee, and YDC will pay the Fee to YEC within 30 days after it receives the invoice plus interest thereafter at an agreed upon rate on overdue amounts established annually. In the event of any dispute regarding the amount of the Fee, the parties will endeavour to resolve the dispute by mutual agreement, but failing agreement the Fee will be determined by arbitration pursuant to Article 8.

- 5.3 For greater clarity, the amount of the Fee will include an appropriate share of YEC's costs of salary or wages and related benefits, insurance, office overhead, and other similar costs that relate to provision of the Services, but YEC shall not include any costs in the Fee more than one time.
- 5.4 Invoicing for Services provided will occur at least quarterly being March 31, June 30, September 30 and December 31.

6 Indemnities

- 6.1 YDC will indemnify and save harmless YEC from and against all liabilities, claims, and demands arising out of the performance of the Services by YEC personnel.
- 6.2 YEC will indemnify and save harmless YDC from and against all liabilities, claims and demands whatsoever to the extent they are caused by the negligence of YEC or any of its personnel in the provision of the Services.
- 6.3 In performing the Services, YEC will, at all times, exercise the standard of care, skill, diligence and timeliness normally provided in the performance of services for work of a similar nature internal to YEC to that contemplated by this Arrangement.

7 General

- 7.1 YDC's published financial statements will at all times be in accordance with Canadian Generally Accepted Accounting Principles. YDC shall take responsibility for the contents of the financial statements. Any accounting questions that arises in the provision of the Services may be referred to the coordinators referred to in section 1.2 for resolution.
- 7.2 YDC is responsible for compliance with the *Financial Administration Act* (Yukon), *Yukon Development Corporation Act* and any other legislation governing its financial affairs.
- 7.3 Subject to prior notice from YEC and section 5.1, YDC agrees it will not unreasonably withhold consent to YEC implementing any order made by the Yukon Utilities Board or any regulation that affects the provision of the Services, and the order or regulation will take precedence in the event of inconsistency with the terms of this Arrangement.

7.4 The parties agree that this agreement may be amended from time to time by mutual consent and in writing.

8 Arbitration

8.1 **Procedure.** In the event of any dispute as to the rights or obligations of any party hereunder, either party may by notice to the other submit the dispute to arbitration as follows:

- (a) within ten (10) days from the date of such submission, the parties shall agree on the appointment of a single arbitrator who shall hear and determine the matter in dispute. If the parties are unable to agree on a single arbitrator within ten (10) days of such submission, then either party may apply to the Supreme Court of the Yukon Territory for appointment of the arbitrator.
- (b) the arbitrator shall proceed immediately to hear and determine the matter in dispute. The determination of the arbitrator shall be made within thirty (30) days after the appointment of the arbitrator subject to any reasonable delay due to unforeseen circumstances; and
- (c) the arbitrator's determination shall be in writing, and shall be final and binding on the parties, and the parties shall abide by the determination and perform in accordance with the terms and conditions thereof.

8.2 **Cost of Arbitration.** The costs of arbitration (other than internal costs of the parties) shall be paid as directed by the arbitrator.

8.3 **Applicability of Arbitration Act.** The provisions of this Article shall be deemed to be a submission to arbitration within the provisions of the *Arbitration Act* (Yukon) except that any limitation on the remuneration of the arbitrators imposed by such legislation shall not be applicable.

9 Applicable Law

9.1 This Arrangement shall be construed and interpreted in accordance with the laws of the Yukon Territory and the laws of Canada applicable therein.

10 Confidentiality

10.1 Any information given to or reviewed by YEC as a result of performing the Services, including all information relating to the Services or other business and affairs of YDC, their investments, affiliates, co-venturers, or the Yukon Government, shall be considered as confidential and privileged by YEC personnel and consultants (the "Confidential Information"), except information falling into one of the following categories:

-
- (a) information that YEC demonstrates was in its possession on a non-confidential basis prior to receipt or acquisition of such information from YDC; and
 - (b) information that is lawfully in the public domain at the time of receipt by YEC of such information from YDC.
- 10.2 Except where required by an order of the court or by law or the professional standards or rules referred to in section 1.3, YEC shall not use or disclose the Confidential Information, without the prior written consent of YDC.
- 10.3 YEC may disclose the Confidential Information to those of its employees, consultants or suppliers and their respective employees to whom disclosure is required for YEC to perform the Services provided that YEC shall use best efforts to ensure that its employees, consultants and suppliers keep Confidential Information in confidence and shall not disclose it to others, except as required by section 10.2, without the prior written consent of YDC.
- 10.4 The provisions of this Article 10 shall survive termination of this Arrangement.
- 11 **Notice**
- 11.1 Any notice or other communication required or permitted to be given under this Arrangement shall be in writing unless otherwise specified and shall be effectively given if mailed in Canada by first class mail, postage prepaid, delivered or sent by telecopier or other electronic means of communication which results in a printed signed document, addressed or directed as follows:

To YEC at:

Yukon Energy Corporation
Box 5920
Whitehorse, Yukon
Y1A 6S7

Attention: Chief Financial Officer

To YDC at:

Yukon Development Corporation
Box 2703 (D-1)
Whitehorse, Yukon
Y1A 2C6

Attention: Chief Executive Officer

or to such other person or address or number as a party may specify by notice given as set out above.

11.2 Any notice or other communication will be deemed to have been received as follows:

- (a) if delivered or sent by telecopier or other electronic means, on the day of delivery or transmission if it is a business day and otherwise on the next succeeding business day;
- (b) if mailed, on the fifth business day following the date on which it was mailed.

11.3 If at the time of the giving of notice there is a postal dispute, all communications shall be delivered or sent by telecopier or other electronic means of communication which results in a printed signed document.

12 Assignability

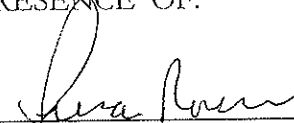
12.1 Neither party may assign any of its rights hereunder to any other party without the prior written consent of the other.

INTER-COMPANY ARRANGEMENTS ON SERVICES

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-30(a) Attachment 1

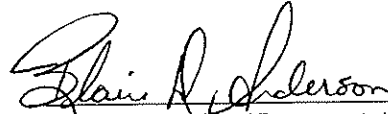
IN WITNESS WHEREOF the parties hereto have confirmed this inter-company Arrangement as of the day and year first written above.

SIGNED AND DELIVERED BY
YUKON DEVELOPMENT
CORPORATION IN THE
PRESENCE OF:


(Witness Signature)

Susan Rousseau
(Witness Name)

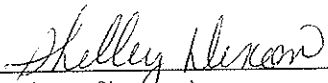
Sept 28/05
(Date)


(Signature of Authorized Representative)

BLAINE ANDERSON
(Name of Authorized Representative)

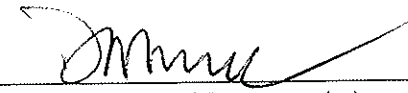
CHIEF FINANCIAL OFFICER
(Title)

SIGNED, SEALED AND DELIVERED
BY YUKON ENERGY CORPORATION
IN THE PRESENCE OF:


(Witness Signature)

Shelley Dixon
(Witness Name)

Sept 30/05
(Date)


(Signature of Authorized Representative)

DAVID MORRISON
(Printed Name of Authorized Representative)

PRESIDENT + CEO
(Legal Name)

SCHEDULE "A"

FINANCIAL, ACCOUNTING AND CORPORATE SERVICES

YEC agrees to provide the following financial, accounting and corporate services:

1. General ledger accounting and maintenance including account reconciliation
2. accounts payable processing and payments
3. accounts receivable processing and payments
4. cash monitoring
5. preparation of financial reports and analysis as required
6. support for year end audit purposes, including preparation of working papers.
7. Where appropriate, provide payroll services to YDC BOD members.
8. Provide legal services
9. Provide management consulting services
10. Provide support to the Board of Directors including the services of a Corporate Secretary, the services of a Chairman and advice on governance issues (and related training as deemed necessary)
11. Provide corporate communications services including the preparation of an annual report
12. Provide Information Systems services including support for software and hardware
13. Provide advice on strategic and financial planning
14. Provide general administrative support
15. Purchase insurance, where cost-effective to do so, on behalf of YDC in conjunction with the insurance program for YEC and charge a proportionate share of the costs

1 **REFERENCE: Page 3-11**

2
3 **TOPIC: Information Systems**

4
5 **PREAMBLE:**

6
7 Since 2005, there has been a significant increase in software license fees.

8
9 **QUESTION:**

10
11 a) Please provide details of each fee, including what system fee is required and
12 who fee is paid to.

13 i. If fee is paid to an 'affiliate' organization external to YEC, please
14 provide a copy of service agreement that governs service levels and
15 associated costs.

16 ii. If there is no service agreement, please explain why not.

17
18 **ANSWER:**

19
20 **(a)**

21
22 There are no fees paid to affiliates. Fees are paid to either the reseller or the vendor for
23 all products.

24
25 The table below reports the Software licence renewals costs contained in the Information
26 Systems line reported in Table 3.9 Administration on Page 3-10 of the Application.

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-33

Software or Service	'2005 Actual	'2006 Actual	'2007 Actual	'2008 GRA	'2009 GRA
Website hosting & domain name fees for yukonenergy.ca			75	1,450	1,450
TDG & WHIMIS software				2,000	2,000
HR Mgr	1,856	1,895	1,935	2,000	2,000
Bentley Microstation	745	1,830	3,173	2,500	3,400
Dell Canada	808				
T4 Timesaver			240	250	250
Entrust SSL certificates			383		
Entrust SSL certificates				500	500
Genesis				850	850
Genesis - Phone call accounting system	750	750	750		
Ecolog OH&S				2,500	2,500
Ecolog OH&S	1,515	2,238	2,147		
Dell Canada		700	1,922		
Checkpoint / NOKIA		10,093	13,086		
Domain name registration (yec.yk.ca)			50		
Checkpoint / NOKIA				12,550	12,550
MS systems center configuration manager				3,000	3,000
Dell Canada		1,313	3,232		
PolarGroup ICT - Domain Name	1,032	4,557	905	80	80
PLS-CADD				1,600	1,600
McAfee			3,745	11,250	11,250
VMWare Infrastructure Enterprise for 2 processors				3,500	3,500
VMWae Virtual Center mgmt server				1,500	1,500
Symantec Corp - Veritas Backup Exec				4,600	4,600
Microsoft Bulk Licenses			36,586	27,000	31,000
Sharepoint 2007 for search				6,400	6,400
Symantec - Veritas Enterprise vault				2,300	2,300
Adobe Acrobat		832		2,000	2,000
Cisco Smartnet Support				10,000	10,000
Symantec			2,199		
Platinum support for 2 ESX servers			2,268		
Backup Exec software 1 BE servers			890		
Sharepoint					43,020
PSS/sincal				4,000	4,000
Solar Winds - Orion				2,000	2,000
Surf Controll & Web filter/monitoring	4,527	2,761	8,105		10,000
Snag it Software			423		
Dell Canada	1,515				
Veritas Software		2,892			
Org Plus					
Dell Canada		75			
Zone Alarm			509		500
	12,749	29,935	82,622	103,830	162,250

1
2

3 Note, in addition to the above which are recorded as IT department licences,
4 approximately \$10,000 per year is spent on JD Edwards licencing for the finance
5 department, and approximately \$3,000 to \$10,000 for electrical system testing software
6 licencing for technical services.

REFERENCE: Page 5-17

TOPIC: Capital Expenditures – JD Edwards Replacement

PREAMBLE:

Yukon Electrical wishes to understand the business needs for replacing the current Financial System

QUESTION:

- a) Please provide the year acquired and total cost JD Edwards was acquired for.
- b) Please provide the annual upgrade details and costs to JD Edwards since inception and the current version of the software.
- c) Please provide the current yearly licensing and maintenance fees for JD Edwards.
- d) Please provide the business case used in the decision to replace this system.

ANSWER:

(a)

Please see table provided below. JD Edwards was acquired in 1999. The total cost is approximately \$1.413 million.

1999 FIS System	739
2001 Inventory System	466
2001 Fixed Assets	106
2001 Fixed Assets	11
2001 JDE report writing	91

Total (\$000):	<u>1,413</u>
----------------	--------------

(b)

YEC has not completed a full upgrade since 2003. Annual operating costs (excluding fees addressed in (c) below are limited to external consulting resources for periodic

1 programming and reporting fixes. These costs are included in Administration. The
2 version of the software is JDEdwards OneWorld, version B7333, Service pack 22.

3
4 **(c)**

5
6 Yukon Energy paid \$9,429 in 2008 to Oracle for the JD Edwards annual license fee; it is
7 anticipated that the fee will increase slightly for 2009. Yukon Energy conducts most of its
8 maintenance on JD Edwards internally and seeks external consultation when required.

9
10 **(d)**

11
12 Please see response to YUB-YEC-1-37(c).

1 **REFERENCE: General**

2
3 **TOPIC: Forecasts**

4
5 **PREAMBLE:**

6
7 Yukon Electrical would like to better understand YEC's process for developing forecasts
8 included in this application.

9
10 **QUESTION:**

11
12 a) Please provide details of YEC's process for developing the labour and other
13 expenses forecasts included in this application. Include all important timelines,
14 and all approvals required prior to finalizing the forecasts. Include the process for
15 both O & M and Capital forecasts.

16
17 b) If different, please provide details of the process required for preparing internal
18 budget forecasts.

19
20 **ANSWER:**

21
22 **(a)**

23
24 Yukon Energy budgets run on the fiscal year January 1 to December 31. The budgeting
25 process for the following year usually starts in early to mid-summer with requests to
26 managers.

27
28 **Labour** – The current staff complement, as well as any requests for new positions, is
29 summarized into a corporate chart that is reviewed, amended (if necessary) and
30 approved by senior management. This chart forms the basis for the budget. For each
31 position finance staff assign a salary, benefits loading factor and expected performance
32 and cost-of-living increment. Next, positions are analyzed for the expected split between
33 capital and O&M. The capital portion is deducted for each position, leaving the O&M
34 labour budget. This amount is adjusted for a vacancy allowance (estimate of FTE
35 vacancies for the year), and the result is the final figure which goes in the budget
36 package.

1 **Other Expenses** – Non-fuel O&M includes production, transmission, distribution,
2 general O&M and administration. Front line managers with budget responsibilities in
3 these areas assemble their requirements for the following year in early summer. These
4 budgets are generally organized by function and location. These functional budgets are
5 assembled and reviewed by senior management. Management reviews these numbers
6 based on consistency with prior years and alignment with corporate objectives. The
7 budget is adjusted if necessary and approved. Depreciation and amortization expense is
8 forecast based on expected additions to fixed assets and deferred costs (planning,
9 feasibility, regulatory, etc) during the year (these additions are the result of the capital
10 planning process described below). These additions are accumulated with current
11 balances in these accounts and depreciation and amortization are calculated based on
12 approved rates by asset category. Fuel and purchased power are derived from sales
13 forecasts. Return on rate base is an arithmetic determination based on forecast
14 balances for the budget year.

15
16 **Capital** – As with the process above, a call is put out in early summer for capital project
17 requests for the coming year. These projects are individually reviewed by members of
18 the Project Review Committee (cross-sectional committee) for need, coordination with
19 other initiatives and goals and proper budgets and classification with respect to capital
20 versus O&M. This package is in turn reviewed by senior management in late summer
21 and amalgamated with the rest of the business plan document.

22
23 The above pieces are assembled with the rest of the Business Plan package (i.e.
24 depreciation, amortization, fuel expense, interest expense, etc) and management
25 reviews one final time for overall return, logic and consistency with Corporate strategic
26 objectives. The package is then forwarded to the Board of Directors for their approval at
27 the December Board meeting.

28
29 **(b)**

30
31 It is not clear what is meant by "internal budgets". The response to (a) above
32 summarizes key budgeting processes in support of approved annual business plans.

1 **REFERENCE: Page 3-12, Lines 6 to 8**

3 **TOPIC: Administration Labour**

5 **PREAMBLE:**

7 "Administration labour increased between 2005 and 2007 due to both wage increases
8 (negotiated and step increases) and increases in staff positions."

10 **QUESTION:**

- 12 a) Please provide a copy of the latest labour agreement negotiated between YEC
13 and its in-scope workers regarding wage increases.
- 15 b) Does this agreement cover each of the Test Years? If not, please provide the
16 basis for the requested increases for each of the Test Years.
- 18 c) Please provide the basis for the requested increases for employees not covered
19 by a negotiated labour agreement.
- 21 d) Please provide a breakdown of the labour inflation for 2008 and 2009 included in
22 forecasts as follows:
23 - employees covered by contract negotiations;
24 - employees not covered by contract; and
25 - increments/steps.
- 27 e) Please provide the 2005-2007 actuals as well as 2008-2009 forecasted
28 increments/steps.
- 30 f) Please provide a business case for all employee additions since 2005 included in
31 general administration. The business case should include information on:
32 - date when position added;
33 - job description;
34 - explanation of why position needed; and
35 - justification for position.

ANSWER:

(a)

Please see document provided as Attachment 1 to this response.

(b)

The agreement provided as Attachment 1 to YECL-YEC-1-37(a) covers both test years.

(c), (d) and (e)

Please see table provided below which includes wages and benefits for both union and out of scope employees in the administration function. YEC does not apply a different rate to union vs. non union employees and does not increase for step increments.

Labour Inflation for Union and Out of Scope Employees

	2005 Approved	2005 Actual	2006 Actual	2007 Actual	2008 GRA	2009 GRA
Marketing:						
Resource Planning	50	32	37	45	69	71
Business Development	59	28	41	47	0	0
Communications	0	73	76	88	100	103
Total Marketing	109	133	155	181	169	174
Customer Accounting	275	233	221	260	239	246
Other						
Environmental Mgt	30	5	25	41	0	0
General	1,393	1,658	1,622	1,920	1,851	1,907
Information Systems	162	184	278	296	344	353
Fish Hatchery	6	2	2	2	7	7
Fish Ladder	12	1	2	1	19	19
Safety	132	104	136	181	239	247
Training	185	129	144	142	199	205
Admin Board of Directors	32	29	28	38	45	46
Admin Union	0	12	2	6	0	0
Regulatory Affairs	0	0	28	7	88	91
Material Mgt		89	99	99	138	143
Contracting	77	109	103	111	148	153
Professional Development	0	2	2	2	13	14
Total Other	2,030	2,325	2,471	2,847	3,091	3,185
Total Administration	2,414	2,691	2,846	3,288	3,498	3,605
Year over year % increase			5.77%	15.52%	6.40%	3.04%
Economic increase January 1st each year			3%	3%	3.75%	3.5%
Number of new positions added			4	3	3.2	0
Number of new positions cancelled					(1.0)	
			4	3	2.2	0

1 The following is noted with regard to the above table:

2
3 **1. The following 4 new positions were added in 2006:** Apprentice Powerline
4 Technician, SCC Operator, Plant Operator, Manager Operations; none of these
5 positions have an impact on Administration.
6

7 **2. The following 3 new positions were added in 2007:** Vice-President,
8 Operations and Engineering, Documentation Specialist and Manager,
9 Environmental Assessment & Licensing; all of these positions have an impact on
10 Administration Labour.
11

12 **3. The following 2.2 net positions were added in 2008:** Records Management
13 Analyst, 2 Year Term Financial Administrator and Capital Planning and Project
14 Coordinator the Office Administrator position was increased from 0.6 FTE to 0.8
15 FTE and the Civil Engineer position was cancelled; all positions would affect
16 Administration Labour to some degree.
17

18 **(f)**

19
20 Please see LE-YEC-1-32.

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Parties to the Agreement

AGREEMENT

THIS AGREEMENT made as of the first (1st) day of January A.D. 2008.

BETWEEN

THE YUKON ENERGY CORPORATION, body corporate with head office at the City of Whitehorse, in the Yukon Territory (hereinafter called "the Corporation").

OF THE FIRST PART,

AND

THE PUBLIC SERVICE ALLIANCE OF CANADA (YUKON EMPLOYEES' UNION Local Y024), a trade union within the meaning of the Canada Labour Code, of the said City of Whitehorse, in Yukon Territory (hereinafter called "the Union").

OF THE SECOND PART

Whereas the Corporation is a public utility engaged in the business of producing, purchasing, transmitting, distributing, delivering and selling electricity and of providing services in connection therewith and supplying electricity to communities and inhabitants in the Yukon and is directly accountable to the Yukon Utilities Board under the Public Utilities Act.

Article 1 Purpose

1.01 The purpose of this agreement is to maintain harmonious and mutually beneficial relationships between the Employer, the Employees and the Union, to set forth certain terms and conditions of employment relating to remuneration, hours of work, employee benefits and general working conditions affecting employees covered by the agreement and to ensure that all legislated measures are provided for the safety and occupational health of the employees.

Article 2 Interpretation and Definitions

“Bargaining Unit” means all employees employed by the Employer as described in Article 3.

“Calendar Year” means January 1 to December 31.

“Casual Worker” means a person who does not work more than three hundred and twenty (320) regular hours within any three (3) consecutive calendar months and all employees performing janitorial work in district offices and it is agreed shall not be included within the scope of this Collective Agreement.

“Common-Law Spouse” – A Common Law relationship exists when for a continuous period of at least one (1) year, an employee has lived with that person, publicly represented that person to be their spouse, and lives and intends to continue to live with that person as if the person were their spouse.

“Day of Rest” in relation to an employee means a day other than a recognized holiday on which that employee is not ordinarily required to perform the duties of their position for reasons other than by being on leave of absence.

“Dependent Child” means an unmarried natural, adopted, or step child who is entirely dependent on the employee for maintenance and support and who is:

- (i) under 21 years of age
- (ii) under 25 years of age and attending a college or university full-time, or
- (iii) physically or mentally incapable of self-support and became incapable to that extent while entirely dependent on the employee for maintenance and support and while eligible under (i) or (ii) above
- (iv) for further clarification, “entirely dependent” means the employee is the principal financial supporter

“Employer” means the Yukon Energy Corporation.

“Grievance” means a claim or complaint in writing involving the interpretation, application or alleged violation of this collective agreement, from an employee or group of employees of the Union, or either party and processed through the grievance procedure.

“Permanent Employee” means an employee who has been appointed by written notice to a permanently established full time position. Such appointment shall be conveyed to the employee and the Union in writing within seven (7) days of appointment.

“Permanent Part Time Employee” means an employee who has been appointed, by written notice, to a permanently established part time position. Such appointment shall be conveyed to the employee and the Union in writing within seven (7) days of appointment.

“Probation Period” means initial period of permanent or term employment during which the employer has an opportunity to assess the suitability of the employee.

“Seniority” means the length of an employee’s accumulated service with the company and predecessor company (s) within the bargaining unit, calculated as the elapsed time from the date they were first employed, unless their seniority was broken in which event, calculation shall be from the date they returned to work following the last break in their seniority.

“Shift Employee” means an employee who is scheduled to work on a rotating or irregular basis.

“Spouse” means a person who is married to the employee, except that a person of the same or opposite sex who is living with the employee in a conjugal relationship for a continuous period of at least one (1) year.

“Technological Change” means the introduction by the Employer of equipment or material of a different nature than that previously utilized and a change in the Employer’s operation directly related to the introduction of that equipment or material.

“Temporary Employee” means an employee hired for full time or part time work which is not of a permanent or continuing nature and further whose employment will be terminated on the completion of such work. A Temporary position shall not utilize a number of person hours in excess of sixty (60) per cent of the hours established for a permanent position. This category of employee shall not be utilized so as to displace any Permanent Employee or position or diminish the regular hours of work of any Permanent Employee. The Corporation undertakes to notify the Union in writing of the name of the employees hired in this category.

“Term Employee” means an employee who has been hired to a position established for a specified length of time for a specific project or for work which is not of a permanent or continuing nature, on either a full or part time basis, and further whose employment will be terminated on the completion of such work. This category of employee shall not be utilized so as to displace any permanent Employee or position or diminish the regular hours of work of any Permanent employee. The Corporation undertakes to notify the Union in writing of the name of the employees hired in this category.

Article 3 Recognition

- 3.01** a) The Corporation recognizes the Union as the exclusive bargaining agency for all employees as defined in the Canada Labour Relations Board Certificate as referred to in Article 4.00 or said certificate as it may be amended from time to time. The Corporation recognizes the right of an employee to be represented by a Union Representative.
- b) Whereas by Certificate dated the December 11, 2001 and issued by the Canada Labour Relations Board (hereinafter called "The Board"), and made pursuant to the provisions of the Canada Labour Code, the Union has been certified as bargaining agent for the unit of employees of the Corporation which is mutually agreed as comprising: "All employees of Yukon Energy Corporation within the Yukon Territory including term employees, excluding President, Vice-President, Managers,

Engineers, Supervisors, Directors, Controllers, employees operating in a confidential capacity, and casual workers."

The above certificate is hereinafter referred to as "the Certificate".

- 3.02**
- a) The Employer acknowledges the right of the Union to appoint employees as representatives.
 - b) The Union may appoint up to three (3) representatives and three (3) alternate representatives, having regard to the Employer's structure.
 - c) The Union will provide the Employer with a list of its representatives and any revisions from time to time.
 - d)
 - (i) All employees shall obtain their immediate out of scope supervisor's approval before leaving work to attend to Union business as per Article 3.02 (e). Such approved leave shall be at no loss of regular pay. All meetings to discuss other matters than those listed in 3.02 (e) will be arranged for outside of normal hours of work. All time granted accordingly, shall be reported as union leave on timesheets.
 - (ii) Employees will follow the procedures set out under Article 11.04 (a) to attempt to resolve disagreements resulting from this Collective Agreement.
 - e) Union business is defined as:
 - (i) Investigating complaints of an urgent nature;
 - (ii) Meeting with the employer to deal with a grievance;
 - (iii) Meeting with the employer at J.C.C.;
 - (iv) Attending such other meetings called by the employer; or
 - (v) Participating in a conflict resolution process, or Union business as agreed by the parties.
 - f) An employee shall not suffer a loss of regular pay as a result of:
 - (i) Being required by the employer to attend a meeting; or
 - (ii) Being called as a witness by the employer before third (3rd) parties.
 - g) Where it is agreed by the Corporation, all travel expenses incurred by the Union shall be paid by the employer.
 - h)
 - (i) Where operational requirements permit, the Employer may grant leave without pay to a maximum of five (5) employees for the purpose of attending contract negotiation meetings with the Employer. All time granted accordingly, shall be reported as union leave on timesheets.
 - (ii) Subject to h(i) above, such employees will be granted leave without pay to attend subsequent negotiation meetings. All time granted accordingly, shall be reported as union leave on timesheets.

- i) Where employees attend contract negotiations or attend Union conferences or seminars on leave without pay, they will remain on payroll and the Union will be invoiced accordingly.
- j) Where it is operationally feasible, up to three (3) employees may be granted leave without pay to attend Union conferences or seminars.

Article 4

Application

- 4.01** This Agreement shall apply with respect to all of the Corporation's employees comprised within the bargaining unit prescribed by the Canada Labour Relations Board or the said certificate issued to the Public Service Alliance of Canada (Yukon Employees' Union) as it may be amended from time to time.

Article 5

Union Dues

- 5.01** All employees now members of the Union, and all employees eligible to become members of the Union, shall, as a condition of employment pay bi-weekly to the Union, monies equal to the dues as established from time to time in accordance with the Constitution and Bylaws of the Union. Such dues shall be deducted bi-weekly by the Corporation from the employee's pay and remitted to the Union at the end of the month following the deduction. The payment of dues does not require the employee to become a member.
- 5.02** The Corporation shall provide the Union with a printout, monthly, containing the following specifics:
- 1. List of the names of deductees
 - 2. Employee Classification
 - 3. Amount deducted from each employee
- 5.03** The Corporation will not authorize any other dues deduction except to the benefit of the Union, unless otherwise required by law.

Article 6

Discrimination

- 6.01** The Employer and the Union agree that there shall be no discrimination, interference, restriction, harassment or coercion exercised or practiced as set out by the Employment Standards Act of the Yukon Territory, the Canada Labour Code and the Yukon Human Rights Act.

Article 7

Continuity of Service

- 7.01** Subject to provisions in 38.00 (Essential Services) it is agreed that the service rendered by the Corporation, its management and employees directly or indirectly, to electric customers from time to time served by the Corporation, is essential to the welfare of these customers.
- 7.02** The Union agrees that it will not directly or indirectly sanction, authorize, or allow any stoppage of work or any action that restricts or limits service or production, and the employees agree that they will not be involved in such actions. The Corporation agrees that it will not cause any lockout of employees.

Article 8

Rights of Management

- 8.01** The Corporation retains the sole and exclusive control of all matters concerning the operation, management and administration of its business and the direction and control of the Corporation's workforce. The Corporation shall retain all the rights, responsibilities, functions and prerogatives of management, except as expressly modified or restricted by a specific provision of this agreement. The Corporation agrees to administer its rights in a manner that is non-discriminatory.

Article 9

Notices

- 9.01** Any notice required to be given by one party to the other hereunder shall be in writing and shall be sufficiently given, if presented by hand, or alternatively mailed to the party to whom such notice is to be given. Notice shall be directed to the parties as follows:

Corporation:

President/CEO & Director, Human Resources & Corporate Services
Yukon Energy Corporation
P.O. Box 5920
Whitehorse, Yukon Y1A 6S7

Union:

President
Public Service Alliance of Canada (Yukon Employees' Union, Local Y024)
100 – 2285 – 2nd Avenue
Whitehorse, Yukon Y1A 1C9

- 9.02** Each party may, from time to time, designate another representative to whom such notices may be served, and may change its address; in these instances written notice to that effect will be served to the other party.

Where such notice has been sent, it shall be deemed to have been received and the particular notice given, upon the expiration of five (5) days excluding Saturdays, Sundays and holidays next following the date of such mailing.

Article 10

Headings

- 10.01** The headings used throughout this Agreement are inserted for reference purposes only and are not to be considered or taken into account in construing the terms and conditions of this Agreement or of any portion herein, nor shall the same be deemed to qualify, modify or explain the effects of any such term, condition or provision.
- 10.02** Whenever the singular, masculine or feminine is used in this Agreement it shall be interpreted as if the plural, feminine or masculine has been used where the context or the parties so require.

Article 11

Grievance Procedure

- 11.01** a) The grievance procedure described in this Article will be used only to resolve disagreements involving the interpretation, application, administration or any alleged violation of the collective agreement.
- b) The employee may be assisted and represented by a Union representative at any stage of this procedure.
- c) A grievance shall not be invalid by reason only of the fact it is not in accordance with the Grievance Fact Sheet provided by the Employer.
- d) For some issues it may be helpful to bring in a third party mediator to facilitate the discussions. The Corporation with agreement from the Union may refer the disagreement to mediation. The Union and the employer shall determine mutually acceptable terms for hiring a mediator, including time frames for conducting the mediation. Both parties must be willing to suspend the time limitations for processing grievances for the duration of the mediation. Mediation may be terminated by either party or the mediator at any time.
- 11.02** While this grievance procedure is in process, the employee involved will continue to faithfully perform the duties assigned.

11.03 No person who is employed in a managerial or confidential capacity shall seek by intimidation, by threat of dismissal or by any other kind of threat to cause an employee to abandon their grievance, as provided in the Collective Agreement.

11.04 Step 1 Discussion Stage

- a) Before submitting a grievance, the employee involved in the disagreement shall seek to settle the difference in discussion with their immediate supervisor or if the disagreement relates to a recruitment posting, with the selecting supervisor.
- b) The discussion should be held as soon as possible after the act which gave rise to the disagreement since any grievance must be submitted within certain time lines.
 - (i) In the case of a Recruitment Posting, a grievance must be submitted within seven (7) days of the employee receiving written reasons for not being selected.
 - (ii) In the case of a dismissal, a grievance must be submitted within ten (10) days of the dismissal.
 - (iii) In any other case, a grievance must be submitted within fifteen (15) days of the act giving rise to the grievance.

However, the parties agree that where the supervisor is not available or the discussion cannot be held, this requirement will not prevent any employee from submitting a grievance.

- c) If the issue cannot be resolved at this stage, and the employee, group of employees or Union wishes to pursue the grievance, a first level "Grievance Fact Sheet" must be filed within the designated timelines; or
- d) In the case of the discharge of an employee, unless the parties agree otherwise, the disagreement will automatically proceed to a Step 3 – Level 2 grievance.
- e) An employee or group of employees must obtain the approval of the Union, and be represented by the Union, before a grievance can proceed to Step 2 – Level 1, or referred to Arbitration – Step 4 – Level 3.

11.05 Calculation of Time

Whenever a time limit is imposed in this article, the following rules apply:

- a) Saturdays, Sundays and Statutory Holidays will not be included in calculating time.
- b) If either party fails to process the grievance within the time limits established, that party will be deemed to have conceded the grievance in favour of the other party without prejudice to either party.

11.06 Step 2 - Level 1 Grievance

- a) The employee is required to file a "Grievance Fact Sheet" to initiate the Level 1 grievance. The information contained in the "Circumstances and Nature of

Grievance” should contain enough information to enable the Director or designate to identify what is being alleged. A copy will be given to the employee’s supervisor.

- b) Where the grievance results from a Recruitment Posting, the grievance will be sent to the selecting supervisor and the Director/Manager within five (5) days of the employee being given written reason for not being selected for the position unless the time for filing of a grievance has been extended pursuant to Article 11.04 (b), where in the time for sending the grievance will be extended to 10 days.
- c) In any other case, the grievance will be given to the employee’s supervisor’s Director/Manager within fifteen (15) days of the act causing the grievance, with a copy, for information purposes, to the employee’s supervisor.
- d) The Director/Manager will meet with the employee and supervisor to discuss the grievance. If the grievance arises from Article 31 (Recruitment Posting), the supervisor who made the decision shall attend.
- e) Within fifteen (15) days of receiving the grievance, the Director/Manager or designate will either uphold or deny the grievance. The Director/Manager or designate’s decision shall be in writing and given to the employee and the Union.
- f) Failing settlement at this stage, the Union or the Employer may proceed to Step 3 – Level 2 grievance.

11.07 Step 3 – Level 2 Grievance

- a) The Union may present the same grievance fact sheet to the President/CEO of the Corporation or designate that was filed for the Level 1 grievance within fifteen (15) days of receipt of the decision.
- b) In the case of a grievance resulting from the dismissal of an employee, the employee is required to file a “Grievance Fact Sheet” to initiate the Level 2 grievance. The information contained in the “Circumstances and Nature of Grievance” should contain enough information to enable the President/CEO or designate to identify what is being alleged.
- c) The President/CEO, or designate and affected manager/supervisor, where appropriate, will meet with the employee to discuss the grievance
- d) Within fifteen (15) days of receipt of the Level 2 grievance, the President/CEO or designate will either uphold or deny the grievance. The President/CEO or designate’s decision shall be in writing and given to the employee and the Union.
- e) Failing settlement at this stage, the Corporation or the Union may refer the issue to Step 4 – Level 3 – Arbitration.

11.08 Policy Grievance

- a) Either party to this Agreement may initiate a grievance regarding the interpretation, application, administration or any alleged violation of the policies that form part of this Collective Agreement as listed in Article 34.05.
- b) The Union is required to file a “Grievance Fact Sheet” to initiate the Level 2 grievance. The information contained in the “Circumstances and Nature of Grievance” should contain enough information to enable the President/CEO or designate to identify what is being alleged.
- c) A grievance under Article 11.08, once served on the other party, shall constitute a notice of request for a Level 2 hearing.
- d) Failing settlement at this stage, the Corporation or the Union may refer the issue to Step 4 – Level 3 – Arbitration.

11.09 Step 4 – Level 3 Rights Arbitration

Either party to this agreement may immediately refer matters not resolved through the grievance procedure to a mutually agreed upon Arbitrator who shall have the power to determine whether any matter is arbitrable. The arbitrator shall settle and determine the said matters during the operation of this Collective Agreement.

- a) By mutual agreement beforehand, the parties may opt for alternative methods such as mediation, in order to resolve a grievance. However, either party may request arbitration by letter to the other party within fifteen (15) days of receipt of the level 2 grievance decision. The letter shall state the matter sought to be arbitrated and the names of proposed arbitrators. The other party shall, within thirty (30) days of the receipt of such letter notify the first party in writing of the acceptance of one of the arbitrators named or propose others.

The agreed upon arbitrator must be available to hear the grievance within six (6) months of receipt of notification to arbitrate or an alternative arbitrator shall be selected by both parties. The six (6) month timeframe may be extended if agreed to by both parties.

- b) If the parties fail to agree on an Arbitrator within thirty (30) days of receipt of the second party’s letter, either party may request the Minister of Labour to make an appointment or if both parties fail to agree on an alternative arbitrator as set out in 11.09 (a).
- c) In addition to any powers contained in this agreement, the arbitrator has all the powers granted to arbitrators under Part 1 of the Canada Labour Code.
- d) The arbitrator shall hear the grievance as soon as possible, and render a written decision within thirty (30) days. The decision, once forwarded to the parties is final

and binding on each part and any employee affected by it.

- e) Each party shall pay one half of the fees and expenses of the arbitrator.

Article 12

Probation

- 12.01** All new hires shall be subject to a probationary period not to exceed six (6) months. During the probation period, employment may be terminated at the Corporation's discretion, for reason of general unsuitability of new hires. A review of each employee's performance will be discussed with them prior to the final thirty (30) days of the probation period.

The probation period for apprentices as specified in 12.01 above will be extended by the length of time that he/she is away from work attending school.

- 12.02** When a term or temporary employee is hired for a permanent position, and has been working in a related job, the probationary period will be reduced as follows:
- a) If the person has been employed by the Corporation in a related job for more than three (3) months, the probationary period will be reduced by at least three (3) months, and may be reduced up to six (6) months, at the Corporation's discretion.
 - b) If the person has been employed by the Corporation in a related job for less than three (3) months, the probationary period will be reduced by the actual amount of time they have been employed in the related job.

Article 13

Normal Hours of Work

- a) The hours of work stated in this Article shall not be construed as a guarantee of any minimum nor as a restriction on any maximum hours to be worked, but serves only as a basis for the calculation of overtime.
 - b) At all times it is the parties' mutual intent that the current practice of scheduling and/or backfilling shift employees so as to minimize costs will continue for the duration of this agreement.
- 13.01 Non-shift employees**
- a) For non-shift employees, a normal day's work shall be eight (8) hours between 06:00 and 20:00 hours as determined by the Corporation. A maximum lunch period of one (1) hour shall be observed taken approximately midway through each work day, unless otherwise agreed to by an employee and their immediate supervisor. The normal work week shall consist of forty (40) hours worked in any five (5) consecutive days Monday through Saturday inclusive, with the exception of a flexible work

arrangement under Letter of Understanding #5 in which case the normal work week can be Monday through Sunday by mutual agreement.

- b) By mutual agreement between the employee and the supervisor, the hours of work per day for a specific job assignment may be extended to a maximum of ten (10) hours per day so as to average forty (40) hours per week over a pre-determined period of time and, consequently, overtime payment for the hours worked over eight (8) per day would not apply.
- c) Certain work of a construction, maintenance or replacement nature on the Corporation's transmission, distribution and production facilities is required on a pre-planned basis, to be performed during other than normal hours of work for operational employees. In such cases the Corporation, on forty-eight (48) working hours' notice, may reschedule the normal hours of work of employees so affected as set out in Sub-Section 13.01 (a).
- d) Authorized overtime for employees in this category shall be paid as follows: employees shall receive overtime pay at the hourly equivalent rate of two (2) times the employee's regular rate of pay for all authorized overtime worked in excess of eight (8) hours per day, ten (10) hours pursuant to Article 13.01 (b), and for all authorized overtime worked in excess of forty (40) hours per week and for all hours worked on Holidays as specified in 24.00 or on scheduled days of rest.
- e) In the event that an employee works five (5) or more hours of overtime in the eight (8) hours immediately preceding their regularly scheduled work period, they shall only be required to report for work for either the first four (4) hours or the last four (4) hours of their next regularly scheduled work period with no loss of wages.
- f) Employees working sixteen (16) or more consecutive hours in any twenty-four (24) hour period shall be allowed eight (8) consecutive hours of rest at no loss of wages before reporting for duty again.
- g) Notwithstanding Article 13.01 (e) and (f), in emergency situations, the employee may be called back to work at the employee's regular rate of pay.
- h) Employees will not normally be called upon to be away from home base on weekends except for work of an emergency nature, or by mutual agreement, or in economically viable situations (e.g. weather, transportation restrictions, etc.).
- i) Except in the case of an emergency, the Corporation will endeavour to give a minimum of twenty (20) hours advance notice to employees prior to their being required to work away from home base for any period exceeding one (1) normal working day.
- j) Except in the case of an emergency, or due to illness, bereavement or special leave, when the Corporation takes an employee off standby and that results in employees

being required to provide standby coverage, on days of rest, away from home base, in Faro, Mayo and Dawson City, the Corporation will give a minimum of five (5) calendar days advance notice. If such notice is not provided, the employee will be paid eight (8) hours of overtime for the first eight (8) hours of standby on the first day of rest. Standby pay and overtime pay for callouts during this period of time will not apply.

13.02 Shift Employees – Plant Operators

When because of operational requirements, hours of work are scheduled for employees on a rotating or irregular basis, they shall be scheduled so that employees:

- a) Normal hours of work shall be a maximum of eight (8) hours per day between 0700 and 1800 hours. A maximum lunch period of one (1) hour shall be observed, unless otherwise agreed to by an employee and their immediate supervisor.
- b) To ensure continuity of service to the Corporation's customers, employees in this category can be assigned to work a two (2) or three (3) shift rotating schedule.
- c) The work schedule will be based on six hundred (600) hours in a fifteen (15) week rotating schedule.
- d) Authorized overtime for employees in this category shall be paid at two (2) times the employee's regular rate of pay for:
 - (i) All hours worked in excess of eight (8) hours per day when working normal hours or a three (3) shift rotating schedule
 - (ii) All hours worked in excess of twelve (12) hours when working a two (2) shift rotating schedule
 - (iii) All hours worked in excess of six hundred (600) hours in a period of fifteen (15) week rotating schedule
 - (iv) All hours worked on Holidays as specified in Article 24.00 and on scheduled days of rest.
- e) Employees shall be compensated for sickness and accident indemnity in accordance with the Corporate Sick Leave Policy in conjunction with the normal scheduled hours of work as posted on the shift schedule and approved Disability Plans (e.g. Short-term Disability, Long Term Disability, or WCB).
- f) There will be an attempt not to schedule more than ten (10) shifts in a row.
- g) When working a two (2) shift schedule, there will be an attempt to schedule a forty-eight (48) hour rest period between day and night shifts and to not schedule more than five (5) shifts in a row.

13.03 Shift Employees – Systems Operators

- a) Systems Operators hours of work will be twelve (12) hours per shift based on six hundred (600) hours in a fifteen (15) week rotating schedule.
- b) Systems Operators hours of work for maintenance shifts, shall be up to a maximum of eight (8) hours between 0700 and 1900 hours. A maximum lunch period of one (1) hour shall be observed, unless otherwise agreed to by an employee and their immediate supervisor.
- c) Authorized overtime for employees in this category shall be paid at two (2) times the employee's regular rate of pay for:
 - (i) All hours worked in excess of twelve (12) hours per shift;
 - (ii) All hours worked in excess of eight (8) hours per shift on a scheduled maintenance shift;
 - (iii) All hours worked in excess of six hundred (600) hours in a period of fifteen (15) week rotating schedule;
 - (iv) All hours worked on Holidays as specified in Article 24.00 and on scheduled days of rest.
- d) Employees shall be compensated for sickness and accident indemnity in accordance with the Corporate Sick Leave Policy in conjunction with the normal scheduled hours of work as posted on the shift schedule and approved Disability Plans (e.g. Short-term Disability, Long Term Disability, or WCB).
- e) There will be an attempt to schedule a forty-eight (48) hour rest period between day and night shifts and to not schedule more than five (5) shifts in a row.

13.04 Shift Change – Shift Workers

- a) All rotating shift schedules shall be posted to cover a minimum of ninety (90) calendar days. In January a master shift schedule for the year shall be prepared and all master shift schedules and subsequent revisions shall be circulated to the respective shift employees.
- b) For Systems Operators a change from a maintenance shift to a regular day shift does not constitute a change of schedule.
- c) If ten (10) or more days notice is given by the Corporation, the shift schedule may be changed without incurring any overtime.
- d) If ten (10) days notice is not given by the Corporation, then the first two (2) shifts that have changed from days to afternoons/evenings or vice versa on the new schedule shall be paid at the applicable overtime rate and all subsequent shifts shall be paid at the regular rate of pay except as provided for in Article 13.04 (e).

- e) If ten (10) days notice is not given by the Corporation, then for the thirty-five (35) calendar days following the posting of the revised schedule, the employee shall be paid at the applicable overtime rate for all hours worked on previously scheduled days of rest up to a maximum of five (5) shifts.
- f) If an employee owes time to the Corporation resulting from shift scheduling and is called out to work on their day of rest, the time worked shall be paid at the applicable overtime rate and not deducted from the time owed.
- g) If the employee owes time to the Corporation resulting from changes in the schedule, the employer is not entitled to recover the time in the next six hundred (600) hour fifteen (15) week shift cycle.
- h) Provided sufficient advance notice is given and with the approval of the Corporation, employees may exchange shifts if there is no increased cost to the Corporation. Employees requesting shift changes must do so in writing.

13.05 Overtime Banking

In recognition that from time to time, an employee may require time off for personal reasons or unforeseen circumstances the following conditions may apply: Such leave shall not normally be taken in conjunction with annual vacation.

- a) When an employee works overtime, they may direct that the amount payable for that overtime be banked rather than paid.
- b) Nothing in this article guarantees an employee that a supervisor will approve any request to take time off.
- c) In any year, an employee may bank overtime pay to a maximum of forty (40) hours at any one time. Systems Operators may bank overtime up to forty-eight (48) hours at any one time.
- d) An employee may take time off and be paid out of their banked overtime by mutual agreement with their supervisor. An employee shall make a request at least six (6) working days prior to the first day they wish to take off. Requests should be made only when no overtime will result and that scheduled vacations will not be affected for them or other employees. The supervisor shall approve or reject the request as soon as possible, but at least three (3) working days prior to the first day the employee wishes to take off.
- e) At the first pay period of the following year, employees will be paid any previous years amount which remains banked.

13.06 Leave Without Pay (LWOP)

Arrangements may be made to take time off without pay subject to the following:

- a) the prior approval of the Department Director/Manager or designate;

- b) the employee having used/scheduled all other leave (excluding leave without pay for union business);
- c) A permanent employee with at least one (1) year of service, subject to providing the Corporation at least six (6) months written notice may apply for a leave of absence of up to one (1) year. Such request not to be unreasonably denied; and
- d) An employee on any unpaid leave of absence may continue the Pension (where applicable) and other Benefit Plans, subject to carrier approval and at no additional cost to the employer, and providing they pay all the premiums and contributions themselves.

13.07 Daylight Savings Time

The following will apply when changing from Pacific Standard Time to Pacific Daylight Time and vice versa:

a) Systems Operators:

- (i) Twelve (12) hours straight time shall be paid to the employees who work the full night shift, which commences on Saturday, when the springtime change occurs.
- (ii) Twelve (12) hours straight time plus one (1) hour double time shall be paid to the employees who work the night shift, which commences on Saturday when the fall time change occurs.

b) All other employees:

- (iii) Eight (8) hours straight time shall be paid to the employees who work the full shift, which commences between 2300 hours Saturday and 0100 hours Sunday, when the spring time change occurs.
- (iv) Eight (8) hours straight time plus one (1) hour double time shall be paid to the employees who work the full shift, which commences between 2300 hours Saturday and 0100 hours Sunday, when the fall time change occurs.

13.08 Rest Breaks

The Corporation and Union acknowledge the benefits of 15 minute rest breaks approximately midway through each half day and will, whenever reasonable, provide such a break.

13.09 Converting Annual Salary to Hourly Rate

The hourly rate for full time employees is calculated by dividing the annual salary by 2,080 hours. (Calculation: 8 hours per day x 5 days per week x 52 weeks per year = 2,080).

13.10 Ticket Bonus

- a) Each additional valid Journey ticket or approved course/certificate over and above that which is required for their job classification, to a maximum of two (2) tickets shall receive a fifty dollars (\$50.00) per month Ticket Bonus. Tickets not relevant to

the job duties will not be eligible for the ticket bonus.

- b) Ticket Bonuses as established in 13.10 (a) shall be reviewed yearly by the Corporation to determine the relevancy and application of the ticket in relation to the employees current job duties.
- c) The following list of tickets may be applicable for the ticket bonus, however is not limited to this list.

Power Lineperson	Power Systems Electrician
Electrician	Welder
Heavy Duty Mechanic	Millwright
Instrumentation	Machinist
ICS Operator Course	

- d) Effective January 1, 2002, the provisions in Article 13.10 shall not apply to new hires.

13.11 Travel Time

- a) Authorized time required for travel outside regular working hours to/from the job site, shall be paid at two (2) times the employee's regular rate of pay.
- b) Authorized time required for travel outside regular working hours between home base and training courses, workshops or seminars, at the employer's request, shall be paid for the first eight (8) hours at the regular rate of pay, and the applicable overtime rate thereafter.

Article 14 Salary Administration

- 14.01** New employees entering the service of the Corporation will be appropriately placed within the salary range at the discretion of the Corporation.
- 14.02** On the first of the month following successful completion of the probationary period, an employee will be advanced 3% in the wage range subject to satisfactory performance. Thereafter, 3% increments reflecting progression through the range will be semi-annually based on the employee's anniversary date, subject to satisfactory performance.
- 14.03** The Employer acknowledges the value and importance of timely performance evaluations, and further agrees to maintain a performance evaluation policy through the Joint Consultation Committee.
- 14.04** When a promotion occurs, the employee concerned shall be placed in that position within the new range which reflects an increase in wage which shall be no less than 3% in the range from which they were promoted.

- 14.05** If an employee is accepted under a posting for a lower level job or is transferred at their own request, they will be appropriately placed within the salary range for such job at the discretion of the Corporation.
- 14.06** An employee temporarily assigned, in writing, for a period of more than two (2) continuous working days to a position of higher classification shall, from the first day, be paid;
- a) The minimum salary for the temporary position where that minimum is more than four percent (4%) above their present salary; or
 - b) Receive four percent (4%) where their salary or temporary assignment does not exceed the maximum of the range for the temporary position; or
 - c) Where the application of (b) above would provide for a temporary assignment which would exceed the maximum of the range for the temporary position, the employee would receive the maximum rate in the range for the temporary position.
- 14.07** In any event that an employee is retained in the temporary assignment for more than one (1) year, their wage shall be administered in the range of the new classification unless the parties agree otherwise.

Article 15

Northern Allowances

- 15.01** The Corporation's assistance to permanent and term full time employees to alleviate the higher cost of living in the Yukon will pay a flat rate northern allowance of six thousand three hundred dollars (\$6,300.00) per annum, paid out equally on each pay date, plus five percent (5%) of base salary.
- 15.02** Permanent and term part time employees shall receive a prorated flat rate northern allowance on provisions in Article 15.01 on the basis of total regular hours to be worked in the year divided by the total regular full time hours, plus five percent (5%) of base salary.
- 15.03** Temporary employees who have been continuously employed for more than five (5) months, or are scheduled to be continuously employed for more than five (5) months shall be entitled to fifty percent (50%) of the flat rate northern allowance for the time worked. Such employees who work less than full time regular hours will be entitled to fifty percent (50%) of the six thousand three hundred dollars (\$6,300.00) per annum prorated.
- 15.04** Northern allowances will not be earned for any month during which the employee does not earn ten (10) days pay in a calendar month due to short- term disability, long term disability, or periods of leave without pay. Northern allowances will be adjusted at the completion of the leave.

Article 16

Location Allowance

- 16.01** Location Allowance specified in this article shall be paid to employees on a pay period basis, and payroll administered in like manner to the Northern Allowance Article 15.00.
- a) Effective January 1, 2007, permanent and term employees whose home base is in Dawson City, Mayo, or Faro shall receive a Location Allowance of two thousand one hundred dollars \$2,100.00 per year over and above their standard Northern Allowance paid out equally on each pay.
 - b) In the event Aishihik is permanently staffed, the rate will be twelve hundred dollars \$1,200.00 per year.
- 16.02** Permanent and term part time employees shall receive a prorated Location Allowance on provisions in Article 16.01(a & b) on the basis of total regular hours to be worked in the year divided by the total regular full time hours.
- 16.03** Temporary employees who have been continuously employed for more than five (5) months, or are scheduled to be continuously employed for more than five (5) months shall be entitled to fifty percent (50%) of the designated Location Allowance for the total time worked.

Article 17

Call Out

- 17.01** Employees will be paid at the overtime rate when called out to perform work outside their normal working hours.
- 17.02**
- a) If an employee is called out within two hours of the start of their regularly scheduled shift, they will be paid for the period from the time of the call-out to the start of their shift.
 - b) If an employee is called out any other time, they will be paid for the time actually worked, or for two (2) hours, whichever is greater. Time required to travel to/from the job site shall be considered time actually worked.
- 17.03** Employees called out are deemed to be on duty for the minimum period set out in Article 17.02, or until the work for which they have been called out is completed. Further calls received during this period will be considered a continuation of the initial call and not subject to call-out pay.
- 17.04** When an employee is authorized to continue working in excess of two (2) hours beyond the normal scheduled quitting time, the employee will be provided with a reasonable meal in the third hour and every four (4) hours thereafter, as arranged by the Corporation, or a dinner per diem as provided for in Article 21.02(a) at the employer's discretion paid

once for the work beyond the normal scheduled quitting time. If the employee does not leave the work site and the meal break does not exceed one-half (1/2) hour, and the work continues after the meal break, the meal break will be considered as time worked at the applicable overtime rate. A practical application of the above arrangements may be made.

- 17.05 Notwithstanding the above, where the employee receives a call and can accomplish the work by telephone without returning to the workplace, the employee shall be compensated at the applicable overtime rate rounded up to the nearest fifteen (15) minute period.

Article 18 Shift Premium

- 18.01** An employee shall receive a shift premium for all hours worked, including overtime hours worked, on eight (8) hour shifts scheduled between 1600 hours and 2400 hours and between 2400 and 0800:

Effective January 1, 2008 - \$1.45 per hour
Effective January 1, 2009 - \$1.55 per hour
Effective January 1, 2010 - \$1.65 per hour

- 18.02** An employee shall receive a shift premium for all hours worked, including overtime hours worked, on twelve (12) hour shifts scheduled between 1900 hours and 0700:

Effective January 1, 2008 - \$1.65 per hour
Effective January 1, 2009 - \$1.75 per hour
Effective January 1, 2010 - \$1.85 per hour

- 18.03** Any job scheduled in advance for off-normal hours requires scheduling for at least three consecutive days to be considered as a scheduled shift.

Article 19 Standby

- 19.01** Where the employer requires the employee to be available on standby during off duty hours, the employee shall be entitled to be compensated at the rate of:

Effective January 1, 2008 - \$3.53 per hour or portion thereof
Effective January 1, 2009 - \$3.78 per hour or portion thereof
Effective January 1, 2010 - \$4.03 per hour or portion thereof

- 19.02** The Corporation shall determine the number of employees required to standby in each circumstance and shall so designate these employees by schedule. Standby allowance will be paid only to employees officially designated for such duty. In designating

employees for standby, the Corporation will endeavor to arrange for the equitable distribution of standby duties.

- 19.03** a) Standby on a regular workday means availability on call outside of normal hours of work. On each scheduled day of rest and recognized holiday, standby means availability on call for the full twenty-four (24) hour period. An employee on standby may leave their home for personal reasons, provided they make arrangements to be reached and to be available for duty.
- b) No standby premium shall be paid if an employee is unable to be reached or report for duty when required.
- 19.04** a) Effective January 1, 2005, employees shall not normally be required to standby more than three thousand seven hundred (3,700) hours in a calendar year where other qualified staff are available. Employees who have been on standby for more than three thousand seven hundred (3,700) hours in a calendar year shall be paid at one and a half times (1.5) times the normal standby hourly rate for standby worked in excess of these hours in a calendar year.
- b) Effective January 1, 2006, employees shall not normally be required to standby more than three thousand seven hundred (3,700) hours in a calendar year where other qualified staff are available. Employees who have been on standby for more than three thousand seven hundred (3,700) hours in a calendar year shall be paid at two times (2) times the normal standby hourly rate for standby worked in excess of these hours in a calendar year.

Article 20

Calculation of Premium Rates

- 20.01** If two (2) or more premiums are applicable to the same hours worked, an employee shall receive only the highest premium rate applicable to such hours. For the same hours worked, an employee shall not receive a premium rate under more than one (1) provision of this Agreement unless otherwise specifically provided.

Article 21

Employee Travel

- 21.01** The Corporation will on production of receipts, pay for room or alternatively provide accommodation when working away from home.
- 21.02** a) An employee on travel status will receive the per diem for meals and incidentals equivalent to Federal Government rates for the Yukon which shall be adjusted annually on January 1st.
- b) Employees working outside the geographical boundaries of the community that is their home base shall be on travel status, excluding the Takhini sub-station.

- c) For employees on travel status to/from Aishihik, reimbursement shall be based on the "Aishihik" per diem as outlined in Appendix A of the Employee Travel Policy.

21.03 This will not apply to locally hired help employed for a specific job in the community in which they reside and who will be laid off prior to the crew moving to another location.

21.04 An employee who is required to work away from home shall be paid incidental expenses based on the per diem schedule for each night away from home.

Article 22 Job Evaluation

22.01 Job Evaluation System

- a) The parties agree to implement the Job Evaluation Plan (Plan) pursuant to the Letter of Understanding # 4 effective July 1, 2005.
- b) The parties agree the Job Evaluation Plan developed jointly and signed-off shall form part of the Collective Agreement.
- c) The Employer agrees that any changes to the Plan factor or factor weightings shall be subject to agreement between the parties.
- d) The Employer and the Union will establish a Joint Job Evaluation Committee (JJE) for the evaluation of all bargaining unit positions.
 - (i) The JJE will consist of at least four (4) members, comprised of equal representation from both Employer and the Union shall be responsible. The JJE may call upon jointly agreed internal and/or external resources as required.
 - (ii) An employee shall suffer no loss of pay or benefits for serving on the JJE.

22.02 Job Evaluation Review and Appeal

- a) When new positions are established, the JJE shall evaluate the jobs and shall notify the Union thereof within fifteen working (15) days of the evaluation being completed.
- b) When significant differences, or changes, in job content effect the existing job evaluation to the extent that the Union or an employee request that the job be re-evaluated, the following procedure shall be followed:
 - (i) An employee or the Union shall initiate a written request to HR for a job to be re-evaluated within fifteen working (15) days of significant changes in job content arising.
 - (ii) An employee initiating a written request for re-evaluation must file a copy of the

- request with the Union.
- (iii) The JJEC shall complete the re-evaluation as soon as possible but not later than ninety (90) working days upon receipt of the written request for review.
 - (iv) HR shall notify the Union and the employee of the results of the re-evaluation within fifteen (15) working days of the completion of any evaluation.
 - (v) If the re-evaluation results in a higher pay level, it shall be retroactive to the date that HR received the written request for review.
 - (vi) If the re-evaluation results in a lower pay level, the employee shall retain their current rate of pay and any adjustments negotiated by the parties for as long as they remain in that position.
- c) When significant differences or changes, in job content affect the existing job evaluation to the extent that the Employer requests that the job be re-evaluated, the following procedure shall be followed:
- (i) The Employer shall initiate a request for re-evaluation within fifteen (15) working days of the significant changes in job content arising.
 - (ii) The Employer shall notify the Union of the initiation of the review.
 - (iii) The JJEC shall complete the re-evaluation as soon as possible but not later than ninety (90) working days upon receipt of the written request for review.
 - (iv) HR shall notify the Union and the employee of the results of the evaluation within fifteen (15) working days of the completion of any evaluation.
 - (v) If the re-evaluation results in a higher pay level, it shall be retroactive to the date the Employer initiated the request for re-evaluation.
 - (vi) If the re-evaluation results in a lower pay level, the employee shall retain their current rate of pay and any adjustments negotiated by the parties for as long as they remain in that position.
- d) Where an employee and the Union are not satisfied with the JJEC's decision, and the Union agrees to represent the employee, the Union may refer JJEC's decision to arbitration by letter within fifteen (15) working days of receipt of the re-evaluation decision. The letter shall state the matter sought to be arbitrated and the names of proposed arbitrators. The Corporation shall, within thirty (30) days of the receipt of such letter notify the first party in writing of the acceptance of one of the arbitrators named or propose others. The Corporation also has the right to appeal under this process.
- e) An independent Arbitrator trained in job evaluation, mutually agreed upon by both parties, will hear appeals of the JJEC's decisions within one hundred and twenty (120) working days or at the earliest mutually agreed upon date by both parties. A decision of the Arbitrator is final and binding. Each party shall pay one half (1/2) of the fees and expenses of the Arbitrator.
- f) The Union may withdraw the appeal from the arbitration process at any time.
- g) Unless the parties agree otherwise, the time lines in this article are mandatory.

Article 23

Description of Duties

- 23.01** Upon written request an employee will be provided a complete and current job description, including the position classification level and point factor ratings for their position.
- 23.02** Job descriptions will be established for each position by the supervisor and the Director. Job descriptions for bargaining unit employees will be issued to the incumbent and the Union.
- 23.03** When a job description is changed, the Corporation will, within fifteen (15) days of the change, give a copy of the revised job description to the Union and the incumbent.
- 23.04** The employee should review the job description annually for their position to ensure that the description is accurate and up to date. Where inaccuracies or discrepancies are identified, they will be discussed during the annual performance review. Where the supervisor in conjunction with the Director believe that there are significant changes to the job, they will notify the Human Resources Department within ninety (90) days. Where the Supervisor/Director believe that there are no significant changes to the job, they will notify the employee.

Article 24

Designated Paid Holidays

- 24.01** (a) All full time employees covered by this Collective Agreement shall receive eight (8) hours pay for designated paid holidays, except as provided by Article 24.02, as listed below:

New Year's Day	Labour Day
Heritage Day*	Thanksgiving Day
Good Friday	Remembrance Day
Easter Sunday	Christmas Day
Victoria Day	Boxing Day
Canada Day	Discovery Day
National Aboriginal Day**	

*Whitehorse and Aishihik only

**Communities outside Whitehorse and Aishihik only

- b) Pursuant to Article 24.01 (a), all part-time employees' designated paid holidays shall be prorated relative to regular scheduled hours.
- 24.02** Notwithstanding the above, should an additional statutory holiday be declared or proclaimed by the Canadian or Yukon Governments, it shall replace the day designated

for the celebration of the Heritage Day. Should a new, non-statutory holiday be established, the parties will meet to decide on a course of action to amend Article 24.01, holiday list.

- 24.03** a) To be eligible for and paid for any of the holidays listed above, an employee must have completed thirty (30) days of employment immediately preceding the holiday and they must have worked their scheduled work shift immediately before and immediately after such holiday. The only exclusion to this requirement will be where an employee is absent due to sickness or accident or by authority of the Corporation.
- b) A temporary or term employee who does not meet the thirty (30) day requirement, but who has worked two hundred and forty (240) hours in the twelve (12) months immediately preceding the holiday and has worked their scheduled work shift immediately before and after the holiday, is eligible to be paid for the holiday.
- 24.04** Pursuant to Article 24.03, employees working on holidays listed in Article 24.01 will be paid two (2) times the regular rate for those hours that fall within the statutory holiday in addition to the regular pay for the holiday.
- 24.05** Should one of the recognized holidays for employees, other than shift employees, fall on a day of rest, the holiday shall be moved to the employee's first working day following his/her day of rest. Employees shall receive holiday pay only once for a given holiday.
- 24.06** Should one of the holidays listed in 24.01 fall on a regular day off of a shift employee, they shall be paid the employee's normal straight time hours, in addition to their regular pay, or be given equivalent time off.

Article 25

Leave

- 25.00** Except for Article 27 and Article 30 it is agreed that any paid day of leave is based on eight (8) hours.

Vacation Leave

- 25.01** a) All full time permanent and term employees who have completed twelve (12) months of continuous employment shall be entitled one hundred and sixty (160) hours per year.
- b) A new permanent or term employee who has completed three (3) months of continuous employment may receive an advance of anticipated annual leave credits expected to be earned by the end of the calendar year.
- c) All full time permanent employees who have completed eight (8) years of continuous employment shall be entitled two hundred (200) hours per year.

- d) All full time permanent employees who have completed fifteen (15) years of continuous employment shall be entitled to two hundred and forty (240) hours per year.
 - e) All full time permanent employees who have completed twenty-two (22) years of continuous employment shall be entitled to two hundred and eighty (280) hours per year.
 - f) Subject to vacation scheduling under Article 25.03 employees may be permitted to take their earned vacation one (1) day at a time up to maximum of five (5) days in a calendar year, subject to receiving the prior approval of their immediate supervisor and providing such scheduling does not unduly interfere with efficiency or incur overtime.
- 25.02** Pursuant to Article 25.01, part-time employees annual leave credits shall be prorated on the basis of total regular hours to be worked in the year divided by the total regular full time hours.
- 25.03** a) Vacations may be taken at any time during the calendar year by mutual agreement between the employee and their supervisor provided that vacation scheduling is arranged to suit the work schedules of the Corporation.
- b) In the year in which an employee qualifies for increased vacation entitlement pursuant to Article 25.01, such increased entitlement may be taken only after the employee's anniversary date of vacation entitlement.
- 25.04** In the event that a recognized holiday falls within the annual vacation period of an employee, such period shall be increased by eight (8) hours for each of the holidays so affected. Part time employees' vacation leave shall be prorated relative to regular scheduled hours.
- 25.05** a) Sick leave, short-term disability and long-term disability shall not be deemed to have broken the continuity of employment for annual leave purposes only for establishing the number of years of continuous employment when the employee resumes work.
- b) Vacation leave will not be earned for any month during which the employee does not earn ten (10) days pay in a calendar month due to short-term disability and/or long-term disability, or periods of leave without pay. Annual vacation leave will be adjusted at the completion of the leave.
- 25.06** A full time employee may carryover sixty (60) hours of vacation accruals or for part-time employees the equivalent prorated hours. Accruals in excess of that amount will be paid out at the beginning of each calendar year.

- 25.07** Permanent, permanent part-time and term employees whose home base is more than one hundred (100) kilometers outside of Whitehorse and who proceed on annual vacation shall be allowed two (2) days of paid travel time annually.
- 25.08** In the event that the employment relationship is terminated and the employee has used more annual leave than they have earned then the Corporation can recover or withhold any amounts owing.
- 25.09** If an employee provides a written notice of their intention to retire in the next calendar year they may at their discretion carry-over up to one (1) year's entitlement of vacation leave to the next calendar year.

Article 26

Vacation Travel Allowance

- 26.01** Permanent and term employees are eligible for a vacation travel allowance for themselves and their families after the completion of twelve (12) months employment with the Corporation.
- 26.02** a) Effective January 1, 2004, the Corporation will pay the following travel allowance on the pay date following the employee's anniversary pursuant to an employee completing a statutory declaration form:

Employee	\$1,300.00
Employee's spouse	\$850.00
Each dependent child	\$850.00

Income tax will not be withheld from this payment unless otherwise requested by the employee.

- b) Unpaid vacation travel allowance will not be carried forward to the next year.
- 26.03** The employee will be responsible for retaining receipts for income tax purposes.
- 26.04** The Travel Allowance shall be prorated for permanent or term part-time employees on the basis of total regular hours to be worked in the year divided by the total regular full time hours.

Article 27

Bereavement Leave

- 27.01** a) The Corporation shall grant an employee bereavement leave with pay for a period of up to forty (40) hours for employees, other than Systems Operators, and sixty (60) hours for Systems Operators, where there is a death in the immediate family, for the purpose set out in Article 27.01 (b) (ii) below, or alternatively, the Corporation will grant bereavement leave where the death of a member of the immediate family is

- imminent, provided such leave is in lieu of bereavement leave at a later date with respect to the same member of the immediate family. Upon written request an employee shall receive up forty (40) hours bereavement leave for immediate family without pay.
- b) Bereavement leave granted under Article 27.01(a) may be taken by the employee at one of the following times:
 - (i) Immediately following the date of death; or
 - (ii) Within a period of thirteen (13) months from the date of death for the purpose of attending a religious or traditional ceremony or event related to the death.
 - c) The employee shall be entitled to utilize their bereavement leave as provided for in Article 27.01 (a) above over two (2) separate periods within the thirteen (13) month period.
 - d) Immediate family for the purpose of bereavement leave is defined as mother, father, sister, brother (or alternatively step-father, step-mother, or foster parent), spouse, son, daughter, step-child, grandparent (including spouse's), grandchild or ward of the employee, mother-in-law, father-in-law, sister-in-law, brother-in-law, son-in-law, daughter-in-law, and any relative permanently residing in the employee's household or with whom the employee permanently resides.

Article 28 Court Leave

- 28.01** An employee who is summoned for jury duty, or by subpoena to attend as a witness, shall be paid for time lost with a maximum of one day's regular pay for each day lost, less any amount paid by the courts.

Article 29 Maternity & Parental Leave

- 29.01** In the event of a birth or adoption of a child, permanent and permanent part time employees are entitled to unpaid parental leave to a maximum of thirty-seven (37) weeks. For the first eighty (80) hours of leave, the employee will receive their regular pay provided that they have been continuously employed by Yukon Energy for the past twelve (12) months. The remainder of the leave shall remain unpaid, except for any period during which the employee qualifies for sickness or disability payments.
- 29.02** An employee wishing to take parental leave may begin the leave upon four (4) weeks' written notice to the supervisor. This requirement is waived in the event a baby is born prematurely, and the employee could not reasonably provide four (4) weeks' notice.
- 29.03** An employee who wishes to resume employment after parental leave shall give the Corporation four weeks' written notice. The Corporation will then:

- a) Reinstate the employee in the position occupied at the time parental leave began; or
- b) Provide the employee with alternate work of a comparable nature, at not less than the same wage and other benefits that had accrued to the employee to the date on which parental leave began.

29.04 Where a pregnancy of an employee interferes with the performance of her duties, the Corporation may, by notice in writing to the employee, require her to begin parental leave. This Article may not be used if the employee is absent from work for medical reasons, certified by a physician.

- a) When an employee adopts a child, the employee shall be entitled to take leave of absence without pay for a maximum of thirty-seven (37) weeks immediately following the adoption.
- b) The employee will notify the Corporation of their intention to adopt and indicate that they intend to take parental leave under this Article.
- c) When the adoption is finalized, the employee may begin parental leave after giving the Corporation as much notice as is possible under the circumstances.

29.05 A birth mother is entitled to a maximum of seventeen (17) weeks of unpaid maternity leave.

Article 30 Special Leave

30.01 a) Employees, other than Systems Operators, will be entitled to sixteen (16) hours special leave per year for the purpose of caring for a sick dependent child, parent or spouse. Systems Operators will be entitled to twenty-four (24) hours special leave per year for the purpose of caring for a sick dependent child, parent or spouse.

- b) Effective January 1, 2009, employees, other than Systems Operators, will be entitled to twenty-four (24) hours special leave per year for the purpose of caring for a sick dependent child, parent, or spouse. Systems Operators will be entitled to thirty-six (36) hours special leave per year for the purpose of caring for a sick dependent child, parent, or spouse

30.02 Employees required to leave the community for purposes of taking a dependent child, parent, or spouse to a medical appointment may use the leave provided for in this Article.

Article 31

Recruitment Postings

- 31.01** a) The Corporation, its management, employees, and Union are committed to the development of employees from within the bargaining unit.
- b) When a permanent position, within the scope of the Collective Agreement, becomes vacant or a new position is created, a recruitment posting outlining details of the vacancy will be posted on Corporation bulletin boards for ten (10) working days. District offices will receive faxed copies of recruitment postings.
- c) All Postings shall contain hiring criteria including educational and/or experience and related skill areas.
- d) A copy of each posting will be directed to the Union.
- e) All employees have the privilege of applying to posted positions. While first consideration will be given to applicants who are members of the bargaining unit, the Corporation reserves the right to fill vacancies from outside the bargaining unit.
- f) Bargaining unit applicants will receive a personal written reply to their applications.
- 31.02** In considering such applicants, the factors which shall be considered are related ability, education, behaviour, performance, related skill areas, and seniority. When the overall assessment is equal for two (2) or more of the applicants, the applicant with the most seniority with the Corporation shall be selected for the position. An unsuccessful internal applicant shall be given a written reason for not being selected.
- 31.03** When making promotions and/or transfers, the factors listed in Article 31.02 shall apply.
- 31.04** The successful applicant will be advised of the appointment date to the new position in their letter of offer.
- 31.05** In instances where an employee who has been promoted to a higher classification and it is determined that they are unable to fulfill the job requirements or is unwilling to remain in that position, then within a three month trial period they may return to their former position.
- 31.06** No posting is required if a position has been re-assessed or re-evaluated to a higher classification, if the person who held the position before the re-assessment or re-evaluation remains in the position.
- 31.07** When an employee assumes a remote and difficult to fill position and has been assured a time certain rotation, the employee will be brought back to an equivalent level position in another location without posting.

- 31.08** An employee on an approved educational leave may be brought back to an equivalent level position within the bargaining unit without posting. The employee must remain a member in good standing with the Union while on leave.
- 31.09** In the case of Articles 31.06 and 31.07, the Corporation will inform the Union in advance of the application of these articles.
- 31.10** When an employee wishes to appeal a decision under Article 31.00, such appeals will be governed by the terms and procedures contained within Article 11.00 Grievance Procedure.
- 31.11** When an employee files a grievance under Article 31.10, the union representative and the grievor will be provided access to the grievor's pertinent documents.

Article 32

Reduction of Staff

- 32.01** This article does not restrict the Corporation's right to terminate an employee for disciplinary or performance reasons. The Corporation agrees that permanent employees will not be laid off or have their hours of work reduced as a direct result of the Corporation contracting out work.
- a) Before there is a reduction in staff by way of layoff or termination(s) of permanent or permanent part-time employee(s), the Corporation will notify the Union and arrange a meeting to discuss the reduction in staff and the procedure to be used. The Corporation representatives at the meeting will include the President/CEO and the management of the Department in which the layoff or termination is to occur.
 - b) Employees directly affected by a reduction of staff will be given three (3) months written notice or pay in lieu thereof. Within fourteen (14) calendar days after receipt of notice those employees may elect at the time of layoff to:
 - (i) Accept the layoff and be placed on the recall list pursuant to Article 32.02; or
 - (ii) Accept severance pursuant to article 33.04 in which event the employment relationship will be terminated; or
 - (iii) Elect to displace another employee with lesser seniority at the same or lower classification provided they are immediately able to perform that job.
 - c) The Corporation will consider retraining or development as an alternative to reduction of staff, when a vacancy exists and the employee demonstrates the ability and aptitude to meet the new job requirements.
 - d) In the event of a reduction in staff the factors which shall be considered are; related ability, education, performance, and seniority related skill areas. These factors are

not listed in order of priority. When the overall assessment is equal for two (2) or more employees, the employees shall be laid-off in the reverse order of their seniority.

- 32.02** a) In the event of an increase in staff within one (1) year following reduction of staff, an employee on the recall list will be eligible for recall on a last out-first in basis, provided they are qualified for the position or could qualify within a familiarization period not to exceed one (1) month. To be eligible, the employee shall be on the recall list and advise the Corporation of any change in address. The Corporation will contact an eligible employee by registered mail and the employee must acknowledge receipt of the Corporation correspondence within seven (7) calendar days of the date of receipt of the Corporation correspondence and be prepared to report to work with the Corporation within twenty-one (21) calendar days of the date of receipt of the Corporation correspondence.
- b) When re-called, the employee will be credited with their seniority and vacation entitlements under the collective agreement that had accrued to the employee up to the date of their layoff. The Corporation shall recall the employee as follows:
- (i) to their former position occupied at the time of their termination if available; or
 - (ii) Subject to 32.02 (a) provide them with alternate work of a comparable nature at an appropriate wage commensurate with their experience and qualifications if available; or
 - (iii) Subject to 32.02 (a), any position with the employer and at the rate of pay for that position when recall under clause (i) and (ii) is not possible.
- c) An employee who accepts a recall under clause (b) (iii) above shall remain on the recall list for the duration of the initial recall period for purposes of recall to a position covered by clauses (b) (i) and (b) (ii).
- d) An employee who refuses a recall under clause (b) (iii) above shall not forfeit their remaining recall rights under clause (b) (i), or (b) (ii) above.

Article 33 **Termination of Service**

- 33.01** In the event of a Permanent Employee giving notice of termination to the Corporation, such termination shall require written notice of ten (10) working days.
- 33.02** In the event of the Corporation giving notice of termination to a permanent employee, such termination shall require notice of thirty (30) calendar days
- 33.03** An employee may be discharged for just cause without notice or pay in lieu thereof, subject to Article 11.00.

- 33.04** In the event of the Corporation terminating the employment of a permanent employee, other than for just cause, severance pay shall be paid to the employee in an amount equal to one (1) week's normal pay per year of seniority up to the maximum of twenty six (26) weeks since date of last hire based on their last month's wage rate.

Article 34
Joint Consultation Committee (JCC)

- 34.01** a) The parties acknowledge the mutual benefits to be derived from joint consultation and are prepared to continue meaningful consultation on matters of common interest.
- b) The purpose of the JCC is to provide a forum to discuss policies and labour related matters.
- c) The JCC shall be composed of an equal number of representatives of the parties to the Agreement. Such representatives are to include the President of the Union and the President/CEO of the Corporation.
- d) No employee shall suffer loss of pay or benefits for serving on the JCC.

34.02 The JCC shall:

- a) Meet as mutually agreed upon but not less than on a quarterly basis;
- b) Discuss and attempt to arrive at mutually agreeable solutions to the problems or issues identified by either party;
- c) The parties mutually agree that JCC shall not have the authority to alter, amend, change, modify or extend the terms and conditions of the Agreement and the details of specific grievances shall not be topics of joint consultation.

34.03 The JCC shall consider as appropriate matters for consultation, the following:

- a) Harassment policy;
- b) Job performance evaluation format;
- c) Volunteer Leave Policy;
- d) Health and Safety policy;
- e) Employment Equity; and
- f) Sick Leave Policy

The Employer agrees that in the matters identified above, new policies will not be introduced, and existing policies and guidelines will not be cancelled, or amended, in such a way to affect employees covered by this Agreement, until such time as the Union has been provided an opportunity to consider and consult on the proposals.

34.04 The JCC may:

- a) Make final and binding decisions on those matters specifically agreed to in this Agreement or any other matters specifically referred to the Committee by mutual agreement of the parties. Both parties shall be bound by the decisions of the JCC. If the JCC chooses not to render a decision, the matter will be referred back to the parties.
- b) Call upon additional persons for technical information or advice; and
- c) Establish sub-committees, or ad-hoc committees as it deems necessary and set guidelines and operating procedures for such committees.

For the purposes of this Article, notices and correspondences shall be between the President of the Union and the President/CEO of the Yukon Energy Corporation with a copy to Human Resources and Yukon Employees Union.

34.05 The following policies at present or as amended through the process in 34.03 shall form part of the Collective Agreement:

- a) Relocation policy;
- b) Travel policy;
- c) Clothing policy - Safety; and
- d) Compassionate Care policy

34.06 Upon the request from the Union, the Corporation agrees to advise the Union at the beginning of each year, of the proposed Capital and Operational and Maintenance plans, and to review the status of these plans with the Union at the end of each year.

Article 35
Health & Safety

35.01 The Corporation and the Union recognize the vital importance of employee and Union involvement along with management in all aspects of health and safety programs affecting them. In particular; the participation on health and safety committees and in accident and incident investigations.

35.02 The parties shall continue to make all reasonable provisions for the occupational safety and health of employees. The employer will welcome suggestions on the subject from the Union and the parties will undertake to consult with the view to adopting and expeditiously implementing reasonable procedures and techniques designed and intended to reduce the risk of employment injury. Employees shall make every reasonable effort to reduce and obviate risk of employment injury.

35.03 Both parties agree to comply with the provisions and the requirements of the Yukon Occupational Health and Safety Act.

- 35.04** Employees are encouraged to refer safety matters to their immediate supervisor in an attempt to resolve any problems and where the safety matters cannot be resolved, both employees and supervisors are encouraged to refer safety issues to the Joint Health and Safety Committee.

Article 36 Bulletin Boards

- 36.01** The Employer shall provide the Union bulletin board space in a reasonable number of locations clearly identified for the use of the Union for posting notices pertaining to elections, appointments, meeting dates, news items, and social/recreational affairs.
- 36.02** Subject to current systems infrastructure, the Employer agrees the Union shall have access to e-mail for purposes of communicating information covered by Article 36.01 to Union members.

Article 37 Technological Change

- 37.01** When the Corporation is considering the introduction or implementation of a technological change which would result in changes in the employment status or working conditions of employees it shall provide the Union and every affected employee not less than one hundred (120) days written notice before the introduction or implementation of a technological change, with a written description of the change it intends to carry out, disclosing foreseeable adverse effects on employees. The Employer will seek ways and means of minimizing adverse effects on employees, which might result from such changes.
- 37.02** The parties agree that where technological change is likely to affect the terms and conditions or security of employment of a significant number of employees, this article will apply.
- 37.03** The written notice provided in Article 37.01 will provide the following information:
- a) The nature and degree of change;
 - b) The anticipated date or dates the employer plans to effect the change;
 - c) The location or locations involved; and
 - d) The names of employees initially affected by the change.
- 37.04** Pursuant to Article 37.01 the Employer shall consult with the Union as soon as reasonably practicable concerning the effects of the technological change on employees. Such consultation will include but not necessarily be limited to the following:

- a) The approximate number and location of employees likely to be affected by the change; and
- b) The effect the change may be expected to have on working conditions or terms and conditions of employment on employees.

37.05 The parties agree to discuss alternatives such as training and/or layoff in instances of technological change.

Article 38 Essential Services

38.01 The parties agree that they provide an ESSENTIAL SERVICE and that Article 7 (Continuity of Service) has application in the event the parties fail to reach agreement for the renewal of this agreement. Further it is agreed that Article 44 (Collective Bargaining-Interest Arbitration) can be used to resolve the issues in dispute.

38.02 a) Should an employee covered by this agreement encounter a legal picket line by another trade union at locations other than the Employer's premises, employees covered by this agreement shall have the right to refuse to cross that legal picket line.

b) If an employee encounters such a picket line they will promptly report the matter to the Employer, the Employer will make every reasonable effort to ensure that the employee is deployed elsewhere so that the employee does not suffer a loss of pay or benefits.

38.03 Where a trade union not party to this collective agreement legally pickets at the Employer's premises then the parties agree that an ESSENTIAL SERVICES AGREEMENT shall be negotiated forthwith which will set out the levels of staffing that must be maintained while the legal picketing remains at the Employer's premises. Those employees not designated as essential will be deemed to be on leave without pay, however such an employee may access other leave, eg. vacation or bank time. While the parties are negotiating the levels of staffing, the normal complement of employees will be obliged to work.

Article 39 Pension Plan

39.01 The Yukon Energy Corporation's Employee Pension Plan shall form part of this collective agreement. It is understood and agreed that the Joint Pension Advisory Committee is not a negotiating committee and does not have authority to make any changes in pension involving any additional cost to either the employee or the Corporation.

- 39.02** No changes will be made to the current Pension Plan except through the recommendation of a majority of the Joint Pension Advisory Committee and the approval by the Board of Directors.
- 39.03** The Joint Pension Advisory Committee will be comprised of five (5) members. Two (2) representatives of the Union, one (1) out of scope employee representative, one (1) management representative, and one (1) representative of the Board of Directors, or their delegate.
- 39.04** The Joint Pension Advisory Committee will as a minimum review the following information annually:
- a. Total employee contributions;
 - b. Total employer contributions;
 - c. Funded status of the plan; and
 - d. Reviewing the investment status of the plan.

Article 40

Group RRSP

- 40.01** a) All new permanent employees entering the Corporation shall automatically participate in the Group RRSP plan.
- b) Participants in the Group RRSP plan contribute six percent (6%) of base salary. The Corporation matches the participant's contributions six percent (6%).
- c) Employees may elect to make personal contributions in excess of the amounts stipulated above but they are not matched by the Employer.
- d) A term employee upon commencement of their third (3rd) continuous year of employment may choose to be covered by the provisions of this Article.

Article 41

Group Insurance Plan

- 41.01** For the duration of this agreement the parties agree premium cost sharing for the group insurance benefit plans will remain unchanged and that levels of benefits will not be reduced unless by mutual agreement. For clarity, benefits in this regard are based on base salary plus northern allowances plus location allowances.
- 41.02** Basic Life, AD&D, Dependent's Life
- a) For information purposes the Employer pays 100% of the premium cost for Basic Life Insurance, Accidental Death and Dismemberment, Dependent Life Insurance, Dental and Extended Health Insurance (including Pay Direct Drug (PDD) cards and Electronic Data Interchange (EDI)). Employees pay 100% of the cost of Short and

Long Term Disability Insurance, and Optional Life and Optional Dependant Life Insurance if they elect to participate in the latter two benefit plans.

- b) Provided that the Employer fulfills its responsibility to pay its share of the premiums, and deduct the employee's share of their premiums, for the applicable benefit coverage, the Employer cannot be held responsible or liable for the rejection of any claim by the carrier(s).

Article 42

Discipline

- 42.01** The parties agree that the Corporation has the right to discipline and discharge for just cause. The purpose of discipline is corrective as opposed to punitive.
- 42.02** Where the Corporation intends to impose a written reprimand, suspension or discharge on an employee it will provide written reasons for the disciplinary action
- 42.03** The Corporation shall notify the Union that such discipline has occurred.
- 42.04** When an employee is required to attend a meeting for the purpose of discussing their conduct or actions that may result in disciplinary action or to render a disciplinary decision or notice of termination regarding that employee, the employee is entitled to have a representative of the union attend the meeting.
- 42.05** Any formal disciplinary notice placed on the employee's personnel file shall become null and void and not used in any future disciplinary decision after the employee attains a clear work record for twenty-four (24) months from the time of the last notice.
- 42.06** No member of the bargaining unit shall be forced to discipline another member of the bargaining unit.

Article 43

Term of Agreement

- 43.01** This agreement shall be binding and remain in effect from January 1, 2008 to December 31, 2010, and from year to year thereafter when notice has been given pursuant to Article 43.05.
- 43.02** Unless otherwise agreed by the parties, all provisions of the Agreement take effect January 1, 2008, or the date of ratification of both parties, or the date of the Arbitration decision pursuant to Article 44, whichever is later.
- 43.03** The provisions of this agreement shall remain in effect during negotiations for its renewal and until a new agreement becomes effective.
- 43.04** Except as provided within the collective agreement, where notice has been given under

Article 43.05, salaries and other conditions of employment will not be altered without consent by or on behalf of the employees affected during collective bargaining.

- 43.05** a) Within four (4) months preceding the expiry of this Agreement either party may by written notice require the other party to commence bargaining within twenty (20) days and that a full exchange of all proposals will take place in that time period.
- b) If collective bargaining is not concluded within one (1) month preceding expiry, then unless mutually agreed by the parties to continue collective bargaining, the provisions of Article 44 will be triggered and arrangements will be made to convene an arbitration board with a view to having the arbitrated collective agreement prior to expiry.
- c) Either party may apply to the Minister of Labour for the appointment of a Conciliation Officer pursuant to the Canada Labour Code.

Article 44

Collective Bargaining – Interest Arbitration

- 44.01** a) The Arbitration Board shall consist of a nominee of the Corporation and a nominee of the Union; such nominees shall elect within seven (7) days of the appointment of the second of them, a third person who shall be Chair. In the event the two nominees fail to agree upon a Chair, the appointment of a Chair shall be made forthwith by the Chief Justice of the Federal Court of Canada, Trial Division, upon request of either nominee. The nominees of the Corporation and the Union must be conveyed in writing to the other party within seven (7) days of the parties agreeing to go to arbitration pursuant to article 43.05.
- b) The Board by its decision may alter, amend, change or delete the matters referred to it for settlement and determination;
- c) The Arbitration Board shall issue an award in writing and the decision is final and binding upon the Corporation and the Union and upon an employee affected by it. The decision of a majority is the award of the Board.
- d) Prior to the Arbitration Board convening, the parties agree to exchange a complete list of those items not yet resolved.
- 44.02** Each party shall bear the expenses of its respective nominee to the Board and the two parties shall bear equally the expenses of the Chair.

Article 45

Wage Schedules

- 45.01** The Wage Schedules respectively annexed hereto, are hereby incorporated into and made part of this Agreement and shall apply for as long as this Agreement remains in force and

effect. Further, any changes to the Collective Agreement or addendum as officially agreed to and signed by both parties shall be attached to and form part of this Collective Agreement.

Article 46

Apprentices

46.01 Apprentices will be compensated not less than the applicable level of the apprenticeship rate listed below for the applicable journey pay range or within the applicable journey pay range at the discretion of the Corporation.

46.02 Employees enrolled in recognized apprenticeship programs must successfully meet all apprenticeship requirements before being advanced.

46.03 Apprenticeship Rates

Training Term	1-1	1-2	2-1	2-2	3-1	3-2	4-1	4-2
% of Journey Rate	60%	65%	70%	75%	80%	85%	90%	95%

Notes: Training Term 1-1 = first year apprentice, first term; 1-2 first year apprentice, 2nd term, etc.

When the Corporation enrolls an employee in a recognized apprenticeship program, the employee shall be reclassified to the applicable journeyed job classification upon successful completion of the full program and receipt of the journey ticket.

Article 47

Injury on Duty Leave

47.01 To assist permanent employees on leave due to a work related injury, the employer will advance employees the wages WCB would normally provide during the WCB claims approval process. Employees will reimburse the Employer for any funds advanced. Employees shall earn vacation credits for the first thirty (30) calendar days of such leave.

Article 48

Loss or Theft of Personal Property

48.01 a) Upon submission of reasonable proof of loss or theft, the Corporation shall indemnify, pursuant to paragraph (b) below, with respect to loss or theft of personal property of an employee while on duty caused by the actions of a person, and provided such personal property is an article of use or wear of a type suitable for use while on duty.

- b) The responsibility of the Corporation to indemnify an employee under paragraph (a) above shall be limited to reimbursing the employee:
 - i. for the deductible costs, up to a maximum of \$200.00, associated with his/her insurance coverage for loss or theft of the personal property; or,
 - ii. if the employee does not have such insurance coverage, to a maximum of \$200.00.

LETTER OF UNDERSTANDING #1

NORTHERN ALLOWANCES

The parties agree to re-open the collective agreement in the event the Corporation is transferred or devolved to another organization where succession rights under the Canada Labour Code do not apply. The re-opener will be confined to the integration of the Northern Allowances into the base salary. Other matters may be included in the re-opener by mutual agreement only. The parties to this collective agreement must ratify any changes as a result of this Memorandum of Agreement. This Memorandum of Agreement forms part of the collective agreement.

LETTER OF UNDERSTANDING #2

VOLUNTEER ACTIVITIES

The parties both recognize the value of employee's participation in volunteer activities of an essential nature to the community.

In recognition of the importance of such activities the employer agrees that employees who are Volunteer Fire Fighters, Ambulance Attendants, Search and Rescue, Auxiliary RCMP Officers (if responding to an emergency), and/or Victim Services Volunteers will be provided two (2) clear hours for each hour of voluntary activity, to a maximum of eight (8) clear hours, from the end of the volunteer activity until their reporting time without loss of salary.

The following examples are to provide clarity on the application of this Letter:

Activity Completed	Duration of Activity (Hours)	Clear Hours	Regular Start Time	Adjusted Start Time
3:00 a.m.	3 hours	6 hours	8:00 a.m.	9:00 a.m.
5:00 a.m.	4 hours	8 hours	8:00 a.m.	1:00 p.m.
7:00 a.m.	1 hour	2 hours	8:00 a.m.	9:00 a.m.

LETTER OF UNDERSTANDING #3

RECOGNITION OF SUPERVISOR REPRESENTATION DURING CONFLICT RESOLUTION PROCESS FOR TWO BARGAINING AGENCY EMPLOYEES

Yukon Energy Corporation (The “Corporation”) recognizes the right of an employee to be represented by a Union Representative of the Public Service Alliance of Canada (The “Union”).

The parties recognize that from time to time, conflict resolution situations may arise between two members of the Union – a Supervisor and a subordinate employee. The parties also recognize that when a union member is assigned to perform management/supervisory functions over another union member, the Corporation will represent that member as if they are a management representative and that member shall be deemed to be outside the Objectives stated in the PSAC Constitution. Under such circumstances, the Supervisor shall be assisted and represented by Management at each stage of the conflict resolution process.

In addition, the Corporation shall bear the expenses of the Supervisor in the conflict resolution process.

The Employer shall have the same obligations and duties of fair and diligent representation as that of the Union and will be responsible for such representation or lack thereof.

LETTER OF UNDERSTANDING #4

PENSION PLAN CHANGES

1. Removing Contributions Cap

You contribute 3.5% of your Earnings up to the Year’s Maximum Pensionable Earnings (YMPE) and 5% of your Earnings that are in excess of the YMPE.

2. Pensionable Service

For periods of disability to count as Pensionable Service, the member must make their contribution and the Corporation will make its contribution for the period of the leave.

For periods of unpaid leave excluding disability leave to count as Pensionable Service, the member must make both their contributions and the Corporation’s contributions for the period of leave.

LETTER OF UNDERSTANDING #5

FLEX TIME

Where a non-shift employee requests and where the Corporation in its discretion (such discretion to be exercised in a fair and reasonable manner) agrees to:

1. Vary the start and finish times of an employee; or
2. Change the hours of work per day, extended or compressed, to a maximum of twelve (12) hours per day so as to average forty (40) hours per week over a predetermined period of time. Authorized overtime rates apply after forty (40) hours of work per week averaged over the predetermined period of time.

It is understood that such change will not result in any additional costs to the employer (e.g., shift premiums, overtime premiums, etc.) or any reduction of service.

In addition, the change of start times will not constitute a change in the normal day's work as per Article 13.01(a); nor will it constitute rescheduled normal hours as per Article 13.01(c).

Should the Corporation discontinue or not allow the above changes then that decision is not grievable for the first nine (9) months after ratification. Either party upon thirty (30) days notice, following meaningful consultation between the parties, can terminate this Letter of Understanding.

LETTER OF UNDERSTANDING #6

ACTING EXCLUDED POSITIONS

The parties agree that employees covered by this Collective Agreement will not be assigned to act in an excluded position, outside the bargaining unit on a temporary basis without their agreement.

The parties agree that employees covered by this collective Agreement and are assigned, to act in an excluded position for a period of more than two (2) continuous working days, outside the bargaining unit on a temporary basis shall:

- a) Continue to accumulate seniority;
- b) Be paid the greater of:
 - i. their minimum salary for the temporary position, or
 - ii. their present salary plus five percent (5%).
- c) All other provisions of the Collective Agreement apply (excluding Article 14.06)

LETTER OF UNDERSTANDING #7

PLANT OPERATORS AND SYSTEMS CONTROL CENTRE OPERATORS

Within three (3) months, the Corporation will endeavour to audit Plant Operator timesheets back to January 1, 2005 to ensure proper compensation of designated paid holidays.

In addition, the parties agree to commence within three (3) months of the signing of the collective agreement a review of the following issues:

1. Administration of the scheduling provisions of the collective agreement.
2. Floater positions for coverage or specific projects.
3. Whitehorse coverage on Saturdays and Sundays.
4. Maximum number of days scheduled in a row.
5. Consecutive days of rest.
6. Distribution of overtime.
7. Use of maintenance days in scheduling.

Any changes to the collective agreement resulting from the above review will be recommended to the Negotiating Committees.

The committee will consist of at least one local officer, one Plant Operator, one Systems Control Centre Operator and a representative of the Public Service Alliance of Canada. The employer may appoint up to four (4) representatives to sit on the committee. Time spent on the committee shall be at no loss of pay for bargaining unit members.

In addition to the issues outlined above, the proposals tabled by the union in November 2007 to deal with these issues (i.e., 13.06(f); 13.02(h); 13.03(f); 13.03(g)) shall be included in the committee's work.

In the event the committee fails to provide recommendations to their respective negotiating teams or the negotiating teams fail to reach agreement on any issue that requires the collective agreement to be amended, such issue shall be the subject of Arbitration as per article 44. The negotiating teams will convene within thirty (30) days of receiving the committee's recommendations.

IN WITNESS WHEREOF the Corporation has hereunto affixed its corporate seal, duly authenticated by the signature of its proper officers thereunto authorized, and the Union has caused these presents to be executed, all as of the day and year first above written.

**FOR THE YUKON ENERGY
CORPORATION LIMITED**

**FOR THE PUBLIC SERVICE ALLIANCE OF
CANADA (YUKON EMPLOYEES' UNION
Local Y024)**

David Morrison

Darrell Johnson

Linda Greer

Ken Sawyer

Dave Wray

Ed Peake

Ed Mollard

Melaine Fillion

Jim Brohman

Jean Francois Des Lauriers

Wage Schedule
1-Jan-08
(+3.75%)

Level	Annual Min	Hourly Min	Annual Max	Hourly Max
1	23,276	11.19	27,385	13.17
2	26,910	12.94	31,660	15.22
3	30,971	14.89	36,438	17.52
4	35,889	17.25	42,222	20.30
5	41,447	19.93	48,760	23.44
6	47,858	23.01	56,304	27.07
7	55,553	26.71	65,356	31.42
8	64,530	31.02	75,917	36.50
9	70,877	34.08	83,385	40.09
10	74,542	35.84	87,697	42.16
11	78,776	37.87	92,678	44.56

Wage Schedule
1-Jan-09
(+3.5%)

Level	Annual Min	Hourly Min	Annual Max	Hourly Max
1	24,091	11.58	28,343	13.63
2	27,851	13.39	32,768	15.75
3	32,055	15.41	37,713	18.13
4	37,145	17.86	43,700	21.01
5	42,898	20.62	50,467	24.26
6	49,533	23.81	58,275	28.02
7	57,497	27.64	67,644	32.52
8	66,789	32.11	78,574	37.78
9	73,358	35.27	86,303	41.49
10	77,151	37.09	90,766	43.64
11	81,534	39.20	95,922	46.12

Wage Schedule
1-Jan-10
(+3.5%)

Level	Annual Min	Hourly Min	Annual Max	Hourly Max
1	24,934	11.99	29,335	14.10
2	28,826	13.86	33,915	16.31
3	33,177	15.95	39,033	18.77
4	38,445	18.48	45,229	21.74
5	44,399	21.35	52,233	25.11
6	51,266	24.65	60,314	29.00
7	59,510	28.61	70,011	33.66
8	69,127	33.23	81,324	39.10
9	75,925	36.50	89,324	42.94
10	79,852	38.39	93,943	45.16
11	84,387	40.57	99,279	47.73

1 **REFERENCE: Table 3.9**

3 **TOPIC: Administration**

5 **PREAMBLE:**

7 Yukon Electrical requires more detail to understand costs.

9 **QUESTION:**

11 a) For information systems for 2005-2009 provide:

- 12 i. costs by system;
- 13 ii. for each system provide breakdown of costs by service; and
- 14 iii. for each service provide units provided and rates.

16 b) For general costs for 2005-2009, please provide details of each component over
17 \$50,000.

19 c) Recruitment costs:

- 20 i. Please provide details of what comprises recruitment costs in each of
- 21 2005-2009; and

22 d) Board of Directors:

- 23 i. Please provide details of costs including fees paid to Directors for
- 24 attendance at meetings, retainers, etc; and
- 25 ii. If a market study to determine whether Directors' fees are at market has
- 26 been conducted, please provide; and
- 27 iii. If a market study has not been undertaken what steps has YEC
- 28 performed to ensure Directors' fees are not above market.

30 e) Out of scope labour:

- 31 i. If a market study to determine whether out of scope salaries are at market
- 32 has been conducted, please provide; and
- 33 ii. If a market study has not been undertaken what steps has YEC
- 34 performed to ensure out of scope salaries are not above market.

ANSWER:

(a)

There are no fees included in the information systems numbers included in Table 3.9 on page 3-10.

Costs incurred for information technology as set out in Table 3.9 are as follows:

\$000s	2005 Actuals	2006 Actuals	2007 Actuals	2008 Forecasts	2009 Forecasts
Annual Software Maintenance	25	42	93	124	183
Consultants	94	108	137	100	112
Contractors		51	41		
Data Circuit	10	11	34	30	31
Legal	24				
Service/Maintenance	26	7	12	50	51
Small Hardware (<300)	4	25	8	20	21
Small items routinely under \$15k	30	21	16	27	27
	215	267	343	353	427

YECL-YEC-1-33(a)(i) provides available information on licencing fees, which are a component of Annual Software Maintenance.

(b)

The Administration-General category is characterized by a large number of small charge items. Consequently, the \$50,000 cutoff proposed in the question is insufficient to define a large number of the charges to this account. The table below provides all spending on items over \$25,000 to better suit the nature of this category.

	2005 Actuals	2006 Actuals	2007 Actuals	2008 Forecasts	2009 Forecasts
\$000s					
Consultants	123	179	69	144	147
Finance Software Lease	177	177	177	177	150
Legal	121	104	59	77	79
Stationary / Office Supplies	40	29	40	33	33
Telephone & Fax	50	47	40	45	46
FN Apprenticeships	31	31	32	32	33
Corporate memberships	31	33	36	37	38
Small items routinely under \$25k	297	205	144	200	208
Total	870	805	597	745	734

Other than 2007, which had lower than average use of consultants and legal services, the Administration-General expenses have been on a relatively stable decline since 2005.

(c)

Details of the recruitment costs in each of 2005-2009 are as follows:

\$000s	2005 Actual	2006 Actual	2007 Actual	2008 GRA	2009 GRA
Consultants	76	14	34	60	62
Relocation	65		64	70	72
Interviewing Costs	30	5	83	35	36
	170	19	181	165	169

Consultants: This cost covers recruitment agencies. YEC uses five different recruiting firms, each of which may specialize in a type of recruiting, i.e. trades, engineers, or management. Some firms require a non-refundable down payment of up to \$2,000, while others do not. Firms may charge anywhere from 16% to 22% of total compensation for a successful recruitment.

Relocation: This cost covers the following:

- House hunting trip for employee and spouse of not longer than five days which includes expenses for airfare, necessary transportation (i.e., taxis), accommodation, meals and incidentals at the Corporation's per diem rates.

- Expenses for moving household and personal effects from previous residence to new residence. This includes effects to a maximum of 4,500 kilograms, contents insurance and storage costs for a maximum of 60 days where an employee is not able to move into their new home right away.
- Reimbursement of travel expenses for employee and their dependents including cost of airfare or mileage, necessary transportation (i.e., taxis), accommodation, meals and incidentals at the Corporation's per diem rates.
- If an employee cannot move into their new home upon arrival, temporary accommodation up to a maximum of 21 days is provided, if a house-hunting trip was not utilized, and up to 14 days if a house-hunting trip was utilized.
- Real estate expenses which include real estate commission and legal fees for selling current home and for legal fees, required legal survey costs and appraisal fees for financial purposes in purchasing their new homes.

Interviewing Costs: This cost includes advertising and travel costs associated with bringing prospective candidates up to Whitehorse for interviewing.

(d)

(i)

Details on costs for the Board of Directors are provided below.

\$000s	2005 Actuals	2006 Actuals	2007 Actuals	2008 Forecasts	2009 Forecasts
Consultants	64	11	53	25	26
Honoraria	71	65	85	93	95
Small items routinely under \$10k	20	14	28	26	27
Total	157	93	168	146	149

1 **(ii) and (iii)**

2
3 No new studies have been completed since 2005. Please see report (Compensation of
4 Boards of Directors 2003) provided as Attachment 1 provided to this response which
5 was used by Yukon Energy in establishing Board of Director's fees for 2005.

6
7 **(e)**

8
9 **(i) and (ii)**

10
11 In 2006 Yukon Energy accessed Hay Group survey data for Canada to develop pay
12 grids for out of scope positions. Hay Group made the following assumptions regarding
13 the population of jobs at Yukon Energy, including where Yukon Energy would be
14 attracting employees from, and where Yukon Energy might lose employees to:

- 15
16 • **National:** Hay Group used a national market since, at this level, Yukon Energy
17 expects to attract individuals from outside the region.
18
19 • **Utilities Sector:** Hay Group used the Utilities sector database, since Yukon
20 Energy looks for managers and professionals with some knowledge and
21 experience in this area.

List of companies in the Utilities Sector		
Bluewater Power Distribution Corporation	BC Hydro and Power Authority	Bruce Power
Burlington Hydro Inc.	Duke Energy Gas Transmission	Emera Inc.
Enbridge Gas Distribution Inc	Enersource Hydro Mississauga	ENWIN Utilities Ltd.
EPCOR	Fortis Ontario Inc	Halifax Regional Water Commission
Horizon Utilities Corporation	Hydro One Brampton Inc	Hydro One Inc.
Hydro Ottawa Limited	Maritime Electric Company	Maxim Power Corp
NB Power Holding Corporation	Newfoundland and Labrador Hydro	Newfoundland Power Inc.
Northwest Territories Power Corporation	Nova Scotia Power Inc.	Oakville Hydro Corporation
Ontario Power Generation Inc.	Oshawa PUC Networks Inc.	SaskEnergy Incorporated
SaskPower	Terasen Gas	Toronto Hydro Corporation
Trans Energy Corporation	Union Gas Ltd.	Whitby Hydro Energy Corporation
Yukon Energy Corporation		

- **Executive Level versus All Jobs:** Hay Group used the executive market data for the jobs that form the core of the executive team.

- **Job Families:** Hay Group used all job families since there is a wide spectrum of jobs within the organization; this also ensured the data base was not narrowed down.

Hay Group used the median or P50 of the market plus 5% as the midpoint of the grade. This positioned Yukon Energy's base salary policy line roughly midway between P50 and P75, and serves to reflect the fact that Yukon Energy is smaller and in a more remote location than most of the companies in the sector where individuals will not have the support networks to call upon that may be found in larger organizations and more populated areas).

- 1 A copy of the Hay Group market survey cannot be provided as it is proprietary in nature
- 2 and retaining confidentiality of the Hay Group report was part of the terms of Yukon
- 3 Energy's contract with the firm.



Compensation of Boards of Directors 2003



Compensation of Boards of Directors Increased Pay Reflects Greater Responsibilities

HUMAN RESOURCE MANAGEMENT

The Conference Board of Canada
Insights You Can Count On



Compensation of Boards of Directors 2003
by Stacey Koumantaros

About The Conference Board of Canada

The Conference Board of Canada is the foremost independent, not-for-profit applied research organization in Canada. We help build leadership capacity for a better Canada by creating and sharing insights on economic trends, public policy issues, and organizational performance. We forge relationships and deliver knowledge through our learning events, networks, research products, and customized information services. Our members include a broad range of Canadian organizations from the public and private sectors. The Conference Board of Canada was formed in 1954, and is affiliated with The Conference Board, Inc. that serves some 3,000 companies in 67 nations.

Preface

This, the 15th edition of the Compensation of Boards of Directors, summarizes the results of The Conference Board of Canada's biennial survey on the fees, retainers, and other compensation received by directors for board and committee service. Between December 2002 and January 2003, a questionnaire was sent to 674 predominately large and medium-sized organizations operating in a variety of regions and sectors. A total of 162 respondents chose to participate in this survey, giving a response rate of 24 per cent. We owe a special vote of thanks to the many executives, usually corporate secretaries, who completed the questionnaire and to the many organizations that continue to participate year after year. This report reflects their commitment to improving corporate governance standards in Canada.

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Introduction

This report updates the 2000 survey of compensation levels and practices of boards of directors. It provides benchmark data on compensation practices and summarizes various key factors in the board operations of a cross-section of the Canadian business community. The data were collected in December 2002 from 162 responding firms across 15 industry classifications (see Appendix 3 for Respondents' Profile).

HIGHLIGHTS

- The average annual potential compensation for outside directors increased by 29 per cent (from \$18,939 to \$24,428) over the last two years. A core group of 48 companies provided data in 2000 and 2002, from which these numbers are derived. The increased compensation reflects the greater responsibilities and accountability of board members.
 - Compensation for members of boards of directors varies significantly depending upon the organization's size, sector, and industry. Overall, potential compensation ranges from a low of \$580 per year for a medium-sized Crown corporation to a high of \$122,946 for a large company in the manufacturing industry. The average amount of compensation in all responding organizations is \$21,943.
 - Median retainers and fees are \$12,000 and \$1,000, respectively. The general manufacturing industry reports the highest potential compensation, at \$40,995, followed by communications and telecommunications at \$31,135, and oil and gas at \$28,371.
 - Directors on the boards of the 10 largest private sector organizations categorized by assets receive an average of \$60,856, compared with \$31,315 for all large organizations in the survey.
 - Compensation for board members of public sector corporations averages \$8,108. This compares to \$27,509 for private sector directors, and \$14,836 for non-profit organizations.
 - The use of stock as an element of outside director compensation continues to increase.¹ Ninety-one per cent (up from 85 per cent two years ago) of all publicly traded responding firms (n=77) promote stock ownership by means of compensation in the form of stock, equity ownership programs, or guidelines regarding stock ownership. Directors in the majority of publicly traded companies hold shares. In 97 per cent of these firms, at least one director holds shares. On average, 88 per cent of directors on these boards currently hold shares. The number of organizations reporting stock ownership guidelines has increased to 57 per cent of the responding organizations (44 per cent mandatory and 13 per cent non-mandatory), up from 36 per cent in 2000.
-
- This report finds that the average amount of compensation in all responding organizations is \$21,943.**
-
- Organizations continue to focus on the effectiveness and assessment of the board and its members. Since 2000, there have been significant increases particularly in the prevalence of position descriptions, formal written limits to authority levels, and formal orientation programs, as well as in performance evaluations for the board as a whole and for individual board members.
 - The average board has 12 directors (10 outside directors and 2 inside directors) and holds seven meetings per year, each lasting approximately five hours. In 79 per cent of responding organizations, directors are appointed for a specific term, the average being 2.1 years. The average tenure of board members is 6.4 years.
 - The proportion of organizations with female directors continues to rise, up from 73 per cent in 2000 to 76 per cent in 2002. However, the percentage of women directors remains low, at 17 per cent. Only 9 per cent of board chairs are women.

¹ Figures in this chapter refer to publicly traded companies. Privately held organizations that reported some share activity were excluded.

CHAPTER 1

Composition and Meetings of the Board

INSIDE AND OUTSIDE DIRECTORS

The vast majority of directors (87 per cent) are outside directors (see Table 1).¹ Of those directors, 64 per cent are fully independent. On average, boards are composed of 10 outside directors and 2 inside directors. The proportion of outside directors is greater on public sector boards (91 per cent) than on

private sector boards, where 82 per cent of directors are outside directors. On non-profit boards, 89 per cent of directors are outside directors,² a percentage that lies between the private and public sector boards.

WOMEN DIRECTORS

Survey data indicate that of the 162 responding companies, 76 per cent have women directors on their boards, up from 73 per cent in 2000, and 65 per cent in 1998 (see Chart 1). Ninety-five per cent of public sector corporations have women directors, whereas 64 per cent of private sector companies have at least one female director. Large organizations are more likely than medium-sized or small firms to have women on their boards; however, the percentage gap between the company sizes has decreased significantly. The percentages are 88 per cent, 75 per cent, and 65 per cent for large, medium, and small firms, respectively, up from 86 per cent, 51 per cent, and 50 per cent in 2000. All not-for-profit respondents (n=17) reported having at least one woman director on their board.

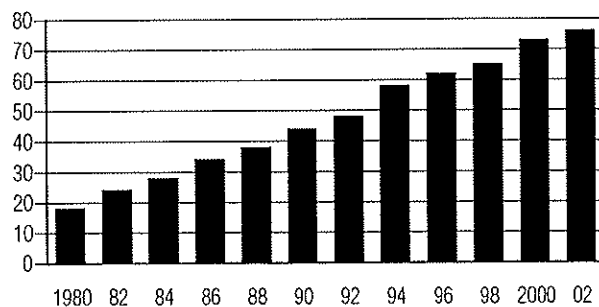
Women outside directors continue to be more prevalent than their inside counterparts. Of the total number of inside directors, only 7 per cent are women. This contrasts with 19 per cent of outside directors. Women constitute only 9 per cent (up from 8 per cent in 2000) of board chairpersons and 17 per cent (up from 15.9 per cent in 2000) of the 1,835 directors included in this survey. The overall representation of women on boards continues to improve—it has more than tripled since 1990. However, other Conference Board research has found that this growth in representation may now have reached a plateau, following a strong increase in the mid-1990s.³

Table 1
Inside and Outside Directors, by Gender
(n=158)

	No.	%
Outside Directors		
Male	1,290	
Female	300	
Total outside directors	1,590	87
Inside Directors		
Male	228	
Female	17	
Total inside directors	245	13
Total number of directors	1,835	100

Source: The Conference Board of Canada.

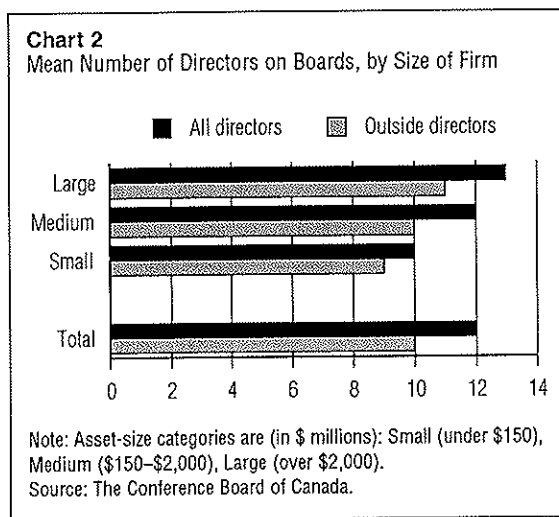
Chart 1
Percentage of Firms with Women on Their Boards



Source: The Conference Board of Canada.

SIZE OF BOARD OF DIRECTORS

The total number of directors on a board ranges from 4 to 30. The average number of directors is 12. Differences in board size occur among industries. The largest boards are found in health and education, which have an average of 20 members, followed by financial services and trade (wholesale/retail), which each have an average of 14 members. The two industries—food, beverage, and tobacco; and transportation and utilities—each average 12 board members. The business/professional services industry reports the smallest boards, with an average of seven board members. Chart 2 provides additional details on the average number of directors on boards.



CHARACTERISTICS OF BOARD MEMBERS

In 79 per cent of responding organizations, directors are appointed for a specific term. The average is 2.1 years (see Table 2). Given that multiple terms are common, the average tenure of board members is 6.4 years. Twenty-six per cent of respondents report that their organizations have an official retirement age for directors, with the median age being 70.

Table 2
Characteristics of Board Members

	Years
Average term* (n=109)	2.1
Average tenure (n=129)	6.4
Average official retirement age** (n=41)	70.4

*79 per cent of respondents appoint directors for a specific term.
**26 per cent of respondents have an official retirement age.

Source: The Conference Board of Canada.

FREQUENCY AND DURATION OF BOARD MEETINGS

On average, boards of directors meet seven times per year; the overall number of meetings ranges from 3 to 52. Regular board meetings last from 20 minutes at the shortest end to 16 hours at the longest end. The average board meeting lasts five hours and has a 92 per cent attendance rate.

ELECTRONIC COMMUNICATION

The use of electronic communication methods, such as conference calls and closed circuit television, is prevalent. A full 65 per cent of respondents use these methods. Of these, 63 per cent pay directors for their participation at the same level they do for regular, face-to-face meetings. Twenty-eight per cent of respondents pay directors for their participation at a lower level than they do for regular, face-to-face meetings, while 9 per cent of respondents do not remunerate their directors for electronically held meetings.

1 An "outside director" is defined as a member of the board of directors who is not a current employee of the company. Former or retired employees and employees of a parent, controlling, or subsidiary company are considered to be outside directors. An "inside director" is defined as a full-time employee of the respondent firm, parent, controlling, or subsidiary company, who, in addition to assuming regular duties as an employee, sits on the board of directors. "Fully independent directors" are free from any material interest affecting their relationship with the company that dates back within the past five years. Please refer to the *Sarbanes-Oxley Act* or Securities Exchange Commission regulations for guidance. A more detailed description is also found noted in the *Canadian Directorship Practices: Composition, Role and Compensation of Boards of Directors* questionnaire on page 5.

2 Public sector board, as defined here, is the board of a Crown corporation or agency (public enterprise).

3 See the Conference Board study by David A.H. Brown, Debra L. Brown, and Vanessa Anastasopoulos, *Women on Boards: Not Just the Right Thing... But the "Bright" Thing*, (Ottawa: The Conference Board of Canada, 2002), pp. 4, 13–14. The study covers in detail the relationship between female representation on boards of directors and elements of board governance that contribute to improved organizational performance.

CHAPTER 2

Compensation for Regular Board Service

POTENTIAL COMPENSATION LEVELS FOR OUTSIDE DIRECTORS: 2002

Compensation for members of boards of directors varies significantly, depending upon the size, sector, and industry. This makes drawing comparisons quite challenging. The method of payment and number of meetings also affect the potential compensation of board members. Tables 3 and 4 illustrate the differences that these factors make on the compensation paid to outside directors among the 162 organizations participating in this year's survey. Appendix 1 offers an overall comparison of boards by sector, and Appendix 2 offers full details on a case-by-case basis.

Table 3
Compensation of Outside Directors for Regular Board Service, Overall Sample
(n=139)

	Mean (\$)	Median (\$)	Range (\$)
Annual retainers	17,025	12,000	1,500-100,000
Per-meeting fees	1,005	1,000	20-2,334
Per diems	723	408	145-4,669
Other compensation*	9,043	6,000	1,000-25,000
Number of meetings per year	7	6	3-26
Potential compensation	21,943	17,000	580-122,946

*Other compensation (n=7) includes travel premiums and money to buy shares.

Source: The Conference Board of Canada.

Table 4
Potential Compensation of Outside Directors for Regular Board Service, by Asset Size, Sector, Ownership, and Industry

	Mean (\$)	Median (\$)	Range (\$)
Small (n=40)	14,043	10,800	1,170-60,695
Medium (n=50)	19,077	15,000	580-77,000
Large (n=49)	31,315	25,000	1,820-122,946
Private sector companies (n=96)	27,509	22,250	1,820-122,946
Public sector corporations (n=34)	8,108	7,450	580-23,330
Non-for-profit corporations (n=9)	14,836	12,000	4,675-32,000
Publicly traded (n=75)	30,624	25,000	7,000-122,946
Privately held (n=64)	11,770	9,322	580-60,695
Food, beverage, and tobacco (n=3)	16,317	13,750	5,200-30,000
Chemical, pharmaceutical, and allied products (n=5)	21,652	18,000	3,000-56,759
Other general manufacturing (n=10)	40,995	23,500	7,000-122,946
Oil and gas (n=7)	28,371	35,000	8,000-45,500
Primary industries (n=9)	24,500	22,500	11,400-37,600
Transportation and utilities (n=21)	18,633	18,000	4,000-46,683
High technology (n=3)	21,267	14,000	12,800-37,000
Financial services, real estate, and holding (n=31)	20,985	13,000	1,500-77,000
Communications and telecommunications (n=9)	31,135	26,000	13,000-77,815
Business/professional services (n=10)	14,018	12,100	6,200-32,000
Construction and construction products (n=5)	27,380	27,500	18,000-36,000
Health and education (n=6)	2,735	2,200	580-5,250
Government/not for profit (n=9)	6,226	4,500	1,065-23,300
Trade (wholesale/retail) (n=7)	27,242	23,000	4,610-53,025
Other (n=4)	34,438	21,000	8,750-87,000

Note: Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150-\$2,000), Large (over \$2,000).

Source: The Conference Board of Canada.

Overall, potential compensation ranges from a low of \$580 per year for a medium-sized Crown corporation to a high of \$122,946 for a large company in the manufacturing industry, with an average of \$21,943 across all responding organizations. Median retainers and fees are \$12,000 and \$1,000, respectively. The highest compensation levels are found in the general manufacturing industry at \$40,995, followed by communications and telecommunications at \$31,135, and oil and gas at \$28,371.

Tables 5 and 6 contain information on annual compensation to outside directors for regular board service for the 10 largest private sector organizations. Average compensation for directors in these organizations is significantly higher than that for large companies overall. Annual compensation for directors on the boards of the 10 largest organizations categorized by sales/service revenue averages \$52,414. Directors on the boards of the 10 largest private sector organizations categorized by assets receive an average of \$60,856, compared to \$31,315 for all large organizations in the survey.¹

Almost 60 per cent of respondents have adjusted the compensation of their board members since 2000. Participants report that they make adjustments approximately every 49 months. Compensation increases for directors of organizations responding to both the 2000 and 2002 surveys were attributed to multiple factors (see Chart 3). Approximately three-quarters increased the retainer amounts; 46 per cent increased per-meeting fees; 21 per cent increased the number of meetings; and 39 per cent increased per-diem fees.

COMPENSATION INCREASES FOR OUTSIDE DIRECTORS: 2000 TO 2002

A core sample comparison of 48 respondents participating in both the 2000 and 2002 surveys reveals strong increases in the compensation of outside directors for regular board service. Among these organizations, the overall average annual potential compensation to outside directors for regular board service increased by 29 per cent, from \$18,939 to \$24,428 between 2000 and 2002 (see Table 7).²

In sectors where there was more than one organization for the core sample comparison, the highest increase was in the government/not-for-profit sector at 56 per cent,

Table 5
Annual Compensation of Outside Directors* for Regular Board Service,
10 Largest Private Sector Firms by Revenue

Company	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Potential compensation (\$)
1	9	30,000	1,500	43,500
2	10	30,000	1,500	45,000
3	9	30,000	2,000	48,000
4	26	77,815	n.a.	77,815
5	6	77,815	2,334	122,946**
6	15	22,000	2,000	77,000**
7	7	35,000	1,500	45,500
8	4	25,000	1,250	30,000
9	10	30,000	1,250	42,500
10	8	75,000	1,500	87,000
Mean	10	43,263	1,648	52,414
Median	9	30,000	1,500	46,750

*Outside directors are non-employees of the company who sit on the board of directors. Former or retired employees are considered to be outside directors.

**These organizations also reported other compensation to their outside directors, such as money for travel and to buy shares.

Note: mean revenue of 10 largest private sector firms = \$13,936 million; median revenue = \$13,859 million.

n.a. = not applicable

Source: The Conference Board of Canada.

Table 6
Annual Compensation of Outside Directors for Regular Board Service,
10 Largest Private Sector Firms by Assets

Company	No. of meetings	Annual retainer (\$)	Per-meeting fee & per diem (\$)	Potential compensation (\$)
1	9	30,000	1,500	43,500
2	10	30,000	1,500	45,000
3	8	100,000	n.a.	100,000
4	26	77,815	n.a.	77,815
5	9	20,000	1,200	30,800
6	8	75,000	1,500	87,000
7	6	15,000	1,000	21,000
8	6	77,815	2,334	122,946*
9	7	35,000	1,500	45,500
10	7	35,000	n.a.	35,000
Mean	10	49,563	1,505	60,856
Median	8	35,000	1,500	45,250

*Organization also provides \$4,669 per diem for travel.

Note: mean assets of 10 largest private sector firms = \$46,158 million; median assets = \$18,451 million.

n.a. = not applicable

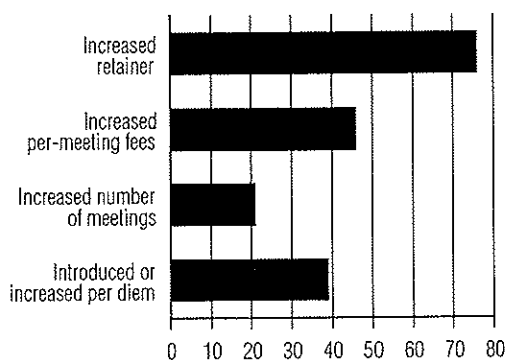
Source: The Conference Board of Canada.

followed by the food, beverage, and tobacco sector at 43.3 per cent (see Table 8). Higher-than-average increases in the retainers, including the introduction of a retainer for one government/non-profit organization, account for the increased average potential compensation in these two sectors.

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-38(d) Attachment 1

Chart 3

Explanation of Compensation Increase
(n=33; percentage of respondents to 2000 and 2002 surveys)



Note: includes multiple responses.
Source: The Conference Board of Canada.

There have been increases in annual compensation to outside directors in firms of all asset-size categories. Increases vary from a low of 23.1 per cent in medium-sized firms to a high of 43.2 per cent in small firms. Directors in large firms received an average increase of 30.5 per cent.

METHOD OF PAYMENT TO OUTSIDE DIRECTORS

The majority of companies (89 per cent) compensate their outside directors for regular board service. The most popular method of compensation is an annual retainer combined with a per-meeting fee and/or per diem (see Chart 4). The retainer represents 78 per cent

Table 7

Annual Compensation of Outside Directors for Regular Board Service, by Size
(48 respondents to 2000 and 2002 surveys)

	No. of firms	2000		2002		Change in mean over 2 years (%)
		Mean (\$)	Median (\$)	Mean (\$)	Median (\$)	
Small	9	6,957	5,075	9,964	7,400	43.2
Medium	15	19,354	13,400	23,822	17,000	23.1
Large	24	23,172	22,000	30,230	24,500	30.5
<i>Overall</i>	<i>48</i>	<i>18,939</i>	<i>15,750</i>	<i>24,428</i>	<i>15,750</i>	<i>29.0</i>

Note: Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).
Source: The Conference Board of Canada.

Table 8

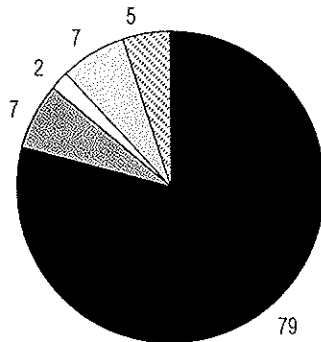
Annual Compensation of Outside Directors for Regular Board Service, by Industry
(48 respondents to 2000 and 2002 surveys)

	No. of firms	2000		2002		Change in mean over 2 years (%)
		Mean (\$)	Median (\$)	Mean (\$)	Median (\$)	
Food, beverage, and tobacco	3	11,387	10,000	16,317	13,750	43.3
Chemical, pharmaceutical, and allied products	1	41,250	41,250	56,759	56,759	37.6
Other general manufacturing	1	76,500	76,500	122,946	122,946	60.7
Oil and gas	2	32,050	32,050	41,300	41,300	28.9
Primary industries	5	23,560	22,000	28,120	24,000	19.4
Transportation and utilities	8	13,663	10,000	18,554	14,725	35.8
Financial services, real estate, and holding	14	22,655	16,500	26,604	19,500	17.4
Communications and telecommunications	1	23,000	23,000	37,000	37,000	60.9
Business/professional services	1	8,500	8,500	16,375	16,375	92.6
Construction and construction products	2	23,240	23,240	27,000	27,000	16.2
Health and education	2	823	823	1,040	1,040	26.4
Government/not for profit	4	5,638	3,150	8,793	5,350	56.0
Trade (wholesale/retail)	3	9,862	6,512	12,723	10,560	29.0
Other	1	17,000	17,000	17,000	17,000	0
<i>Overall</i>	<i>48</i>	<i>18,939</i>	<i>15,750</i>	<i>24,428</i>	<i>15,750</i>	<i>29.0</i>

Source: The Conference Board of Canada.

Chart 4
Method of Payment to Outside Directors for Regular Board Service
(n=139; percentage of respondents)

- Annual retainer, per-meeting fee and/or per diem
- Per-meeting fee only
- ▨ Annual retainer only
- ▤ Per-diem fee only
- ▩ Other combination*



*These organizations pay various combinations of retainers, meeting fees, or per diems, plus additional compensation such as travel and preparation time; money to buy shares, and out-of-province attendance premiums.
Source: The Conference Board of Canada.

of the average value of potential compensation. The remaining 22 per cent of the potential compensation mix, such as per-meeting fees and per diems, is based on attendance.

COMPENSATION OF INSIDE DIRECTORS

Only 9 per cent of responding organizations compensate inside directors for regular board service. The most common method of compensating inside directors is by an annual retainer.

The annual compensation to inside directors averages \$25,936.

1 Organizations by revenue size (in \$ millions): Small (under \$150), Medium (\$150–\$1,000), Large (over \$1,000). Organizations by asset size (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).

2 For the purpose of this study, "total annual potential compensation" or "annual compensation" is defined as compensation received in any form: a per-meeting fee and/or per diem, a retainer, or any combination of these. Attendance at all meetings is assumed. For example, when a firm pays an annual retainer and a per-meeting fee, the total annual compensation is calculated as the per-meeting fee times the number of meetings plus the annual retainer. This figure, as well as the other estimates of total annual potential compensation, has been calculated by The Conference Board of Canada.

CHAPTER 3

Use of Stock

The interest in and promotion of stock as an element of outside director compensation continues to increase.¹ Ninety-one per cent (up from 85 per cent two years ago) of all publicly traded responding firms (n=77) promote stock ownership by means of compensation in the form of stock, equity ownership programs, or guidelines regarding stock ownership. Directors in the majority of publicly traded companies hold shares. In 97 per cent of responding firms with publicly traded shares, at least one director holds shares, while, on average, 88 per cent of directors on these boards currently hold shares (see Table 9). Seventy-two per cent reported that all directors on their boards were shareholders.

Table 9
Prevalence of Stock by Percentage
(n=76; percentage of publicly traded companies)

Where directors receive some or all of retainer/fee in stock	33
Where at least one director holds shares	97
Where all directors hold shares	72
Outside directors who hold shares	88

Source: The Conference Board of Canada.

STOCK AS COMPENSATION

Organizations are using stock in combination with cash to a slightly lesser degree to compensate outside directors for regular board service. Overall, directors in 37 per cent of publicly traded organizations receive all or part of their retainers or fees in company stock, down from 46 per cent in 2000 and 39 per cent in 1998. The decreased use of stock as compensation may be partly due to the use of deferred share units by some organizations in conjunction with cash fees. Retainers are more likely to be paid entirely or in part in stock rather than by per-meeting fees and/or per diems (see Chart 5).

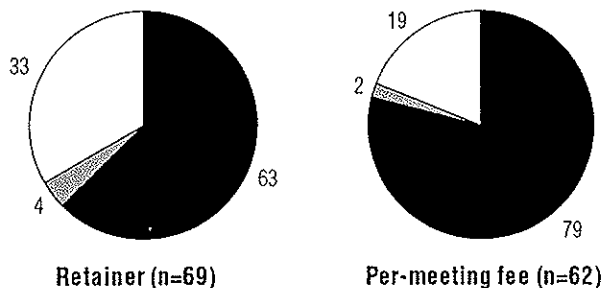
STOCK OWNERSHIP PROGRAMS

The number of organizations reporting either mandatory (44 per cent) or non-mandatory (13 per cent) stock ownership guidelines has increased to 57 per cent of the responding organizations, up from 36 per cent in 2000 (see Chart 6). The majority of these stock guidelines outline requirements regarding the minimum number or value of shares to be held, the length of time allowed to fulfill these requirements, and the length of time that shares must be held. Shares to be held range in number from 1 to 250,000 (the median is 4,000) or two to six times the annual retainer. Directors are typically given 1 to 10 years (the median is 2.5 years) to fulfill these requirements and must hold their shares for the duration of the directorship.

In addition to their retainers and fees, outside directors in almost two-thirds of publicly traded organizations are eligible for stock options either through an employee stock option plan (39 per cent) or through a separate plan for directors (24 per cent). Of those organizations whose outside directors are eligible to receive options through an employee or director plan, in 60 per cent of cases all outside directors received options during the past two years, while in 22 per cent of organizations some outside directors received options.

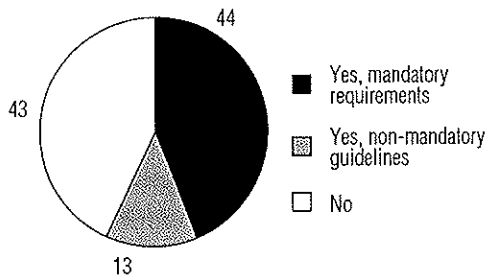
Chart 5
Form of Compensation for Regular Board Service, by Method of Payment
(n=76; percentage of publicly traded companies)

■ Cash ■ Company stock □ Combination (cash and stock)



Source: The Conference Board of Canada.

Chart 6
Share Ownership Guidelines for Outside Directors
(n=68; percentage of respondents)

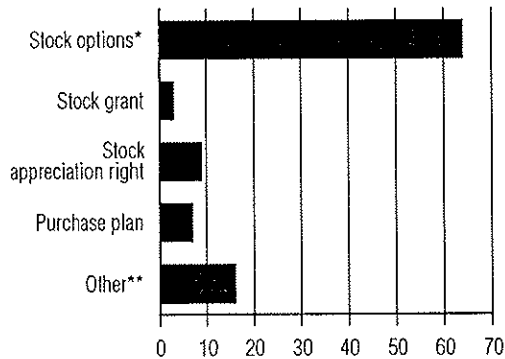


Source: The Conference Board of Canada.

To facilitate the ownership of stock by directors, organizations may offer formal assistance. This can take the form of the direction of retainers or fees towards purchasing stock (24 organizations); company matching of acquired shares (3 organizations); waiving of brokerage fees (5 organizations); a discount applied to purchase prices (3 organizations); and interest-free or low-rate loans (3 organizations). Thirty-seven per cent of publicly traded organizations do not assist directors to acquire stock.

Stock options remain by far the most popular type of stock ownership program. They are offered in 64 per cent of publicly traded firms (up from 60 per cent two years ago). Other forms of equity-based plans include stock grants, share appreciation rights, purchase plans, and other equity plans, including dividend reinvestment plans and deferred share units (see Chart 7).

Chart 7
Type of Stock Plan in Place
(n=76; percentage of publicly traded companies)



* Awarded through the employee stock plan (n=26) and/or through a separate plan for directors (n=16).

** Other equity plans include dividend reinvestment plan and deferred share units.

Source: The Conference Board of Canada.

¹ Figures in this chapter refer to publicly traded companies. Privately held organizations that reported some share activity were excluded.

CHAPTER 4

Committee Service

The use of committees of boards of directors is widespread.¹ Ninety-eight per cent of respondents reported having at least one committee (see Table 10). The finance/audit committee is the most commonly reported standing committee of the board, followed by the governance committee (see Chart 8). Over one-third of these organizations indicate that some committees are tasked with multiple functions. For example, organizations frequently combine the nomination and governance and the human resources and compensation functions.

On average, a board has four committees in place. Outside director participation in committee activity is high, with 95 per cent of all outside directors serving on at least one committee. On average, a director sits on two committees.

COMPENSATING OUTSIDE DIRECTORS FOR COMMITTEE SERVICE

Most firms (82 per cent) compensate outside directors for committee service in addition to any compensation for regular board service. The most prevalent method of

Table 10
Profile of Committee Activity
(n=158)

Firms with committees	98%
Number of committees	
1-2	15%
3-4	51%
5-6	23%
7+	10%
Average number of committees	4
Average number of directors on a committee	10
Average number of committees a director sits on	2

Source: The Conference Board of Canada.

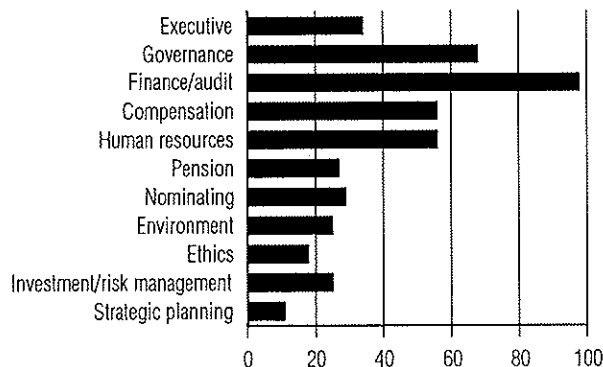
payment across all committees is a per-meeting fee of \$1,000 or per-diem fee of \$485. The most common retainer is \$3,000.

The average potential compensation for outside directors for committee service varies depending upon the committee on which they serve and the number of meetings per year. Members of the investment/risk management, finance/audit, and nominating committees receive the highest potential compensation. On average, this ranges from \$7,045 for investment/risk management committee members to \$3,795 for strategic planning committee members. Tables 11 and 12 highlight the compensation received by committee members depending on the type of committee on which they sit.

COMPENSATING INSIDE DIRECTORS FOR COMMITTEE SERVICE

The majority of inside directors who serve on committees are not compensated for committee service; only 9 per cent of firms with inside directors on committees provide such compensation. When inside directors are compensated, they are generally paid at the same rate as outside directors.

Chart 8
Prevalence of Committees, by Type
(n=158; percentage of firms with committees)



Source: The Conference Board of Canada.

Table 11
Incidence of Outside Directors Who Are Paid for Committee Service and Method of Payment, by Committee

Committee	No. of organizations with this committee	No. of organizations with paid outside directors*	No. (and %) by method of payment			
			Retainer only	Per-meeting fee only	Per diem only	Combination
Executive	53	29	3 (13)	10 (42)	6 (25)	5 (21)
Governance	108	86	4 (5)	44 (53)	14 (17)	21 (25)
Finance/audit	154	118	6 (5)	61 (54)	18 (16)	28 (25)
Compensation	89	68	5 (8)	34 (52)	8 (12)	19 (29)
Human resources	88	68	4 (6)	35 (53)	10 (15)	17 (26)
Pension	42	26	2 (8)	11 (42)	6 (23)	7 (27)
Nominating	45	29	1 (3)	18 (62)	2 (7)	8 (28)
Environment	40	32	1 (3)	17 (53)	2 (6)	12 (38)
Ethics	29	19	0 (0)	12 (67)	3 (17)	3 (17)
Investment/risk management	39	26	0 (0)	15 (63)	4 (17)	5 (21)
Strategic planning	18	10	0 (0)	7 (70)	2 (20)	1 (10)

*The total number of organizations reported on for method of payment differs from the number with paid outside directors due to incomplete data provided by respondents.
Source: The Conference Board of Canada.

Table 12
Annual Compensation of Outside Directors for Committee Service, by Committee

	Mean no. of annual committee meetings	Firms paying retainer		Firms paying per-meeting fee		Firms paying per-diem fee		Total potential compensation		
		No.	Median (\$)	No.	Median (\$)	No.	Median (\$)	No.	Median (\$)	Mean (\$)
Executive	5	9	3,000	14	875	8	485	18	2,963	4,965
Governance	4	25	3,000	63	1,000	16	493	71	3,000	4,991
Finance/audit	5	34	3,000	86	1,000	22	430	101	4,000	5,632
Compensation	3	24	3,000	52	1,000	11	625	56	3,000	4,814
Human resources	4	21	3,000	51	1,000	12	493	58	3,825	5,375
Pension	4	9	3,000	17	1,200	7	485	21	3,750	4,996
Nominating	4	9	3,500	26	1,000	2	463	23	2,400	5,436
Environment	4	13	3,000	29	1,000	3	330	27	3,200	5,119
Ethics	4	3	3,000	15	1,200	3	300	15	2,400	4,781
Investment/risk management	7	5	5,000	20	1,000	5	300	21	4,000	7,045
Strategic planning	4	1	5,450	8	575	3	500	8	1,500	3,795

Source: The Conference Board of Canada.

COMPENSATING COMMITTEE CHAIRPERSONS

Seventy-nine per cent of all committees have a chairperson. The human resources, nominating, environment, and ethics committees are all chaired entirely by outside and/or fully independent directors. The percentage of fully independent directors chairing the board committees ranges from 35 per cent for the executive committees to 62 per cent for the nominating committees. In comparison, the percentage of inside director chairpersons is low. It is highest for the executive committees, at 15 per cent.

Additional compensation to committee chairpersons solely for these duties varies by type of committee (see Table 13). For example, 77 per cent of respondents paid a premium to the chairperson of the finance/audit committee, whereas 7 per cent paid a premium to the strategic planning committee chairperson.

The most common form of payment for committee chairs is an additional annual retainer, with the majority of organizations paying a standard retainer of \$3,000. For organizations paying a per-meeting fee, the standard fee is \$675, and for organizations paying a per-diem fee, the standard fee is \$183.

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Table 13
Annual Compensation of Committee Chairpersons, by Committee

	No. of firms with committee chairs	Firms paying premium to chairperson (%)	Retainer only		Per-meeting fee only		Per-diem fee only		Combination	
			No.	%	No.	%	No.	%	No.	%
Executive	41	13	8	73	0	—	1	10	2	18
Governance	90	66	52	81	6	9	2	3	4	6
Finance/audit	131	88	64	73	9	10	3	4	12	14
Compensation	69	49	36	79	4	8	3	7	6	12
Human resources	70	51	38	79	4	8	1	2	5	10
Pension	31	23	19	86	2	9	0	—	1	5
Nominating	33	14	12	86	0	—	0	—	2	14
Environment	29	26	20	80	3	12	0	—	2	8
Ethics	21	13	10	77	1	8	1	8	1	8
Investment/risk management	30	16	13	87	1	7	0	—	1	7
Strategic planning	12	7	7	100	0	—	0	—	0	—

	Firms paying retainer			Firms paying per-meeting fee			Firms paying per-diem fee		
	No.	Median	Mean	No.	Median	Mean	No.	Median	Mean
Executive	10	4,000	4,277	1	1,000	1,000	2	300	300
Governance	58	3,000	4,528	11	500	589	2	81	81
Finance/audit	77	3,000	4,760	20	675	676	4	183	190
Compensation	42	3,000	4,763	10	675	655	3	116	137
Human resources	44	3,000	4,786	9	500	617	1	116	116
Pension	20	3,000	4,396	3	375	475	0	—	—
Nominating	14	3,000	5,200	2	750	750	0	—	—
Environment	22	3,000	3,624	5	100	335	0	—	—
Ethics	11	5,000	5,426	2	1,250	1,250	1	250	250
Investment/risk management	14	5,000	5,532	2	688	688	0	—	—
Strategic planning	7	4,000	4,457	0	—	—	0	—	—

Source: The Conference Board of Canada.

1 "Committees" include only those consisting entirely of directors.

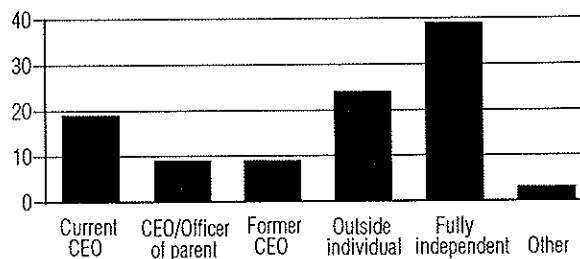
CHAPTER 5

Board Chairpersons

In keeping with governance guidelines, the prevalence of related chairs, particularly with respect to current chief executive officers (CEOs), has decreased since 2000. As illustrated in Chart 9, 24 per cent of board chairpersons are outside individuals, another 39 per cent are fully independent, 19 per cent are the current CEO (down from 31 per cent in 2000), 9 per cent are the former CEO, and 9 per cent are officers of the organization's parent company. Sixty-six per cent of board chairpersons serve on a part-time basis.

Almost two-thirds of the respondents (65 per cent) compensate chairpersons separately for board-chairing duties; however, this varies significantly depending on the category of chairperson as defined in the survey. While 82 per cent of organizations pay additional compensation to chairpersons who are outside or fully independent individuals, very few organizations provide additional compensation for a chairperson who is also the CEO. Seventy-seven per cent of former-CEO chairpersons are paid a premium. Part-time chairpersons are more likely to receive a premium for chairing than are full-time chairpersons. For those chairpersons of the 90 organizations that pay additional compensation for chairing the board, this amount ranges widely, from \$1,000 to \$560,268 (see Table 14).

Chart 9
Description of Chair
(n=151; percentage of respondents)



Source: The Conference Board of Canada.

Table 14
Compensation of Board Chairpersons
(n=140)

	No.	Additional pay to chair		Amount (\$)		
		No.	%	Mean	Median	Range
Current CEO	29	2	7	*	*	*
CEO/officer of parent**	10	6	60	111,625	55,000	1,500-335,000
Former CEO	13	10	77	108,576	95,000	24,000-311,260
Outside individual	36	21	58	53,662	16,000	2,000-150,000
Fully independent	59	48	81	80,985	27,500	1,000-560,268
Other	4	3	75	*	*	*

*Too few responses to report (not all organizations that pay the chair reported an amount).

**One organization reported its additional pay to the chair in deferred share units (\$1,000,000,000). This was excluded from the calculation.

Source: The Conference Board of Canada.

CHAPTER 6

Assessment of Board Members

Organizations are focusing increasingly on the effectiveness and assessment of the board and its members. In particular, there have been significant increases since 2000 in the prevalence of position descriptions (see Chart 10), formal written limits to authority levels, and formal orientation programs, as well as performance evaluations for the board as a whole and for individual members (see Chart 11). The percentage of organizations conducting CEO performance evaluations remains high, at 91 per cent (see Table 15).

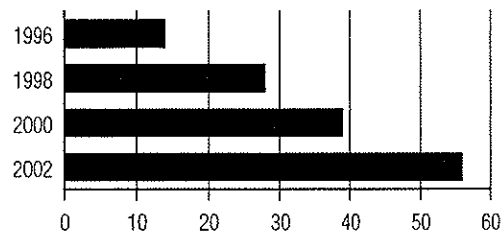
Table 15
Assessment and Evaluation of CEO and Board Members
(percentage of respondents)

	CEO	Board as a whole	Directors	Committee members
Position description/mandate statement in place	85	87	56	99
Formal written limits to authority levels	85	58	33	61
Formal orientation program in place	38	55	77	42
Formal education program in place	14	40	25	25
Performance evaluation conducted	91	92	49	73
Compensation affected by evaluation results	83	6	4	2
Reappointment affected by evaluation results	64	n.a.	33	36

n.a. = not applicable

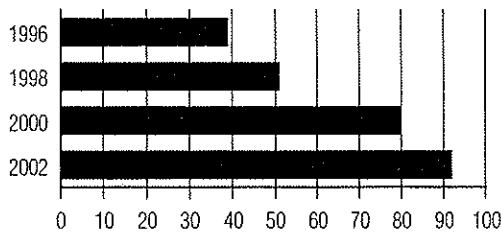
Source: The Conference Board of Canada.

Chart 10
Position Descriptions in Place for Directors
(percentage of respondents)



Source: The Conference Board of Canada.

Chart 11
Evaluation in Place of Board Performance
(percentage of respondents)



Source: The Conference Board of Canada.

APPENDIX I

A Comparison of the Public and Private Sectors

Comparison of Private Sector Companies and Public Sector Corporations

	Private sector companies (n=101)	Not-for-profit companies (n=18)	Public sector corporations (n=43)
Mean board size	11	19	11
Number of meetings per year	6	7	8
Percentage of inside directors paid	12	6	7
Percentage of outside directors paid	97	53	85
Mean compensation paid to outside directors	\$27,509	\$14,836	\$8,108
Percentage paying outside directors for committee service	88	56	78
Percentage with women directors	64	100	95

Comparison of Publicly Traded Corporations and Privately Held Companies

	Publicly traded (n=77)	Privately held (n=85)
Mean board size	11	13
Number of meetings per year	6	8
Percentage of inside directors paid	11	9
Percentage of outside directors paid	99	80
Mean compensation paid to outside directors	\$30,624	\$11,770
Percentage paying outside directors for committee service	89	74
Percentage with women directors	59	92

Source: The Conference Board of Canada.

APPENDIX 2

Annual Compensation of Outside Directors for Regular Board Services

Annual Compensation of Outside Directors for Regular Board Services, by Individual Company, 2000 and 2002

		2000					2002				
Industry & company	Size*	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)
Food, beverage, and tobacco											
1	Small	12	—	—	180	2,160	12	2,500	225	—	5,200
2	Small	5	5,000	1,000	—	10,000	5	7,500	1,250	—	13,750
3	Large	4	18,000	1,000	—	22,000	4	25,000	1,250	—	30,000
Mean	1,500	7	11,500	1,000	180	11,387	7	11,667	908	—	16,317
Median	102	5	11,500	1,000	180	10,000	5	7,500	1,250	—	13,750
Chemical, pharmaceutical, and allied products											
1	Small	—	—	—	—	—	4	7,500	500	—	9,500
2	Small	—	—	—	—	—	8	10,000	1,000	—	18,000
3	Medium	1	—	—	—	—	4	3,000	—	—	3,000
4	Medium	—	—	—	—	—	6	15,000	1,000	—	21,000
5	Medium	5	33,750	—	1,500	41,250	7	35,017	1,553	1,553	56,759
Mean	417	3	33,750	—	1,500	41,250	6	14,103	1,013	1,553	21,652
Median	446	3	33,750	—	1,500	41,250	6	10,000	1,000	1,553	18,000
Other general manufacturing											
1	Small	—	—	—	—	—	4	5,000	500	—	7,000
2	Small	—	—	—	—	—	5	12,000	1,000	—	17,000
3	Small	—	—	—	—	—	7	15,000	1,000	—	22,000
4	Medium	—	—	—	—	—	4	10,000	1,000	—	14,000
5	Medium	—	—	—	—	—	5	10,000	1,000	—	15,000
6	Medium	—	—	—	—	—	6	22,500	1,000	1,000	34,500
7	Medium	—	—	—	—	—	4	47,500	1,250	—	52,500
8	Large	—	—	—	—	—	5	20,000	1,000	—	25,000
9	Large	—	—	—	—	—	8	100,000	—	—	100,000
10	Large	6	60,000	2,250	—	76,500	6	77,815	2,334	4,669	122,946
Mean	4,398	6	60,000	2,250	—	76,500	5	31,982	1,120	2,835	40,995
Median	344	6	60,000	2,250	—	76,500	5	17,500	1,000	2,835	23,500
Oil and gas											
1	Medium	—	—	—	—	—	4	4,000	1,000	—	8,000
2	Medium	—	—	—	—	—	4	11,000	1,000	—	15,000
3	Medium	—	—	—	—	—	5	15,000	500	—	17,500
4	Large	—	—	—	—	—	7	35,000	—	—	35,000
5	Large	5	28,100	1,800	—	37,100	5	28,100	1,800	—	37,100
6	Large	—	—	—	—	—	7	30,000	1,500	—	40,500
7	Large	7	20,000	1,000	—	27,000	7	35,000	1,500	—	45,500
Mean	4,835	6	24,050	1,400	—	32,050	6	22,586	1,217	—	28,371
Median	5,325	6	24,050	1,400	—	32,050	5	28,100	1,250	—	35,000

* Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).
Mean and median figures are in \$ millions.

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		2000					2002				
Industry & company	Size*	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)
Primary industries											
1	Small	—	—	—	—	—	9	6,000	600	—	11,400
2	Small	—	—	—	—	—	6	10,000	750	—	14,500
3	Medium	—	—	—	—	—	5	10,000	1,000	1,000	20,000
4	Large	7	15,000	1,000	—	22,000	7	15,000	1,000	—	22,000
5	Large	5	10,000	1,500	—	17,500	5	15,000	1,500	—	22,500
6	Large	4	14,000	1,000	—	18,000	4	20,000	1,000	—	24,000
7	Large	—	—	—	—	—	6	25,000	1,500	—	34,000
8	Large	7	24,000	1,500	—	34,500	7	24,000	1,500	—	34,500
9	Large	9	15,000	1,200	—	25,800	8	18,000	1,200	—	37,600
Mean	2,760	6	15,600	1,240	—	23,560	6	15,889	1,117	1,000	24,500
Median	2,900	7	15,000	1,200	—	22,000	6	15,000	1,000	1,000	22,500
Transportation and utilities											
1	Small	—	—	—	—	—	8	7,000	400	—	10,200
2	Small	—	—	—	—	—	7	25,000	900	—	31,300
3	Small	—	—	—	—	—	52	—	—	—	—
4	Medium	6	2,500	250	—	4,000	6	2,500	250	—	4,000
5	Medium	—	—	—	—	—	5	4,700	310	310	7,800
6	Medium	—	—	—	—	—	10	8,000	400	—	12,000
7	Medium	—	—	—	—	—	5	8,000	600	—	12,000
8	Medium	—	—	—	—	—	4	11,000	800	—	14,200
9	Medium	—	—	—	—	—	5	10,000	1,000	—	15,000
10	Medium	—	—	—	—	—	5	15,000	—	750	18,750
11	Medium	—	—	—	—	—	4	17,000	1,100	—	21,400
12	Medium	—	—	—	—	—	10	15,000	1,000	—	25,000
13	Medium	6	8,000	900	—	13,400	20	8,000	900	—	26,000
14	Medium	—	—	—	—	—	6	—	—	—	—
15	Medium	—	—	—	—	—	4	—	—	—	—
16	Large	9	7,502	—	—	7,502	9	7,500	—	—	7,500
17	Large	8	6,000	500	—	10,000	6	6,500	550	—	9,800
18	Large	8	6,000	—	500	10,000	9	6,500	550	—	11,450
19	Large	8	3,000	—	300	5,400	4	15,000	—	750	18,000
20	Large	—	—	—	—	—	8	—	1,500	1,500	24,000
21	Large	6	17,500	1,250	—	27,000	6	17,500	1,250	—	25,000
22	Large	—	—	—	—	—	6	18,000	1,200	—	25,200
23	Large	—	—	—	—	—	6	20,000	1,000	—	26,000
24	Large	10	10,000	1,000	1,200	32,000	10	15,563	1,556	1,556	46,683
25	Large	10	—	—	—	—	10	—	—	—	—
Mean	4,860	8	7,563	780	667	13,663	9	11,888	848	973	18,633
Median	1,000	8	6,751	900	500	10,000	6	10,500	900	750	18,000
High technology											
1	Small	—	—	—	—	—	4	8,000	1,200	—	12,800
2	Medium	—	—	—	—	—	4	10,000	1,000	—	14,000
3	Medium	—	—	—	—	—	6	25,000	1,000	—	37,000
Mean	445	—	—	—	—	—	5	14,333	1,067	—	21,267
Median	500	—	—	—	—	—	4	10,000	1,000	—	14,000

* Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).
Mean and median figures are in \$ millions.

Yukon Energy Corporation
2008-2009 General Rate Application
YECL-YEC-1-38(d) Attachment 1

		2000					2002				
Industry & company	Size*	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)
Financial services, real estate, and holding											
1	Small	—	—	—	—	—	5	—	—	300	1,500
2	Small	—	—	—	—	—	6	5,400	—	375	7,650
3	Small	—	—	—	—	—	6	7,200	—	500	10,200
4	Small	5	8,600	750	—	12,350	5	9,200	750	—	12,950
5	Small	—	—	—	—	—	8	8,000	—	625	13,000
6	Small	—	—	—	—	—	4	54,471	1,556	—	60,695
7	Small	—	—	—	—	—	4	—	—	—	—
8	Small	—	—	—	—	—	4	—	—	—	—
9	Medium	10	3,000	—	250	5,500	9	3,000	250	—	5,250
10	Medium	—	—	—	—	—	10	6,200	20	—	6,400
11	Medium	8	4,500	—	375	7,500	8	4,500	—	375	7,313
12	Medium	—	—	—	—	—	4	7,500	—	—	7,500
13	Medium	—	—	—	—	—	13	5,200	175	250	10,725
14	Medium	4	15,000	1,000	—	19,000	4	15,000	1,000	—	19,000
15	Medium	4	16,000	—	—	16,000	4	16,000	—	4,000	32,000
16	Medium	—	—	—	—	—	10	30,000	1,250	—	42,500
17	Medium	8	30,000	2,000	—	47,000	9	30,000	2,000	—	48,000
18	Medium	10	47,000	2,000	—	67,000	15	22,000	2,000	—	77,000
19	Medium	—	—	—	—	—	5	—	—	—	—
20	Medium	—	—	—	—	—	5	—	—	—	—
21	Large	—	—	—	—	—	7	—	—	260	1,820
22	Large	—	—	—	—	—	5	—	650	—	3,250
23	Large	—	—	—	—	—	9	5,000	450	—	9,050
24	Large	7	4,500	375	—	7,125	7	6,200	—	485	9,595
25	Large	6	5,000	500	—	8,000	6	5,000	500	500	11,000
26	Large	10	2,500	—	300	5,500	10	6,200	—	485	11,050
27	Large	—	—	—	—	—	6	12,000	—	500	15,000
28	Large	—	—	—	—	—	4	11,500	1,000	—	15,500
29	Large	—	—	—	—	—	6	9,000	700	—	18,800
30	Large	4	13,000	1,000	—	17,000	4	16,000	1,000	—	20,000
31	Large	—	—	—	—	—	6	15,000	—	1,000	21,000
32	Large	8	15,000	1,000	—	23,000	9	20,000	1,200	—	30,800
33	Large	—	—	—	—	—	4	27,500	1,500	—	33,500
34	Large	10	30,000	1,500	—	45,000	9	30,000	1,500	—	43,500
35	Large	11	24,000	1,200	—	37,200	10	30,000	1,500	—	45,000
36	Large	—	—	—	—	—	12	—	—	—	—
37	Large	4	—	—	—	—	4	—	—	—	—
Mean	13,156	7	15,579	944	308	22,655	7	14,895	1,000	743	20,985
Median	1,176	8	14,000	1,000	300	16,500	6	10,350	1,000	485	13,000
Communications and telecommunications											
1	Small	—	—	—	—	—	4	20,000	1,500	—	26,000
2	Medium	—	—	—	—	—	8	8,000	625	—	13,000
3	Medium	—	—	—	—	—	5	12,000	1,000	—	17,000
4	Medium	—	—	—	—	—	7	18,000	1,000	—	25,000
5	Medium	—	—	—	—	—	5	25,000	1,500	—	32,500
6	Medium	—	—	—	—	—	7	25,000	1,500	—	35,500
7	Medium	—	—	—	—	—	10	—	—	—	—
8	Large	—	—	—	—	—	8	10,000	—	800	16,400
9	Large	8	15,000	1,000	—	23,000	8	25,000	1,500	—	37,000
10	Large	—	—	—	—	—	26	77,815	—	—	77,815
Mean	4,038	8	15,000	1,000	—	23,000	9	24,535	1,232	800	31,135
Median	1,225	8	15,000	1,000	—	23,000	8	20,000	1,500	800	26,000

*Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).
Mean and median figures are in \$ millions.

Yukon Energy Corporation
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		2000					2002				
Industry & company	Size*	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)
Business/professional services											
1	Small	—	—	—	—	—	4	5,000	600	—	7,400
2	Small	—	—	—	—	—	6	2,500	1,000	—	8,500
3	Small	—	—	—	—	—	6	8,000	—	250	9,500
4	Small	—	—	—	—	—	4	10,000	800	—	13,200
5	Small	—	—	—	—	—	5	12,000	1,000	—	17,000
6	Small	—	—	—	—	—	4	15,000	1,000	—	19,000
7	Small	—	—	—	—	—	8	20,000	1,000	500	32,000
8	Small	—	—	—	—	—	10	—	—	—	—
9	Medium	—	—	—	—	—	4	4,700	—	375	6,200
10	Medium	—	—	—	—	—	4	10,000	—	250	11,000
11	Medium	10	6,000	—	250	8,500	5	10,750	750	375	16,375
12	Medium	—	—	—	—	—	4	—	—	—	—
Mean	332	10	6,000	—	250	8,500	5	9,795	879	350	14,018
Median	82	10	6,000	—	250	8,500	5	10,000	1,000	375	12,100
Construction and construction products											
1	Small	4	9,200	320	—	10,480	5	13,000	1,000	—	18,000
2	Small	—	—	—	—	—	6	25,000	1,250	—	32,500
3	Medium	4	30,000	1,500	—	36,000	4	30,000	1,500	—	36,000
4	Large	—	—	—	—	—	4	17,500	1,350	—	22,900
5	Large	—	—	—	—	—	5	20,000	1,500	—	27,500
Mean	1,161	4	19,600	910	—	23,240	5	21,100	1,320	—	27,380
Median	140	4	19,600	910	—	23,240	5	20,000	1,350	—	27,500
Health and education											
1	Small	—	—	—	—	—	8	—	—	275	2,200
2	Small	—	—	—	—	—	6	—	—	—	—
3	Small	—	—	—	—	—	4	—	—	—	—
4	Medium	7	—	—	—	145	4	—	—	145	580
5	Medium	10	—	—	150	1,500	10	—	—	150	1,500
6	Medium	—	—	—	—	—	11	—	—	200	2,200
7	Medium	—	—	—	—	—	7	—	—	750	5,250
8	Medium	—	—	—	—	—	5	—	—	—	—
9	Medium	—	—	—	—	—	10	—	—	—	—
10	Medium	—	—	—	—	—	9	—	—	—	—
11	Large	—	—	—	—	—	11	—	—	425	4,675
Mean	740	9	—	—	150	823	8	—	—	324	2,734
Median	445	9	—	—	150	823	8	—	—	238	2,200
Government/not for profit											
1	Small	3	—	—	250	750	3	—	—	390	1,170
2	Small	6	—	—	300	1,800	6	1,500	—	300	3,300
3	Small	—	—	—	—	—	8	2,500	—	250	4,500
4	Small	—	—	—	—	—	10	3,500	250	—	6,000
5	Small	—	—	—	—	—	11	3,400	—	260	6,260
6	Small	5	3,000	—	300	4,500	4	6,000	—	350	7,400
7	Small	12	14,000	125	—	15,500	12	21,500	150	—	23,300
8	Small	5	—	—	—	—	5	—	—	—	—
9	Small	—	—	—	—	—	4	—	—	—	—
10	Small	—	—	—	—	—	3	—	—	—	—
11	Medium	—	—	—	—	—	5	—	213	—	1,065
12	Medium	—	—	—	—	—	12	—	253	—	3,036
13	Medium	—	—	—	—	—	10	—	—	—	—
14	Medium	—	—	—	—	—	10	—	—	—	—
Mean	184	6	8,500	125	283	5,638	7	6,400	217	310	6,226
Median	32	5	8,500	125	300	3,150	7	3,450	232	300	4,500

*Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000). Mean and median figures are in \$ millions.

* Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000).
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		2000					2002				
Industry & company	Size*	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)	No. of meetings	Annual retainer (\$)	Per-meeting fee (\$)	Per-diem fee (\$)	Potential compensation (\$)
Trade (wholesale/retail)											
1	Small	15	2,750	155	—	5,075	12	2,750	155	—	4,610
2	Small	—	—	—	—	—	11	7,500	—	—	7,500
3	Medium	10	3,552	—	296	6,512	8	7,920	—	330	10,560
4	Large	5	18,000	—	—	18,000	5	18,000	1,000	—	23,000
5	Large	—	—	—	—	—	8	30,000	1,500	—	42,000
6	Large	—	—	—	—	—	5	50,000	—	—	50,000
7	Large	—	—	—	—	—	9	25,000	1,725	—	53,025
Mean	2,530	10	8,101	155	296	9,862	8	20,167	1,095	330	27,242
Median	3,000	10	3,552	155	296	6,512	8	18,000	1,250	330	23,000
Other											
1	Small	—	—	—	—	—	5	5,000	750	—	8,750
2	Small	—	—	—	—	—	—	25,000	—	—	25,000
3	Medium	5	12,000	1,000	—	17,000	5	12,000	1,000	—	17,000
4	Large	—	—	—	—	—	8	75,000	1,500	—	87,000
Mean	4,823	5	12,000	1,000	—	17,000	6	29,250	1,083	—	34,438
Median	437	5	12,000	1,000	—	17,000	5	18,500	1,000	—	21,000
Total											
Mean	5,042	7	14,766	1,051	439	18,939	7	17,025	1,005	723	21,943
Median	660	7	13,000	1,000	300	15,750	6	12,000	1,000	408	17,000
*Asset-size categories are (in \$ millions): Small (under \$150), Medium (\$150–\$2,000), Large (over \$2,000). Mean and median figures are in \$ millions.											

APPENDIX 3

Respondents' Profile

Respondents' Profile

(n=162; percentage of respondents)

Industrial Classification

Food, beverage, and tobacco	2
Chemical, pharmaceutical, and allied products	3
Other general manufacturing	6
Oil and gas	4
Primary industries	6
Transportation and utilities	15
High technology	2
Financial services, real estate, and holding	23
Communications and telecommunications	6
Business/professional services	7
Construction and construction products	3
Health and education	7
Government/not for profit	9
Trade (wholesale/retail)	4
Other	3

Ownership Description

Widely held publicly traded corporation	31
Closely held (under 100 shareholders) corporation	3
Single-shareholder corporation	7
Significant shareholder (one major)	16
Crown corporation or agency (public enterprise)	26
Co-operative	4
Not for profit	12
Other	1

Size of Firms, by Assets, Revenues, and Number of Employees

Assets (\$ millions)	Small (under \$150)	30
	Medium (\$150–\$2,000)	38
	Large (over \$2,000)	32
	<i>Mean</i>	5,041
	<i>Median</i>	660
Revenue (\$ millions)	Small (under \$150)	34
	Medium (\$150–\$1,000)	32
	Large (over \$1,000)	35
	<i>Mean</i>	2,150
	<i>Median</i>	400
Number of employees	Fewer than 500	26
	500–1,499	27
	1,500–4,999	28
	5,000 or more	19

Total number of employees 816,144

Source: The Conference Board of Canada.

1 **REFERENCE:** **Table 3.3**

2
3 **TOPIC:** **Non-Fuel Operating, Maintenance, and Administrative**
4 **Expenses**

5
6 **QUESTION:**

7
8 a) For each of Production, Transmission, Distribution, and General O&M, and
9 Administration, please provide costs by activity for 2005-2009 by the following
10 components:

- 11 i labour
12 ii fringe
13 iii contractor services
14 iv other

15
16 b) For costs included in contractor services, please provide:

- 17 i details and costs of each of the services being provided; and
18 ii a business case justifying use of contractor.

19
20 **ANSWER:**

21
22 **(a) and (b)**

23
24 Please see YECL-YEC-1-40(g) and UCG-YEC-1-38(a) in regards to labour and fringe
25 expenses. Also see UCG-YEC-1-40 in regards to production expenses, UCG-YEC-1-41
26 for transmission expenses, UCG-YEC-1-42 for distribution expenses, and CW-YEC-1-22
27 for General O&M. For specific contractor and consultant expenses in each category, see
28 the table below:

1

Consultant and Contractor Expenses

	2005	2006	2007	2008	2009
\$000s	Actuals	Actuals	Actuals	Forecasts	Forecasts
Production	270	127	169	141	129
Transmission	241	183	331	326	448
Distribution	77	95	12	58	91
General	113	43	35	54	56
Administration	631	622	664	666	830
Total	1331	1071	1211	1245	1553

2

3

4 It is not possible to provide detail on each response to the question due to the immense
5 level of detail required to review and summarize each use of a contractor within the
6 noted categories.

7

8 Contractors are not hired specifically on a "business case" basis. Functional managers
9 hire external contractors under two scenarios a) when they have insufficient internal
10 resources to achieve desired goals and b) where a particular expertise is required that
11 does not exist with internal resources. This includes a huge variety of tasks, covering
12 everything from snow clearing to survey services to divers.

1 **REFERENCE: Page 3-6 and Table 3.3 & 3.4**

3 **TOPIC: Labour**

5 **PREAMBLE:**

7 Yukon Electrical wishes to understand the components of labour dollars.

9 **QUESTION:**

- 11 a) Provide, by department detailed in Table 3.4, costs associated with:
- 12 i Northern allowance;
 - 13 ii Travel related benefits provided to employees;
 - 14 iii Variable pay programs other bonus related programs provided to
 - 15 employees;
 - 16 iv Fringe benefits; and
 - 17 v Other - provide details of other labour related costs included in the
 - 18 forecasts.
- 19
- 20 b) Please indicate where the items in (a) above are included in YEC's forecasted
- 21 revenue requirement.
- 22
- 23 c) If there are variable pay programs or other bonus programs, please provide
- 24 a redacted copy of the contract between employee and YEC.
- 25
- 26 d) If there is no formal contract signed by the employee, please provide the policy
- 27 for when payment is made under these programs.
- 28
- 29 e) Please confirm that there are no earnings related incentive programs included in
- 30 revenue requirement.
- 31
- 32 (f) If not confirmed, please explain.
- 33
- 34 (g) Provide details, description and quantification of the components of fringe
- 35 benefits/fringe benefit rate (e.g. CPP, EI, Pension, etc).

ANSWER:

(a)

i. Northern Allowance is made up of \$6,300 per year flat rate per annum and 5% of base salary per annum.

ii. Permanent and term employees are eligible for a vacation travel allowance for themselves and their families after the completion of twelve months of employment with the Corporation. They are eligible to the following benefit for vacation travel allowance:

Employee	\$1,300
Employee's spouse	\$ 850
Each dependent child	\$ 850

iii. Yukon Energy does not have variable pay programs or other bonus related programs provided to employees except as noted below in (c) and (d).

iv. Fringe benefits are included in labour costs.

v. The other labour related costs in the forecasts are as follows: employee benefits, leave entitlements, shift differentials, standby, and overtime. All of these cost items are included in the labour cost.

(b)

All costs identified in (a) are included in labour in Tab 3 of the General Rate Application and as such are included in YEC's forecast revenue requirement.

(c) and (d)

At the time the labour amounts were prepared for the Revenue Requirement there were no contracts with variable pay programs or other bonus programs. Since that time one contract was entered into which includes a bonus provision. However, no change will be made to the labour amounts to reflect any bonus that might be paid.

1 **(e)**

2
3 Confirmed.

4
5 Forecast labour expense reported in the application as part of revenue requirement does
6 not include any provision or amounts for earnings related incentive programs.

7
8 **(f)**

9
10 Not applicable.

11
12 **(g)**

13
14 For 2008 and 2009 GRA Fringe and Burden for Full time and Term is 54.78% and for
15 Casuals is 14.71%. Further, details, description and quantification for the components of
16 fringe benefits/ fringe benefit rate are as follows:

- 17
18 • **Northern Fringe & Burden** - This fringe covers the cost of the Northern
19 Allowances that employees are entitled to as per the union agreement and the
20 terms and conditions for out of scope employees. This is applied to Full Time
21 Permanent Employees and Term Employees (EI reduced employees) and
22 Casual Employees (regular EI employees). This benefit is based on regular
23 wages earned.
24
25 • **Benefits Fringe & Burden** - This fringe covers the cost of CPP, EI, WCB, Health
26 & Dental Benefits, Life and Accident Death & Dismemberment Insurance,
27 Vacation Pay for casual/part time employees. This is applied to Full Time
28 Permanent Employees and Term Employees (EI reduced employees) and
29 Casual Employees (regular EI employees). This benefit is calculated on regular
30 wages earned.
31
32 • **Vacation Travel Allowance Fringe & Burden** - This fringe covers the cost of
33 the Vacation Travel Allowance that is paid to full time permanent and term
34 employees. This fringe is applied to regular wages earned for Full Time
35 Permanent Employees and Term Employees.

- 1 • **Pension/RRSP Fringe & Burden** - This fringe covers the cost of the Pension
2 and RRSP as per the union contract and the out of scope terms and conditions
3 and only applies to full time permanent employees This fringe is applied to
4 regular wares to Full Time Permanent employees.
5
6 • **Leave Fringe & Burden** - This fringe covers the cost of leave employees are
7 entitled to according to the union contract and the out of scope terms and
8 conditions. This fringe is only applied to regular wages earned for Full Time
9 permanent employees.
10
11 • **Stat Fringe & Burden** - This fringe covers the cost of statutory holiday leave
12 taken by full time employees throughout the year. This fringe is only applied to
13 regular wages earned for Full Time Permanents and Term employees

REFERENCE: Page 3-7 and Table 3.4

TOPIC: Employee Complement

PREAMBLE:

Table 3.4
Employee Complement History

	Actual 2005	Actual 2006	Actual 2007	GRA 2008	GRA 2009
President	1.60	1.50	2.50	2.50	2.50
Communications	1.00	1.00	1.00	1.00	1.00
Human Resources & Info. Mgmt.	6.06	6.01	6.00	7.00	7.00
Business Development	1.08	1.00	1.00	1.00	1.00
Finance, Cust. Acctg. & Purchasing	11.05	11.49	11.63	12.81	12.81
Operations	34.82	39.43	38.60	40.20	40.10
Engineering Services	13.21	13.58	14.00	12.67	12.00
Health, Safety & Environment	1.00	1.00	3.00	3.33	3.33
Total	69.82	75.01	77.73	80.51	79.74

QUESTION:

- a) For 2005-2009, please provide the vacancy rate by department as well as the overall corporate vacancy rate.
- b) For 2008 and 2009, please provide the vacancy rate assumptions used in developing the forecast complement. Also provide the overall corporate vacancy rate forecast.
- c) Please expand Table 3.4 to identify the employee complement separately charged to O&M and to Capital.

ANSWER:

(a) and (b)

Actual corporate vacancy rates for the period of 2005-2007 are as follows:

1 **Vacancy Rates - Actuals**

	Percentage	# of Employees	FTE
2005	2.95%	70.97	2.09
2006	5.70%	75.72	4.32
2007	7.21%	78.44	5.65
2008	4.73%	81.22	3.84
Average	5.14%	76.59	3.94

3

4 For 2008 and 2009, the vacancy rate assumptions used were 5% which equals
5 approximately 4 FTEs. YEC reviewed the historical vacancy rates from 2005 to 2007;
6 staff turnover and time it took to fill newly created positions and determined that the
7 corporation was experiencing approximately a 5% or 4 FTE's vacancy. A 5% reduction
8 was applied to the loaded cost of each employee.

9

10 Yukon Energy does not track individual department vacancy rates. The degree of
11 position transfers between departments would make it difficult or impossible to provide
12 this information in many cases.

13

14 **(c)**

15

16 Please see UCG-YEC-1-35(a).

1 **REFERENCE: Section 3**

3 **TOPIC: Labour**

5 **PREAMBLE:**

7 Yukon Electrical is interested in understanding the labour costs of YEC.

9 **QUESTION:**

- 11 a) Please provide a complete organizational chart(s) for all employees of YEC.
- 13 b) How many employees did YEC have when they took over the management
14 of the government power system assets in 1997? What have been the
15 fundamental changes to the business of YEC that have created the need for
16 the significant number of new positions since that time?
- 18 c) Please provide YEC's total labour costs, including both capital and O & M, and the
19 overall average labour cost per employee
- 21 d) What are YEC's total costs, per customer and per pole, for both Transmission
22 and Distribution expenses?
- 24 e) On line 20 and 21 page 3-9 YEC refers to "less time being spent on
25 maintenance of the fleet...." Please identify the savings expected to be
26 achieved in each test year. Where are the savings reflected in the
27 application?
- 29 f) In table 3.8 page 3-9 please provide a breakdown of all company owned
30 properties. Please provide the details of the costs associated with each of the
31 properties that are included in the test period revenue requirement.
- 33 g) Please define and itemize special projects included in table 3.8.
- 35 h) In regard to transportation costs in table 3.8, are these YEC's entire
36 transportation costs or are there additional transportation costs allocated to

1 projects? If there are transportation costs allocated to projects please provide
2 these costs.
3

4 **ANSWER:**

5
6 **(a)**

7
8 Please see Attachment 1 provided to LE-YEC-1-32(a).
9

10 **(b)**

11
12 Yukon Energy had 3.4 FTE employees (1997) when it took over direct management of
13 its assets. Staffing levels and changes over time are reviewed in LE-YEC-1-32 in this
14 proceeding, and UCG-YEC-I-46 from the 2005 proceeding.
15

16 There has not been a "fundamental" change in YEC's business since assuming direct
17 management. Increases in staffing are justified as needed to deal with issues such as
18 aging infrastructure (e.g. most of YEC's hydro assets were constructed in the 50's and
19 60's), additions of new assets (e.g. >350 km of new transmission added in last five
20 years), availability of external contractors, planning for increased demand and changes
21 in regulations (OH&S, YESAB).
22

23 **(c)**

24
25 Please see UCG-YEC-1-35.
26

27 **(d)**

28
29 Total labour cost figures used in this analysis are from tables 3.6 (Transmission) and 3.7
30 (Distribution). Pole count and customer count data is as-of December 2008.
31

32 **Labour cost per pole and per customer for Transmission and Distribution**

	Proposed \$ (000's)		Cost per Pole (\$/pole)			Cost per Customer (\$/customer)		
	2008	2009	# poles	2008	2009	# Customers	2008	2009
33 Transmission	466	482	4,941	94	98	1,875	249	257
Distribution	505	521	3,201	158	163	1,875	269	278

1 **(e)**

2
3 The cited quote relates to labour costs for General O&M. These savings are reflected in
4 Table 3.8, which notes test year labour cost forecasts for General O&M at levels below
5 those experienced in 2005 to 2007 actuals.

6
7 **(f)**

8
9 Yukon Energy does not track costs by property. YEC tracks company-owned houses
10 and company owned buildings by community. Details on the costs associated with
11 company owned buildings are as provided below.

1 Maintenance of Company Owned Buildings

Maintenance of Co-Owned Houses	Cost Description	2008 (\$000)	2009 (\$000)
Faro	Gasoline/Heating Fuel	2	2
	Materials(Small Tools)	2	24
	Parts and services	3	3
Faro-Sub-Total		7	29
Dawson	Gasoline/Heating Fuel	43	44
	Janitorial		1
	Materials(Small Tools)	1	1
	Outside Service	5	5
	Parts and services	17	17
	Snow Removal	2	2
	Utilities	9	10
Dawson Sub-Total		78	79
Mayo	Contractors	8	9
	Gasoline/Heating Fuel	9	9
	Outside Service	2	2
	Road & Ground Maintenance	5	5
Mayo Sub-Total		24	25
Aishihik	Materials(Small Tools)	1	6
	Parts and services	3	3
Aishihik Sub-Total		4	9
Maintenance of Co-Owned Houses Sub-Total		112	141
Maintenance of Co-Owned Buildings	Cost Description	2008 (\$000)	2009 (\$000)
Faro	Materials(Small Tools)	1	1
	Snow Removal	2	2
Faro Sub-Total		3	3
Dawson	Contractors	11	17
	Janitorial	2	2
	Materials(Small Tools)	1	1
	Parts and services	5	5
	Road & Ground Maintenance	2	2
	Snow Removal	4	4
Dawson Sub-Total		24	30
Mayo	Gasoline/Heating Fuel	8	8
	Materials(Small Tools)	1	
	Parts and services	6	6
	Snow Removal	19	20
Mayo Sub-Total		34	35
Aishihik	Gasoline/Heating Fuel	2	2
	Parts and services	1	1
	Snow Removal	8	8
Aishihik Sub-Total		10	10
Whitehorse	Contractors	23	18
	Gasoline/Heating Fuel	8	8
	Janitorial	28	29
	Materials(Small Tools)	9	27
	Parts and services	17	18
	Road & Ground Maintenance	11	
	Snow Removal	23	23
	Utilities	11	12
	Office Rent / Yard Rent	28	29
Whitehorse Sub-Total		159	164
Maintenance of Co-Owned Buildings Sub-Total		231	243
Grand Total		342	384

2

1 **(g)**

2
3 The only two items in Table 3.8 that are not SCADA or Communications are \$20,000 for
4 replacement of a damaged transformer at Stewart Crossing in 2005, and \$9,000 for
5 software for modelling the Corporation's electrical system load flows.

6
7 **(h)**

8
9 Table 3.8 reports those vehicle costs charged to operations. The table below reports the
10 vehicle costs charged to capital projects.

11
12 **Vehicle Costs Charged to Capital Projects (\$)**

Actual	Actual	Actual	Actual
2005	2006	2007	2008
72,338	79,244	89,829	107,083

1 **REFERENCE: Page 3-10 Table 3.9**

2
3 **TOPIC: General**

4
5 **PREAMBLE:**

6
7 Yukon Electrical would like to better understand the costs imbedded in General

8
9 **QUESTION:**

10
11 a) Please describe in detail the type of activities that take place in this
12 account and the cost associated with each activity

13
14 b) Please detail the job classes that would charge time into this account. Indicate
15 if the job class or position is in or out of scope.

16
17 **ANSWER:**

18
19 **(a)**

20
21 This is a general administration account that is used for corporate wide costs that do not
22 belong to a unique function. These are costs required to administer the organization.
23 Details of non-labour amounts are provided in YECL-YEC-1-38(b).

(b)

Please see Table provided below.

Position Name	Regular Time Percent Charged to General Admin.	Union/Out of Scope or Confidential Exclusion
President & CEO	63.00%	Out of Scope
Vice-President, Operations & Engineering	86.00%	Out of Scope
Coordinator, Property & Security	10.00%	Union
Leadhand, Transmission & Distribution	8.31%	Union
Powerline Technician	0.82%	Union
Powerline Technician	0.82%	Union
Senior Powerline Technician	3.86%	Union
Apprentice Powerline Technician	10.32%	Union
Senior Powerline Technician	9.72%	Union
Powerline Technician	8.00%	Union
Powerline Technician	15.00%	Union
Powerline Technician	1.00%	Union
Apprentice Powerline Technician	8.00%	Union
Maintenance Mechanic	5.00%	Union
Plant Operator II	5.00%	Union
Plant Operator I	5.00%	Union
Plant Operator I	2.00%	Union
Plant Operator I	5.00%	Union
Maintenance Electrician	1.00%	Union
Maintenance Electrician	1.00%	Union
Maintenance Electrician	1.00%	Union
Maintenance Electrician	1.00%	Union
Maintenance Electrician	1.00%	Union
Director, Health, Safety & Environment	10.00%	Out of Scope
Director, Technical Services	15.00%	Out of Scope
Coordinator, Capital Projects	5.00%	Union
Land Technician	5.00%	Union
Supervisor, Mechanical & Civil Engineering	25.00%	Out of Scope
Civil Engineer	15.00%	Out of Scope
Term Civil Engineer	10.00%	Out of Scope
Coordinator, Mechanical Projects	15.00%	Union
Draftsperson	20.00%	Union
Term Draftsperson	15.00%	Union
Supervisor, Electrical Engineering	20.00%	Out of Scope
Electrical Engineer	12.00%	Out of Scope
Electrical Engineer	12.00%	Out of Scope
Electrical Engineer	12.00%	Out of Scope
Distribution Technologist	3.00%	Union
Engineer in Training	12.00%	Out of Scope
Corporate Secretary	25.00%	Confidential Exclusion
Director, Human Resources & Information Management	60.00%	Out of Scope
HR & Records Management Advisor	96.00%	Confidential Exclusion
Administrative Assistant/Receptionist	97.00%	Confidential Exclusion
Relief Administrative Assistant	50.00%	Confidential Exclusion
Documentation Specialist	100.00%	Union
Records Management Analyst	100.00%	Confidential Exclusion
Chief Financial Officer	86.00%	Out of Scope
Revenue & Financial Analyst	50.00%	Union
Controller	70.00%	Out of Scope
Financial Systems Administrator	77.00%	Union
Financial Administrator	68.00%	Union
Accounts Payable Clerk	73.00%	Union
Financial Administrator	77.00%	Union
Term Financial Administrator	77.00%	Union
Supervisor, Financial & Risk Management	59.50%	Out of Scope
Senior Office Administrator	5.00%	Union
Manager, Environmental Assessment & Licensing	86.00%	Out of Scope

1 **REFERENCE:**

2
3 **TOPIC:** **General**

4
5 **PREAMBLE:**

6
7 Yukon Electrical is interested in understanding the steps YEC has taken to ensure
8 productivity and efficiency of its organization.

9
10 **QUESTION:**

- 11
12 a) Please provide a listing of the initiatives demonstrating cost savings that YEC
13 has under taken toward increasing productivity and where such productivity gains
14 can be found in the application.

15
16 **ANSWER:**

17
18 **(a)**

19
20 The major increased improvement in the Application, resulting in savings to ratepayers,
21 is timely completion of CSTP/MS and connection of Minto and Pelly Crossing to displace
22 diesel generation with surplus hydro generation.

23
24 Yukon Energy strives for maximum use of resources in all areas of operations, as our
25 application demonstrates. For example, additions to labour are only approved after
26 thorough review by appropriate levels of management; see LE-YEC-1-32.

27
28 Internal labour resources for an ongoing required long-term activity are generally more
29 affordable than external resources, so where a long-term need is identified, Yukon
30 Energy will staff that position vs. using more expensive external consultants or
31 contractors. One specific example of this concept is the creation of a records
32 management position – this internal position is considerably less expensive than a
33 consultant, and, as well, creation of a proper records management system allows other
34 employees to be more productive in terms of the ease of access to records.

35
36 Yukon Energy feels that the pattern of costs shown in the application demonstrates a
37 commitment to providing for the needs of our customers while ensuring costs do not

- 1 increase disproportionately. Other initiatives like our Employee Wellness program, helps
- 2 to keep employees operating at maximum effectiveness.

1 **REFERENCE: Page 3-11 lines 18~24 of application**

2
3 **TOPIC: Safety**

4
5 **PREAMBLE:**

6
7 Safety expenses have had significant fluctuations since 2005, increases of 42% in
8 2006, increases of 145% in 2007, decreases of 127% based on 2008 proposed and a
9 forecast of a 174.5% increase for 2009. As per table 3.9 page 3-10 Yukon Electrical
10 wishes to understand the variances in this activity

11
12 **QUESTION:**

13
14 a) Please provide variance explanations year over year from 2005 to 2009 for the
15 safety account.

16
17 b) Please provide the detailed components and benefits associated with the
18 additional \$100,000 requested in 2009 for process documentation.

19
20 c) Please provide a copy of the most recent audit conducted by a third party or
21 external source which verifies that YEC's safety program meets all legislative,
22 regulatory and industry standards for an electrical utility. Please include all
23 recommendations of the audit.

24
25 **ANSWER:**

26
27 **(a)**

28
29 Variance explanations (\$000), year over year from 2005 to 2009 for Safety expenditures
30 are provided below:

31
32 **2006:**

33 Spending in 2006 increased by approximately \$16,000 over 2005. This increase is
34 largely attributable to increased costs for purchasing Safety Aids (\$6,000) and
35 Contractor costs (\$9,000).

1 **2007:**

2 Spending in 2007 increased by approximately \$79,000 over 2006. This increase is
3 largely attributable to one time increased costs related to legal expenses (\$62,000) and
4 for purchasing safety aids (\$10,000).

6 **2008:**

7 Spending in 2008 decreased by approximately \$73,000 compared to 2007. This
8 decrease is largely attributable to reduced legal costs (\$64,000) and reduced costs
9 related to purchasing small tools (\$15,000). These decreases were offset to a small
10 degree by small increases in other cost categories.

12 **2009:**

13 Spending in 2009 is forecast to increase by approximately \$103,000 compared to 2008.
14 This increase is largely attributable to increased contractor costs (\$102,000). This
15 relates to the need to document YEC's safety procedures as described on Page 3-11.

17 **(b)**

19 The process documentation will address the following components and requirements:

- 21 • Section 3(1)(b) of the Occupational Health and Safety Act requires employers to
22 document, so far as reasonably practicable, that work techniques and
23 procedures are adopted and used that will prevent or reduce the risk of
24 occupational illness and injury.
- 26 • Section 7 (d) of the Occupational Health and Safety Act requires, for prescribed
27 workers, written instructions as to the measures and procedures to be taken for
28 the worker.
- 30 • The Yukon Worker's Compensation Health and Safety Board also requires that
31 safe work procedures be followed.

33 In order to address these requirements, and to ensure the health and safety of its
34 workers, YEC creates and documents Safe Job Procedures (SJP) for the most
35 applicable activities and undertaken by its employees. SJPs document the steps
36 involved in completing a specific task in a manner that minimizes the potential for an

1 employee being exposed to a health or safety hazard. SJPs help to ensure quality
2 control and are used to train workers in new or infrequently done tasks.

3
4 SJPs are reviewed frequently and require updating from time to time. SJPs are also
5 required for new tasks. The added \$100,000 in safety spending in 2009 will ensure that
6 SJPs are updated for the applicable tasks done by the Corporation.

7
8 The benefits of the updated SJPs include allowing the Corporation to maintain its high
9 standards for workplace health and safety and meeting or exceeding the requirements of
10 the Yukon Occupational Health and Safety Act and the Yukon Worker's Compensation
11 Health and Safety Board.

12
13 **(c)**

14
15 A key initiative in Yukon Energy's safety program over the last few years has been
16 achieving registration under the Yukon's Certificate of Recognition (COR) program. In
17 that context, the last audit conducted on YEC's health and safety management system
18 occurred in 2008. The purpose of this review was to provide management with an
19 assessment of the safety management system, with a view towards developing a plan
20 for continuous improvement of this system, as well as preparing the organization for
21 registration under the Yukon COR program. To qualify for registration, an external audit
22 is required to be passed; conducting this internal review provided management with an
23 opportunity to assess the system as is currently stands and focus improvements on key
24 areas prior to engaging the external audit.

25
26 This audit was conducted by Yukon Energy's corporate health and safety manager, who
27 carries certification as a Canadian Registered Safety Professional. In addition, this
28 individual previously was employed by the Northern Safety Network, with overall
29 responsibility for managing the COR program in Yukon on behalf of the Yukon Workers'
30 Compensation Health & Safety Board (YWCHSB). The audit methodology used is
31 nationally recognized and approved by the YWCHSB and Northern Safety Network
32 Yukon as appropriate for this jurisdiction.

33
34 Attached is a narrative description of the auditor's findings, as well as the audit summary
35 worksheet that describes the findings. Generally, the scoring was favorable for the
36 Corporation, with the exception of the areas relating to Safe Work Practices and Safe

- 1 Job Procedures. The Corporation has committed budget dollars in the 2009 safety
- 2 budget to improve these areas prior to the COR registration audit process.

December 19, 2008

To File:

Re: Certificate of Recognition Baseline Audit, YEC

The attached summarizes a Baseline Audit for Yukon Energy. The obvious commitment to a solid safe and healthy workplace was evident by the level of assistance provided by all staff.

It is anticipated that this organization will become an industry leader in Health and Safety. This executive summary will describe my findings while conducting the Audit and provide the reader with an 'element by element' snapshot of the organization's health and safety systems. For this audit, I have used the audit instrument approved by the Canadian Federation of Construction Safety Associations, the YWCHSB and the Northern Safety Network Yukon.

3 Worksites visited
9 Management/Supervisor interviews
7 Worker interviews
0 Contractors were interviewed

Element 1

The Corporate Health & Policy Statement and the 1-page 'Commitment to Health & Safety' documents are posted throughout all YEC's sites and available to all employees through the intranet. Managers, Supervisors and Workers are aware of their responsibilities and accountabilities in respect of health and safety. Good job on this element.

Element 2

Hazard Assessment and Control – Hazard Assessments are available for all critical tasks and most are prioritized according to risk. It does appear however, that Hazard Assessments are not being undertaken on each project. The recommendation is that Hazard Assessments be completed on each project and involve/include the affected workers.

Element 3

The *most applicable/critical* safe work practices (SWP's) are either missing or out of date. The organization did not receive the required 50% score to pass this element of the audit. The safe work practices are guidelines or general "DO's & DON'Ts" on how to carry out specific tasks. SWP's are designed to inform the worker about the known hazards that are present and provide direction on how to safeguard against the hazard. During the audit, it was noted that there is a consultant and a 'Subject-Matter-Expert' (a YEC retiree) developing Safe Work Practices. The recommendation here is that the SWP development continues for all critical tasks and be completed prior to the COR audit planned for mid-2009.

Element 4

As in Element 3 above, safe job procedures (SJPs) were in the process of being developed during the audit. Those that were found appeared to be complete and were easy to understand but review dates were passed.

Again, the *most critical/applicable* SJPs were not found during this audit. The recommendation here is that the SJP development continue and be completed prior to the COR audit in mid-2009.

Element 5

Company rules were written, and available for all employees to read (on the intranet) and interviews supported that workers receive the rules and Code of Conduct training as part of their safety orientation on or about day one of employment. Good job on this element.

Element 6

The PPE use at YEC has become second nature to the workforce. Very good job in this element. The Policy on PPE seems to deliver an effective message. The supervisors include PPE use as an evaluation item in performance reviews. Specialized PPE is available, including the SCBA apparatus at the Aishihik facility. Hearing protection is also available and is used when required. Minutes from previous years' JHSC meetings confirm the Committee has assisted by developing standard selection criteria for certain PPE items such as hard hats and flame resistant clothing.

Element 7

The maintenance records for diesel generators, substation equipment and other mechanical or electrical components are clear, concise and meticulously kept. PM schedules for all equipment and rolling stock including forklifts are up to date and adhered to. The audit did not uncover a system to remove defective tools from service. The recommendation is to ensure there is a system to remove defective or broken tools from service and the workers are trained accordingly. Overall though, a good job on this element of the audit.

Element 8

Training and Communications. Documentation confirmed that the health and safety orientation for employees and contractors is clear and mandatory. All employees receive a full orientation to the H&S program and non-administrative employees complete a WHMIS training session as well. (If required, a TDG training session is also carried out.) Employees and Contractors receive an Orientation Guide Booklet. The inclusion of Bear Awareness and Helicopter Safety is a useful and pertinent part of the YEC orientation. Some employees would like to see the Contractors receive a wallet-sized card confirming "Safety Orientation Completed". I agree, this would be a good addition to the orientation program.

Many of the staff have completed the PHSM and LSE courses offered by the NSNY. (*Principles of Health & Safety Management and Leadership for Safety Excellence*) It was also apparent that the training plans for 2009 include a Crane Operator certification program, Arc flash and ATV training. By using the qualified trainers at NSNY, Orbis Engineering and the Department of Environment we will be assured of consistent curriculum that is kept up to date. Weekly and monthly safety meetings are done and this was verified through review of minutes from Whitehorse and the communities.

Element 9

Inspections. While standardized forms are in place and used, the documentation confirmed that site inspections are not being carried out as frequently as stated in the company policy. There was also no evidence of senior management participating in inspections. Most inspections are carried out by the Manager, Health and Safety, Supervisors and the JHSC members and representatives. Work areas are inspected, including communities. The senior managers review and sign off the inspection sheets with the H&S Manager. The recommendation here is to encourage managers' participation in the site inspections on at least a quarterly basis.

Element 10

Investigations are carried out for vehicle, property, third party, near miss, first aid and medical incidents. Verified by reviewing incident reports. Most supervisors have been trained to investigate incidents, but not all. Fortunately the incident frequency at YEC has been low in 2008 leaving limited opportunity for worker participation this year. In every case the Manager, Health & Safety and members of the JHSC and senior management participate in incident investigations. In some cases members of the Risk Management committee also participate. Investigation training has been provided by a group out of Alberta called "Utility Risk Management." Recommendations and results from the Incident Reports are reviewed on a monthly basis by the JHSC and the President. Recommend that all supervisors and/or lead hands complete Incident Investigation Training in 2009.

Element 11

Emergency Preparedness, First Aid Services, Fire Fighting and Emergency Communications. YEC has done an excellent job on this section of the audit. The emergency response protocol is current and appears to take into account all hazards regarding hydro generation, transmission and distribution. Observed site evacuation plans in all offices and common areas in Whitehorse that were up to date. First aid kits are compliant with the Yukon's Minimum First Aid Regulations and confirmed that in addition to 22 standard first aiders in the organization, there are now 3 Advanced First Aid persons based in Whitehorse. The Procedures for Emergency Evacuation are posted on the intranet and the employees interviewed knew where to find them. The ER Notification Matrix is also current and available to all. It was also noted that this is included in the Orientation package for all employees and contractors. Employees know how to use the satellite phone systems (Iridium) and the SPOT TPS transponder systems that all employees use in company trucks.

Element 12

Statistics and records are available and confirm that monthly and annual summaries are kept. Through YEC's affiliation with the Canadian Electricity Association the annual *KPI's* show progress and confirm YEC is a leader in the utility industry when it comes to frequency and severity figures. Through a H&S newsletter the workforce is kept informed on the company's H&S records and know how YEC compares to other utilities.

Element 13

Legislation. Incident reporting is done and conforms to Yukon's OHS Act. In all cases YEC is meeting the requirements of the YWCHSB's Occupational Health and Safety Regulations – although as mentioned in my review of Elements 3 and 4, more *written* safe job procedures are required to ensure compliance with the regulations and earn YEC the minimum 50% passing mark on audited elements 3 and 4. Interviews confirmed that employees understand their legislated responsibilities and know how to report incidents, near misses, vehicular and 3rd party incidents.

Medical monitoring is done and confirmed through review of annual audiometric test results for YEC employees employed in noise-exposure occupations.

Element 14

As required, YEC has a well established and committed JHSC. The committee meets on the 3rd Thursday of every month. In 2008 the Committee was never without a quorum. Reps are elected by their peers and all work sections and communities are represented. The Committee members have completed the training required by the Yukons OH&S Act. The Committee has representation of both labour and management and the Manager, H&S acts as a neutral advisor to the Committee. Minutes of meetings and Action Checklists are posted on the intranet and all workers read them after each meeting. (Verified by interview.) JHSC's recommendations made to the President are documented. At every JHSC meeting Incident Reports are

reviewed. The YEC JHSC's commitment to a safe and healthy workplace is proven by their interest and involvement in the company H&S program.

In Summary

Overall the health and safety program is well structured, well documented and easy to follow. This audit resulted in a very high score of 86%, although due to the low scores in Elements 3 and 4, Yukon Energy did not 'pass' the NSNY audit. If this were an audit for COR, the organization may qualify for a *Limited Scope Audit*.

At this time, it is my recommendation that before contracting another external auditor to complete the COR audit, we will use this *baseline audit* as a starting point to develop an Action Plan and ensure the missing SJP's and SWP's are in place.

Melanie Pettefer,
Canadian Registered Safety Professional 00-1730
Certified Auditor #05-11-1828

NSNY Audit Document:

Audit Summary Sheet

Company YUKON ENERGY Name of Auditor M. PETTERER Date of Audit JUNE 24/08

Element #	Element Name	Possible Score	Actual Score	Minimum Standard	Auditor Comments
1	(Corporate) Safety Policy	17	17	9	Good job on this element
2	Hazard Assessment	40	31	20	Attn: Prioritize / late hazards
3	Safe Work Practices-Implementation	7	3	4	Most applicable/critical SWPs missing
4	Job Procedures-Implementation	8	2	4	" STP's missing
5	Company Rules	6	NP	3	Good work / communication
6	Personal Protective Equipment	10	10	5	Good job on PPE use
7	Preventative Maintenance	6	4	3	Bring up defective tool removal rule
8	Training and Communication	40	40	20	Excellent!
9	Inspections	24	19	12	Training req'd here
10	Investigations	27	23	14	New training req'd
11	Emergency Preparedness	24	24	12	ERP & DRP are up to date
12	Statistics and Records	9	6	5	This is YEC's 1st audit
13	Legislation	9	9	5	Due diligence! Good job.
TOTAL (where element 14 is N/A)		228	194		
14	JH&SC and Safety Representatives	15	15	8	Well done
TOTAL (with element 14)		243	209		

Minimum Standard = 80% overall score and 50% each element

Actual Score 209 x 100 = 86% %
Possible Score

Standard Achieved: YES NO X

The goal for the next audit must be set by the organization/company representative

Goal for Next Audit: 86% Percentage

Auditor Signature: [Signature]

Reviewed: [Signature] Senior Organization/Company Officer

1 **REFERENCE: Page 3 - 11, lines 18 through 23**

2
3 **TOPIC: Safety/Training**

4
5 **PREAMBLE:**

6
7 Footnote 6, suggests procedures be in place and workers be trained to perform jobs
8 safely. Table 3.9 Training

9
10 **QUESTION:**

- 11
- 12 a) Please provide the types of training identified and number of employees
13 requiring the training along with the associated costs of each training activity.
14
- 15 b) Please provide details as to what facility employees will receive trade related
16 training at, specific to each job class identified.
17
- 18 c) Please provide the average cost per employee for the required training.
19

20 **ANSWER:**

21
22 **(a), (b) and (c)**

23
24 For 2009, the types of training, number of employees requiring training and associated
25 costs of each training activity are anticipated as follows:
26

- 27 • **The Crane Safety Regulations:** The Occupational Health and Safety
28 Regulations (OHS), Part 5, require YEC to ensure all operators of mobile cranes
29 are assessed and are competent to operate. This training will be offered to all
30 employees who operate mobile cranes. This is a new regulation (2006) and the
31 requirement to ensure competency for crane operators must be met before July
32 1, 2009. The cost of training is \$500 per person, plus GST. There are 23
33 employees that require this training. The trainer and assessors are from BC and
34 are approved by the Yukon Worker's Compensation Health and Safety Board
35 (YWCHSB).

- 1 • **Training for Confined Space Entry and Self Rescue:** This training is required
2 in order to comply with OHS Regulations, Part 2. Local trainers will deliver this
3 material. Fifteen employees will receive this training at an estimated cost of
4 \$1520.
5
- 6 • **Substance Abuse Awareness:** This training is provided for supervisors and
7 lead hands. Estimated cost is \$3,085. There are 25 employees receiving this
8 training.
9
- 10 • **Certification of Recognition (COR) Training:** This training will continue at an
11 estimated cost of \$100 per employee. Twenty employees require this training.
12
- 13 • **Hazard Assessment & Control Training:** The training is provided to employees
14 to ensure that they learn the correct use of hazard assessment and control
15 methods. The estimated cost of this training is \$75 per employee. This training
16 will be provided to 30 employees (at a half day course offered by the
17 NSNY/YWCHSB).
18
- 19 • **Arc Flash Awareness:** This training will be one day duration and is being
20 offered by Orbis Engineering. This will be offered to all employees in trades as
21 well as non-technical managers and supervisors. The estimated cost of this
22 training is \$11,000.
23

24 Most training will be carried out at the Whitehorse facility; however, employees in
25 communities outside Whitehorse will also be participating. Schedule accommodation is
26 being provided to allow for travel to Whitehorse.
27

28 See also YECL-YEC-1-43 for actual and budgeted spending on individual training
29 courses in 2005 to 2009.

1 **REFERENCE: Introduction Page 2-12**

3 **TOPIC: Diesel Generation**

5 **PREAMBLE:**

7 Yukon Electrical wishes to better understand the way in which diesel will be consumed
8 in the test period.

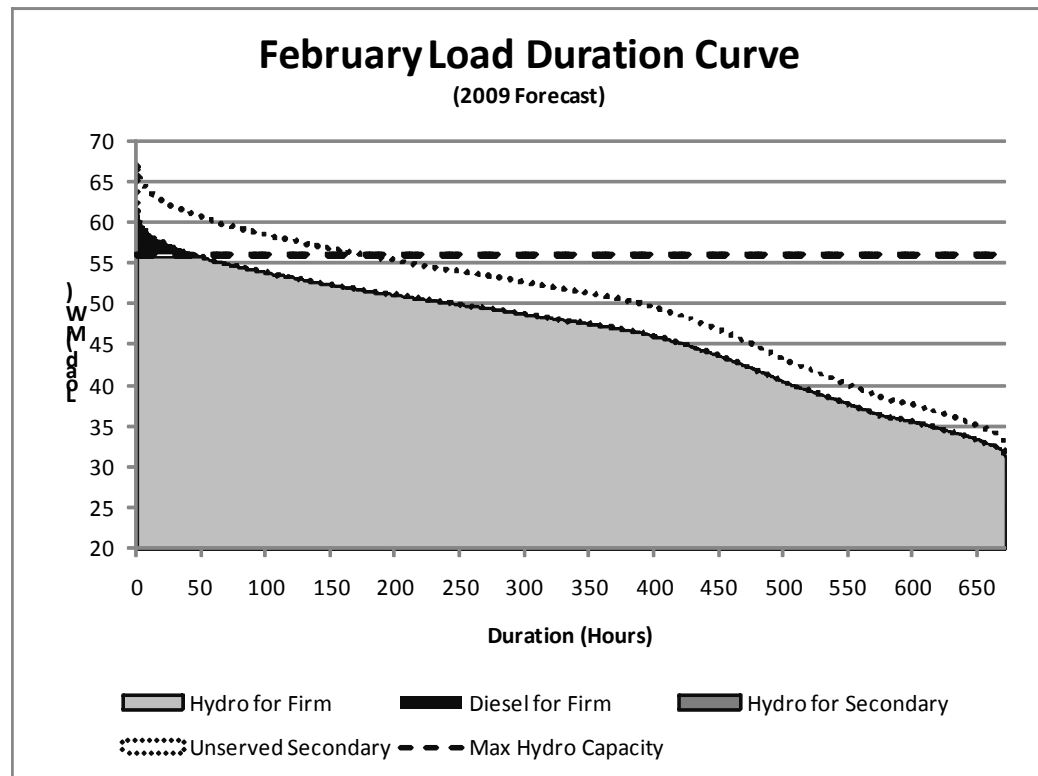
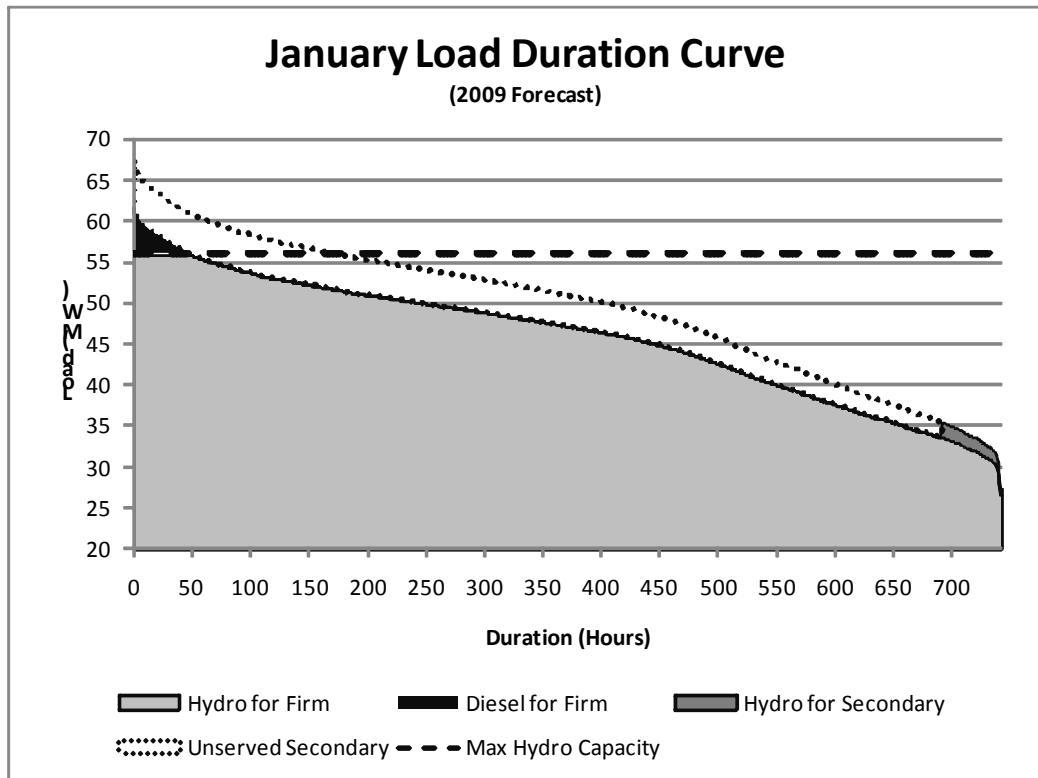
10 **QUESTION:**

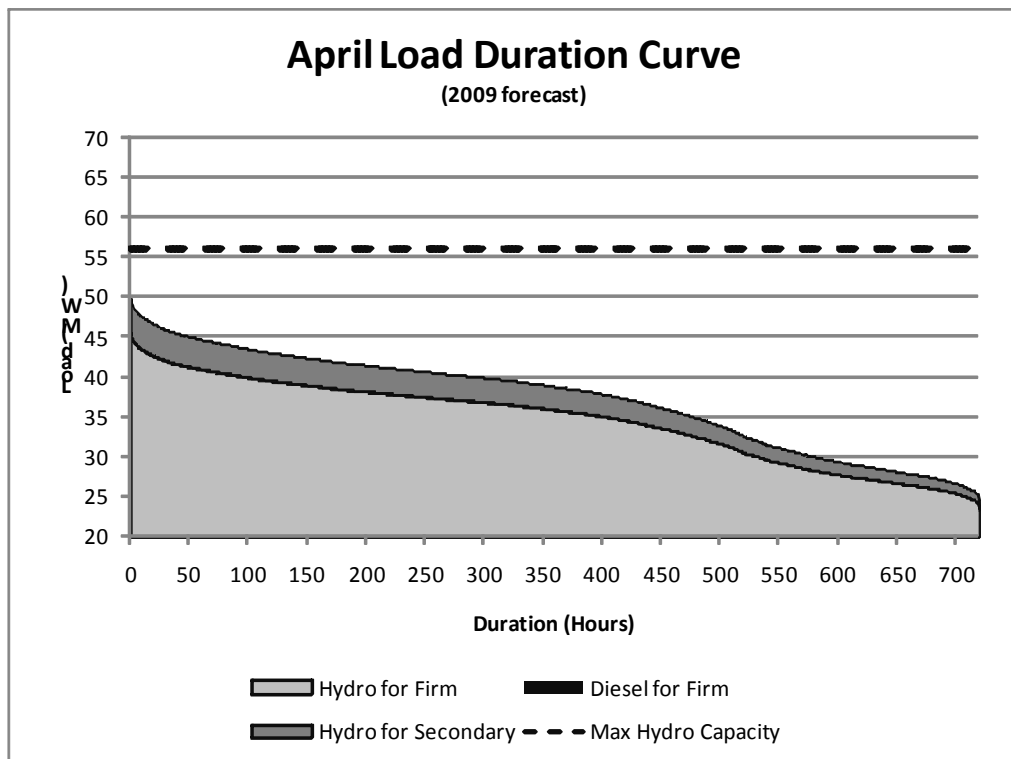
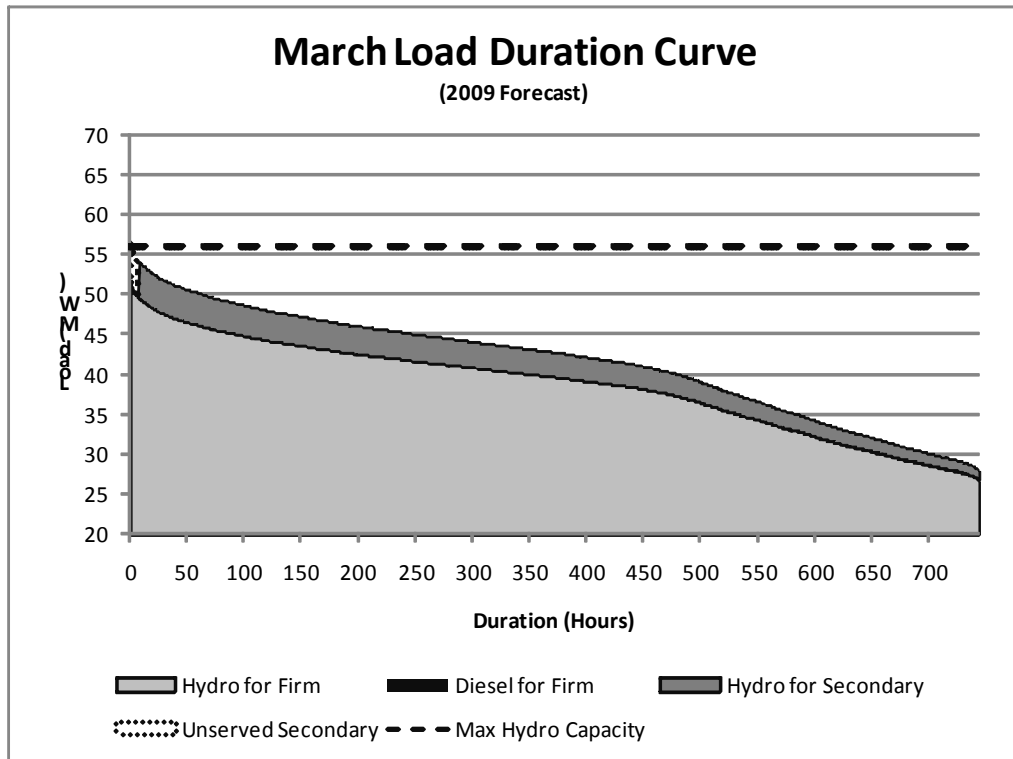
- 12 a) Please provide the monthly load duration curves for 2008 and 2009.
- 14 b) Please overlay hydro supply levels on the above curves.
- 16 c) Please provide the same curves with and without Secondary Sales.
- 18 d) Please provide a diesel unit availability chart for each unit.
- 20 e) In the 20 year Resource plan page 9 it mentions that the Mirrlees rebuilds will
21 ADD capacity to the WAF grid. Were these units removed from rate base and
22 from the WAF grid? Please provide the technical feasibility study done on the
23 Mirrlees referred to in the 20 year Resource Plan on page 9.

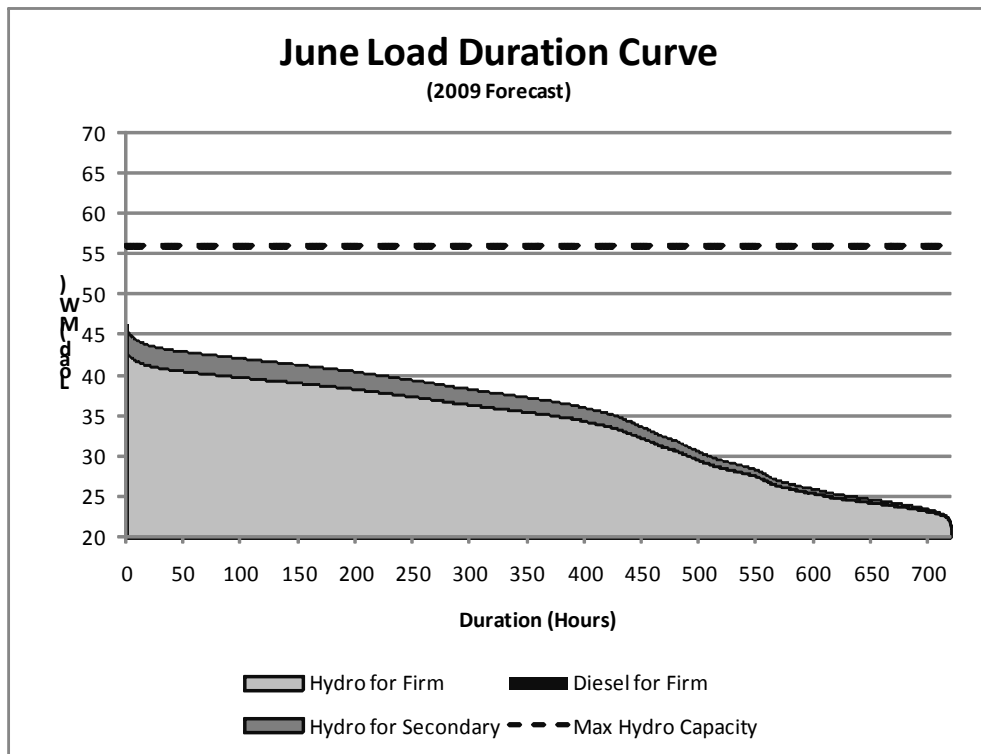
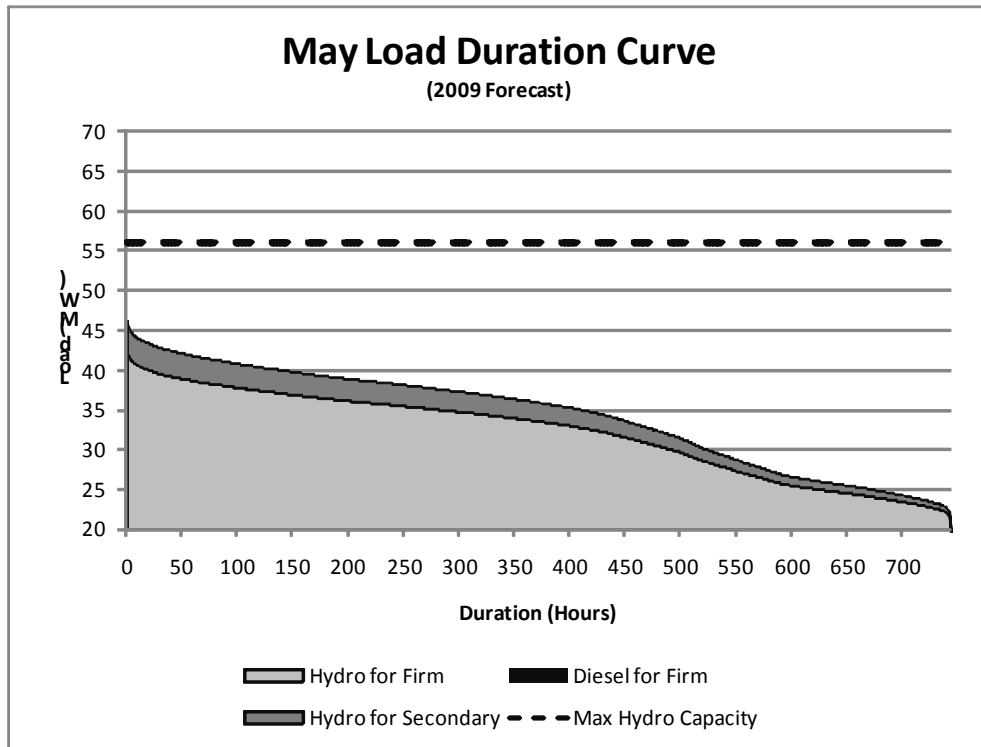
25 **ANSWER:**

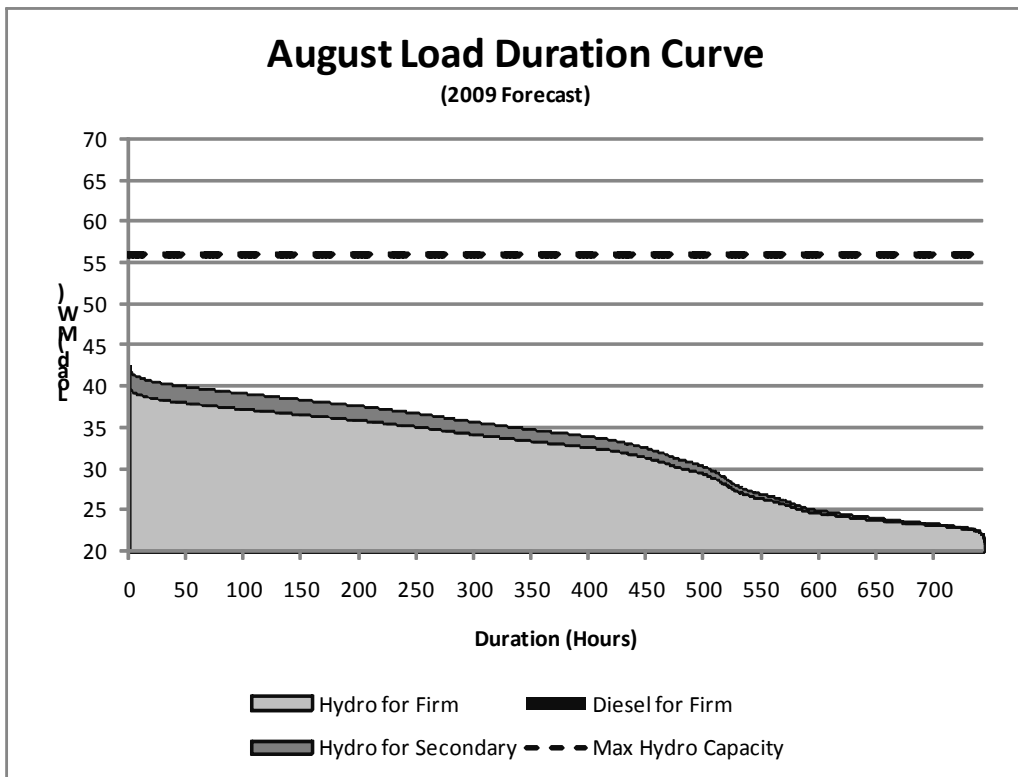
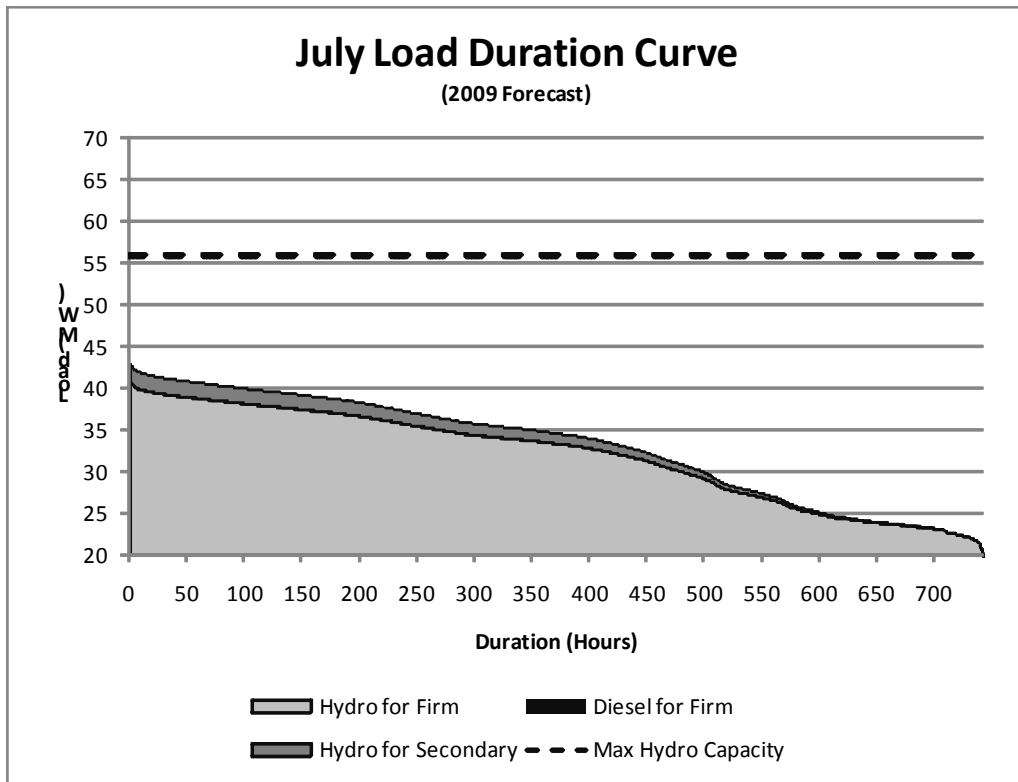
27 **(a), (b) and (c)**

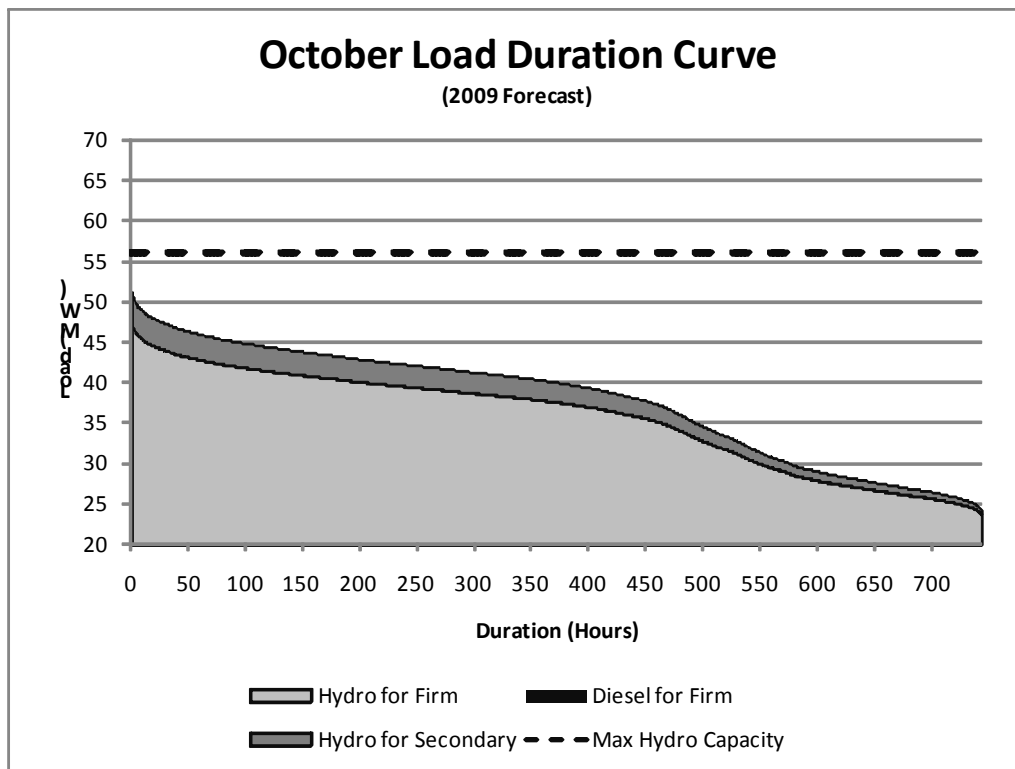
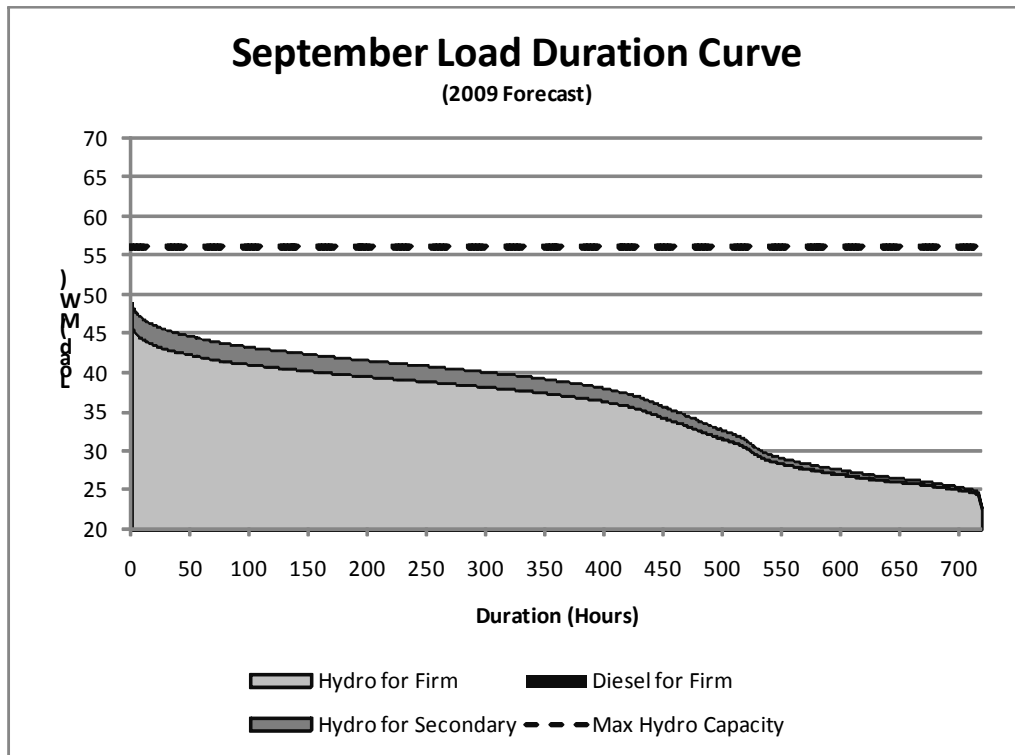
29 Please see the charts below for 2009, based on the detailed analysis provided in YECL-
30 YEC-1-23(b). No similar analysis was conducted for forecast 2008, but the general load
31 shape is expected to be largely similar.

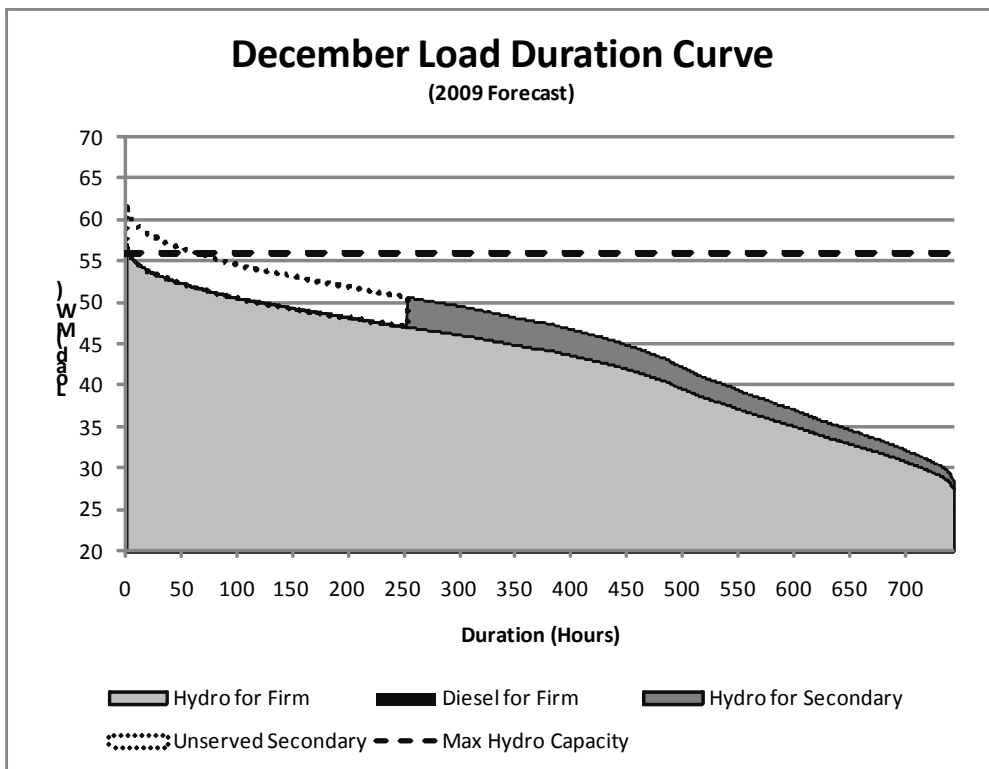
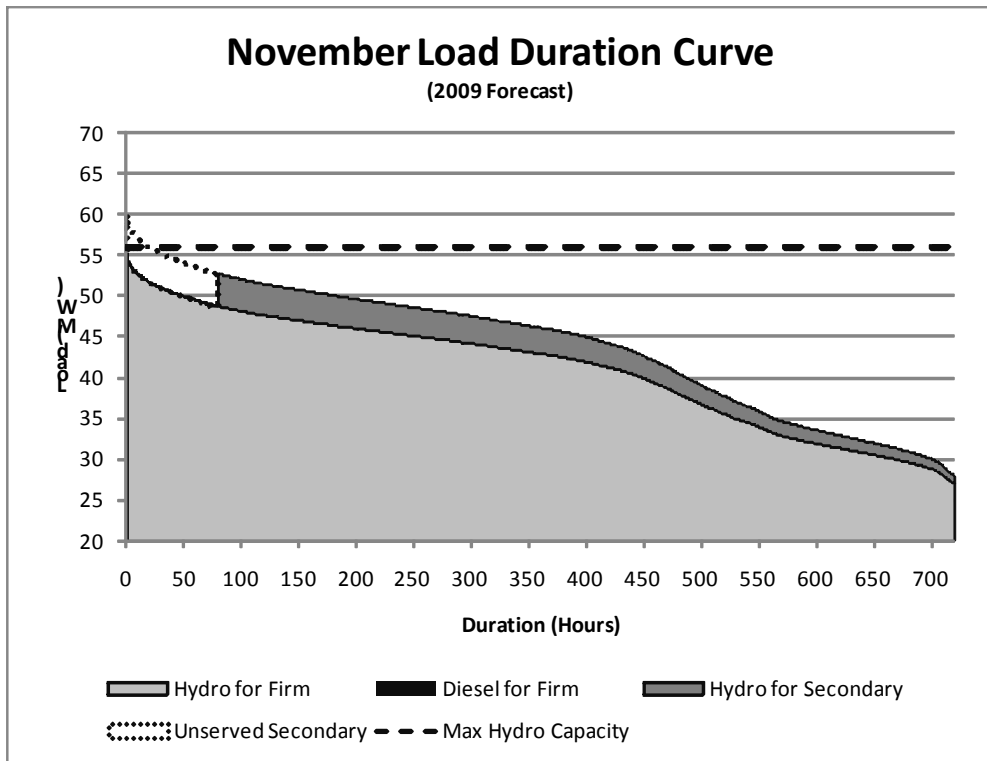












1
2

(d)

1 YEC does not have a forecast availability charge for the test years. On a prospective
2 basis, Yukon Energy's system is planned on the basis of an assumed 10% Forced
3 Outage Rate for diesel units.

4
5 **(e)**
6

7 The units were not removed from rate base or from the WAF grid before or since the
8 Resource Plan proceeding, but were forecast to be retired. As noted at page 4-2 of the
9 20-Year Resource Plan, plans for the retirement of the three Whitehorse Mirrlees Units
10 (WD1, WD2 and WD3) had been in place for some time (as far back as the 1992
11 Resource Plan hearing). While the planned retirement had been delayed over the years,
12 by the time of the Resource Plan hearing in 2006 further delay related to the retirement
13 of the units was not possible without material investment in major tear-down overhaul
14 work. As a result of life extension plans, compared to the scenario with these units
15 retired, the refurbished units have become a source of supply.

16
17 The confirmation of Mirrlees technical feasibility was provided at the 2006 Resource
18 Plan hearing in extensive detail. It was not a "study". The reference to feasibility provided
19 on that page refers to a series of investigations undertaken to confirm technical
20 feasibility.

1 **REFERENCE: Page 3-4, Table 3.2, Page 3-5, lines 1-11**

2
3 **TOPIC: Fuel Costs**

4
5 **QUESTION:**

6
7 a) Please provide complete details of fuel expense by plant. Include details of
8 sales, station service, litres of fuel used, average costs and fuel expense.

9
10 b) Please provide the heat rate at each stand by plant YEC operates and confirm
11 how these heat rates are calculated.

12
13 c) Please provide the details on any initiative that YEC has taken to improve heat
14 rates (lines 3 & 4 Page 3-5 speak of improved efficiency).

15
16 **ANSWER:**

17
18 **(a)**

19
20 Please see UCG-YEC-1-30 (a) and (e).

21
22 **(b)**

23
24 Please see page 3-5 of Tab 3 of the Application.

25
26 **(c)**

27
28 Please see response to LE-YEC-1-50.

1 **REFERENCE:** Page 3-8 Lines 2 through 8

2
3 **TOPIC:** Brushing

4
5 **PREAMBLE:**

6
7 Yukon Electrical is interested in understanding the fluctuations from year to year in
8 the brushing program at YEC, 105% increase from 2006 to 2007 actuals and 47%
9 increase from 2008 to 2009 proposed expenditures.

10
11 **QUESTION:**

12
13 a) Please explain in detail what is meant by a "Stage increase in brushing activity,
14 which is a periodic and cyclical requirement in the Yukon".

15
16 b) Please provide the details of YEC's transmission and distribution brushing
17 programs, including copies of policies and practices regarding same.

18
19 **ANSWER:**

20
21 **(a) and (b)**

22
23 Yukon Energy does not have written policies on brushing and line assessments. Please
24 see YUB-YEC-1-37 (d) and (e) for description of YEC's pole replacement and brushing
25 program.