

PETER PERCIVAL / HAMLET OF MOUNT LORNE
(PWP / HML)

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) OIC 2008/149 was issued Oct. 3, 2008 and the GRA was filed with the YUB on
6 Oct. 6, 2008. Based on the reasonable assumption that it takes a considerable
7 length of time to prepare a GRA filing and therefore by Oct. 3, 2008 the GRA
8 would have been virtually complete, did YEC during the three day (in reality a 2
9 day) interval find it necessary to make any changes to the filing so as to comply
10 with OIC 2008/149? Please explain why or why not changes were required. Does
11 YEC now plan to make any amendments to the existing GRA as filed so as to
12 conform to OIC 2008/149?

13
14 **ANSWER:**

15
16 **(a)**

17
18 Please see response to YUB-YEC-1-20. YEC filed its Application on October 6, 2008 in
19 compliance with the YUB and the directives in place at the time, including OIC 2008/149.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Please explain why the on page 2 of the Over View it states that "Rate Policy
6 Directive (OIC 1995/90) was amended prior to this Application..." but the
7 Application does not provide the new OIC number in this reference nor was the
8 new OIC 2008/149 included in the Application binder under TAB 10, ORDERS IN
9 COUNCIL?

10
11 **ANSWER:**

12
13 **(a)**

14
15 The government OIC (2008/149) was not available for inclusion in the 2008/2009
16 General Rate Application when the Application was being finalized for printing.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) When exactly did YEC receive OIC 2008/149? At what point in time was YEC
6 made aware that this OIC was being prepared? Did any YEC staff or Board
7 members of YEC or its parent YDC have input or were they consulted during the
8 preparation of this OIC? Please identify such staff or members. Please provide
9 any YEC files, records, notes, letters or emails relating to the issuance and
10 impacts of this OIC.

11
12 **ANSWER:**

13
14 **(a)**

15
16 Please see response to YUB-YEC-1-20.

REFERENCE:

QUESTION:

- a) Please provide a list of the YEC Board Members and Corporation Officers with titles and appointment term expiry dates for each Board Member. Which of these YEC Board Members or Corporation Officers serve in similar capacities on the Board or within the corporate structure of YEC's parent Crown Corporation YDC?

ANSWER:

(a)

YEC Board Members are as follows:

	<u>Date Appointed</u>	<u>Term</u>
Willard Phelps, Chair	March 16, 2007	March 15, 2010
Paul Hunter	August 5, 2007	August 4, 2010
Paul Birckel	January 21, 2009	January 20, 2012
Barb Joe	August 5, 2007	August 4, 2010
Pat Irvin	December 9, 2007	December 8, 2010
Martin Allen	July 25, 2008	July 24, 2010
Greg Hakonson	October 15, 2008	October 14, 2011
Luke Johnson	January 21, 2009	January 20, 2012

The Officers of YEC are as follows:

David Morrison, President and CEO
Ed Mollard, CFO
David MacDonald, VP Operations
Shelley Dixon, Corporate Secretary

Issues relating to YDC and its corporate structure are not relevant to this Application.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Assuming that YEC's proposed retail customer rates for all classes of retail
6 customers are implemented on a Yukon wide basis (i.e. would apply to YECL's
7 retail customers also), please provide, on a (YEC / YECL combined) Yukon wide
8 basis, estimates for the amount of energy consumption and the amount of
9 revenue collected from each of the first blocks and run out blocks for each retail
10 customer class for each of the test years.

11
12 **ANSWER:**

13
14 **(a)**

15
16 Please see Table 4.10, Tab 4.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) As run out or second block rates, sales and revenues are in effect to be used to
6 subsidize or lower the first block rates for the residential retail classes how does
7 YEC propose to cover revenue short falls that may occur as a result of customer
8 price resistance to the run out rates? What sensitivity analysis has YEC carried
9 out with regards to this possible price resistance?

10
11 **ANSWER:**

12
13 **(a)**

14
15 Yukon Energy understands the question to be in regards to price elasticity of demand for
16 second block rate power.

17
18 Yukon Energy does not anticipate price elasticity of demand leading to reduced second
19 block use to be a material factor in the test years. This is because electricity as a
20 commodity is typically not particularly elastic, and any consumer price elasticity is
21 normally understood as a longer-term factor.

22
23 Beyond the test years, to the extent less purchases occur in the second block, the
24 impacts of this development in terms of both revenues and reduced peaking diesel
25 consumption will be reflected in future GRAs.

1 **REFERENCE:**

2
3 **QUESTION:**

4
5 a) If OIC 2008/149 requires that “rate adjustments for retail customers apply
6 equally, when measured as percentages, to all classes of retail customers.” why
7 does the table on page 2 of the OVERVIEW Background show Overall
8 Percentage Changes for first block rate decreases that vary between (17.8%)
9 and (13.7%)? To conform to the OIC does YEC plan to amend the GRA filing to
10 rebalance the % decreases so that the rate adjustments for retail customers
11 apply equally?

12
13 **ANSWER:**

14
15 **(a)**

16
17 No. YEC’s GRA filing is in compliance with the OIC. All classes of customers are
18 proposed to receive a 3.48% rate reduction to the class.

19
20 This OIC directive has applied in the past to prevent rebalancing of revenues among
21 retail rate classes. During the time that this directive was previously in effect,
22 adjustments were approved to address runout rate requirements and other specific rate
23 elements within each class in the same manner as proposed in the Application.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Do the second block run out rate increases for retail customers apply equally,
6 when measured as percentages, to all classes of retail customers?

7
8 **ANSWER:**

9
10 **(a)**

11
12 No. The requirement for rate changes to apply equally on a percentage basis is applied
13 at the class level, not at the individual rate block charge level. Please also see response
14 to PWP/HML-YEC-1-7.

1 **REFERENCE:**

2
3 **QUESTION:**

4
5 a) In the OVERVIEW, Summary of Requested Orders c. Depreciation and
6 Amortization Expenses i. pages 4/5 the amortization period for the current GRA
7 (Phase I) Application is proposed to be only over the 2 test years. Would it not be
8 more appropriate to amortize these costs over the period ending December 31,
9 2012, the date on which OIC 2008/149 expires, and which is probably the earliest
10 likely date by which YEC would file a new GRA?

11
12 **ANSWER:**

13
14 **(a)**

15
16 YEC has no specific plans as to when it would seek to file a next GRA. It is possible it
17 will be for test years prior to 2012.

18
19 The practice in Yukon has been to amortize the costs of a GRA or rate hearing over the
20 period covered by the test years. The only exception YEC is aware of was YEC's 2005
21 GRA, which was amortized over 3 years (2005-2007) based on the approval to make
22 use of deferred revenues (de-watering funds) to plan to avoid the need for a GRA until
23 test year 2008.

1 **REFERENCE:**

2
3 **QUESTION:**

4
5 a) In the OVERVIEW on page 6 under a. v. Lighting (Rate Schedules 61/66, 67,
6 75/76) please provide the actual reductions for each of the rate schedules in
7 cents/kW.h?

8
9 **ANSWER:**

10
11 **(a)**

12
13 Lighting loads served under these rate schedules are not billed on a cents/kW.h basis,
14 but rather a flat fee per month for each lamp or each watt of lighting capacity installed.
15 For the Rider U reductions proposed for each lighting rate class, please see the table
16 provided below.

Proposed reductions for Rate Schedules 61/66, 67, 75/76.

	Current base rate	Proposed reduction	Proposed base rate
Rate Schedule 61/66			
Customer Charge (\$/lamp)	6.36	0.22	6.14
Demand Charge (c/Watt)	4.03	0.14	3.89
Surcharge for Highmast Fixtures (\$/lamp)	1.03	0.04	0.99
Rate Schedule 67			
400 Watts Street Light (\$/month)	23.66	0.82	22.84
250 Watts Street Light (\$/month)	15.47	0.54	14.93
Rate Schedule 75/76			
Normal 12-month unmetered service			
100 Watt HPS (\$/month)	11.64	0.40	11.24
A 175 Watt MV 7,000 Lumen (\$/month)	14.18	0.49	13.69
A 250 Watt MV 11,000 Lumen (\$/month)	17.34	0.60	16.74
A 400 Watt MV 20,000 Lumen (\$/month)	23.03	0.80	22.23
400 Watt MV Flood-Light Unit (\$/month)	25.44	0.88	24.56
Energy and maintenance only			
100 Watt HPS (\$/month)	6.46	0.22	6.24
A 175 Watt MV 7,000 Lumen (\$/month)	9.87	0.34	9.53
A 250 Watt MV 11,000 Lumen (\$/month)	13.16	0.46	12.70
A 400 Watt MV 20,000 Lumen (\$/month)	18.61	0.65	17.96
400 Watt MV Flood-Light Unit (\$/month)	17.75	0.62	17.13
12-month service through customer meter			
100 Watt HPS (\$/month)	7.34	0.26	7.08
A 175 Watt MV 7,000 Lumen (\$/month)	7.97	0.28	7.69
A 250 Watt MV 11,000 Lumen (\$/month)	8.23	0.29	7.94
A 400 Watt MV 20,000 Lumen (\$/month)	7.84	0.27	7.57
400 Watt MV Flood-Light Unit (\$/month)	10.26	0.36	9.90

1

1 **REFERENCE:**

2

3 **QUESTION:**

4

- 5 a) As Lighting is un-metered what is the rationale of having Lighting classed as a
6 Retail Rate?

7

8 **ANSWER:**

9

10 **(a)**

11

12 The term "retail customer" is defined by OIC 1995/90, and includes lighting customers.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Please provide in table form a summary of all planned or accidental power
6 disruptions or power bumps (dates, durations, affected zone(s) / number of
7 customers affected, causes, remediation / response procedures, etc.) attributable
8 to YEC operations on the WAF and D-M grids from the period beginning when
9 the D-M grid came on line up to date.

10
11 **ANSWER:**

12
13 **(a)**

14
15 Please see Attachment 1 provided to this response. These reports commenced in March
16 2004.

 Outage / Disturbance Report March 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
March 11/04	<i>Faro</i> - Little Salmon	2	Bird/animal	1 hour, 30 minutes	Customer not sure when power went off. Called at 14:15 hrs, power on at 15:45.
March 19/04	<i>Faro</i> - Tintina subdivision	6	Planned	29 minutes	Planned outage to change out a switch.
March 26/04	<i>Mayo</i> - Mayo and Elsa Line	350	Planned	8 minutes	Planned outage to test Mayo diesel load pickup.
March 26/04	<i>Mayo</i> - Elsa Line	35	Planned	3 minutes	Planned outage to test Mayo diesel load pickup.
March 26/04	<i>Mayo</i> - Mayo and Elsa Line	350	Planned	3 minutes	Planned outage to test Mayo diesel load pickup.
March 30/04	<i>Dawson</i> - Part of Feeder 2	110	Planned	35 minutes	Express Feeder Alley Work.

 Outage / Disturbance Report April 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
April 2/04	Part Feeder 2	110	Planned	29 min	Express Feeder Work
April 3/04	Dawson S7960 out to Dempster cutoff	161	Planned	92 min	Install gang switch S7964
April 3/04	Grid/Dawson City	Feeder 1- 389 Feeder 2- 474 Feeder 3- 306	Unknown	19 Feeder 1 8 min Feeder 2 11 min Feeder 3 37 min	Phase to ground fault on Hunker Creek feeder. During heavy icing, nothing found after line patrol. Relay coordination problem caused breaker CM-1 to trip.
April 17/04	Rock Creek	20	Isolation	20 min	Trouble call -- tree felled on line by third party.
April 19/04	Dome Sub	1	Blown Transformer	12 hrs	Customer didn't call until next AM.
April 27/04	Henderson Corner	1	Damaged Transformer	2 hrs	Transformer failed after oil sample was taken.
April 27/04	L170 (S164 to Faro)	505 - 11 506 -- 131 507 - 131 Drury Crk - 9 Braeburn-- 10 Lt Fox -- 2 Lt Salmon- 8 Deep Crk - 1 (YECL)	Tree Contact	505 -- 7 min, 46 sec 506 -- 8 min, 40 sec 507 -- 8 min, 58 sec Drury Creek & Lt Salmon -- 2 hrs, 28 min Braeburn, Lt Fox & Deep Creek -- 1 hr, 24 min	Trees contacting the line near Little Salmon structure 1272. Faro placed on diesel and L170 was energized up to Carmacks, trees removed on April 28/04.

 Outage / Disturbance Report May 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
May 4/04	Mayo	23	Unplanned - Nature	14 minutes	Tree was on Primary. Had to open line to remove
May 20/04	L250 line (Elsa Feeder)	5	Unplanned - Mechanical	2 minutes	Gang switch did not close properly, had to take outage to close.
May 26/04	Henderson's Corner (Dawson)	49	Planned	70 Minutes	Pole Changed
May 27/04	Callison Subdivision (Dawson)	78	Planned	55 Minutes	Pole Changed
May 28/04	Boutillier Road (Dawson)	4	Planned	60 Minutes	Move Pole for YTG
May 28/04	6 th and York (Dawson)	75	Planned	15 Minutes	Set Pole to Remove Arial Transformer

File #2700-05-04

 Outage / Disturbance Report June 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
June 9/04	Mayo	2	Planned	25 min	Planned outage to remove PCB transformer.
June 22/04	Porter Creek & Riverdale	1- YECL	Equipment Failure	19 min, 41 sec	AH1 tripped off (guide bearing temperature) line while generating 10 MW, resulting in the under-frequency tripping of S6838 and S150 52-17
June 22/04	Mayo - Town site	296	Wind	1 hour, 1 min	Strong winds caused three separate tree contacts on the Mayo town feeder resulting in the over-current trip of OCR S7748.
June 22/04	Dawson - Rock Creek	2	Wind	Approx. 6 hours	Windstorm hit causing trees to fall on line, broke pole, 5 spans down.
June 22/04	Dawson - Rock Creek	1	Wind	Approx. 4 hours	Wind causing tree contact.
June 29/04	Dawson - Part of Feeder 1	49	Planned	37 min's	Move of RCMP building.
June 30/04	Downtown Whitehorse	1- YECL	Lightning	22 min's	Many lightning strikes in the Whitehorse area.

File #2700-05-04

 Outage / Disturbance Report July 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
July 1/04	L170 (S164 to Faro)	505 - 11 506 - 131 507 - 131 Drury Crk - 9 Braeburn- 10 Lt Fox - 2 Lt Salmon- 8 Deep Crk - 1 (YECL)	Suspected Lightning	505 - 11 min, 18 sec 506 - 11 min, 18 sec 507 - 11 min, 18 sec Drury Creek & Lt Salmon - 5 min, 54 sec Braeburn, Lt Fox & Deep Creek 5 min, 54 sec	Lightning strike on L170 caused breaker S164 52-3 to trip on over-current. The breaker was successfully reclosed. Faro was not placed on diesel during this event. Carmacks and Ross River transferred to standby diesel (YECL) during this event.
July 2/04	Group Home Road, Mayo	10	Tree Contact	12 minutes	Had to remove a tree on the Primary
July 3/04	Whitehorse Feeders: 9L, 10L, 19L and S6838	1 (YECL)	Animal Contact	9L - 10 min 10L - 25 min 19L - 31 min S6838 - 17 min	A raven in the Shipyards substation caused a phase to ground fault which tripped off WH4 before the feeder breaker cleared the fault.
July 11/04	L170 (S164 to Faro)	505 - 11 506 - 131 507 - 131 Drury Crk - 9 Braeburn- 10 Lt Fox - 2 Lt Salmon- 8 Deep Crk - 1 (YECL)	Equipment Failure	505 - 12 min, 12 sec 506 - 17 min, 3 sec 507 - 19 min, 42 sec Drury Creek & Lt Salmon - 2 hrs est. Braeburn, Lt Fox - 4 hrs, 59 min, 46 sec Deep Creek - 4 hrs, 13 min, 46 sec	The cause of this outage was found to be a broken cross-arm on structure 262 near the south end of Fox Lake. Faro was placed on diesel during the repairs. Carmacks and Ross River transferred to standby diesel (YECL) during this event.
July 12/04	All of Feeder 3	304	Planned	55 minutes	Change faulty insulator on guy.
July 14/04	Elsa, & Keno, Mayo	4 - Elsa 245 - Mayo	Equipment Failure	4 minutes and 1 second (Elsa), 4 minutes and 28 seconds (Mayo)	Men were working on the Governors of MH2- SCC received incorrect readings on SCADA - Resulting in the operator tripping the feeder breakers.
July 19/04	L170 (S164 to Faro) & Whitehorse Feeders: 9L, 10L, 13L, 19L, S6837, S6838.	(L170) 505 - 11 506 - 131 507 - 131 Whse Feeders are YECL customers.	Suspected Lightning & Equipment Failure (WH4 Protection)	505 - 48 min, 47 sec 506 - 49 min, 15 sec 507 - 48 min, 47 sec Drury Creek & Lt Salmon - 5 min, 54 sec Braeburn, Lt Fox & Deep Creek 5 min, 54 sec 9L - 12 min, 41 sec 10L - 33 min, 42 min 13L - 8 min 19L - 43 min, 5 sec S6837 - 51 min, 29 sec S6838 - 45 min, 8 sec	The loss of WH4 resulted in a major system outage, WH3 remained on line energizing the sub buses and transmission line, Haines Junction remained on the grid. The protection at WH4 indicates a high current on A phase, which indicates a potential distribution or transmission fault, however nothing was reported in either case. The protection settings on WH4 were changed on July 19, 2004, these changes were made after the system was restored and stabilized.

 Outage / Disturbance Report August 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Aug. 11/04	Village of Mayo	249	Planned Outage	3 hours, 40 minutes	Replacing Gang Switch at Diesel yard.
Aug. 12/04	Village of Mayo	249	Planned Outage	3 hours, 50 minutes	Replacing Gang Switch at Diesel yard.
Aug 13/04	Dawson - Feeders #2 and #3.	777	Equipment Failure	Feeder 3: 1 hour, 12 minutes Feeder 2: 1 hour, 42 minutes	At the time of this event MH2 was off line for repairs to the slip ring. MH1 and DD5 were on line supplying the grid demand. The investigation found two blown fuses on a bank of 37 kva's in Callison. The services are on but there is no consumption. The H1 bushings on both cans were flashed over (they had squirrel guards on them that were pushed all the way down to the top of the can, covering all the skirts of the glass.).
Aug 25/04	Town of Elsa	2	Planned Outage	2 hours, 15 minutes	Customer requested switch opened, to brush substation
Aug 27/04	S150 9L - Teslin and Carcross Loads	1- YECL 15 --- Johnson's Crossing	Lightning	1 minute, 26 seconds	Lightning strike caused breaker S150 52-22 to trip, successfully re-closed by SCC
Aug 31/04	Village of Mayo	130	Planned Outage	2 hours, 45 minutes	Replace switch S7709
Aug 31/04	Village of Mayo	4	Improper installation	10 minutes	Polarity of Transformer in Bank incorrect.

File #2700-05-04

 Outage / Disturbance Report September 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Sept 4/04	Mayo	27	Tree Contact	22 min	Tree contact at Wozinaacs (Government subdivision)
Sept 24/04	Dawson	1166	Line Contact	Feeder #1 - 14 min Feeder #2 - 18 min Feeder #3 - 2 hrs 20 min (estimated)	Airplane flew through the L174 transmission line, cutting all three phases.
Sept 25/04	Dawson	1166	Loss of Generation	Feeder #1 - 44 min Feeder #2 - 46 min Feeder #3 - 1 hr (estimated)	Dawson fed from diesel while L174 was down for repairs. DD3 tripped off line on high jacket water temperature.
Sept 28/04	WAF - S150 52-17, S150 52-22 & S6838	1 - YECL 15 - YEC (Johnson's Crossing)	Tree Contacts & Loss of Generation	S150 52-17 - 33 min S150 52-22 - 34 min S6838 - 12 hrs, 1 min	High winds caused multiply tree contacts, specifically south of Whitehorse. WH4 tripped off line (over-current) causing additional outages in Riverdale and Porter Creek (under-frequency trips). WH4 was unable to be placed back on line, failed to sync.
Sept 29/04	WAF - S6838 and S150 52-17	1-YECL	Loss of Generation	S150 52-17 - 11 min S6838 - 17 min	WH4 was placed on line after being electrically tested from the Sept 28/04 outage, when the unit breaker closed an under-frequency condition occurred on the system resulting in the tripping of feeders S150 52-17 and S6838.

File #2700-05-04

 Outage / Disturbance Report October 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Oct 2/04	Riverdale	1- YECL	Bad Insulators	3 hours, 45 minutes	Bad insulators on 19L (S150 52-17)
Oct 10/04	Mayo School	1	Unplanned - Customer Problem	1 hours, 10 minutes	Blown fuse in Cutout. Refused - OK
Oct 13/04	Carcross Line 9L	1- YECL	Tree Contacts (high Winds)	4 hours, 35 minutes	Extremely high winds gusting to 65km/hr, tripped line 9L (S150 52-22). Many trees on the line
Oct 19/04	Riverdale and Porter Creek	1- YECL	Loss of Generation	S150 52-17 -- 3 minutes S6838 -- 4 minutes	WH4 was off line for breaker repair when unit was put back on line it went unstable causing S6838 and S150 52-17 to trip on under frequency. Cause unknown at this time.
Oct 20/04	Dawson - Feeder #3	304	Over speed on DD5	2 minutes	See outage report.
Oct 20/04	Faro - Breaker 506	135	Animal Contact (Raven)	7 minutes	Raven blew 50 KVA transformer fuse. This caused feeder breaker 506to operate.
Oct 20/04	Faro RCMP Office	1	Animal Contact (Raven)	22 minutes	Refused 50 KVA transformer and restored power at 10:10

File #2700-05-04

 Outage / Disturbance Report November 2004					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Nov 3/04	Johnson's Crossing	16	Tree Contact	1 hour, 42 minutes	Tree contacted the line.
Nov 17/04	Elsa Feeder	YECL customers -10 YEC customers-4	Planned Outage	3 hours, 15 minutes	Pole change out
Nov 18/04	Elsa Feeder	YECL customers- 10 YEC customers- 4	Planned Outage	2 hours, 24 minutes	Pole change out
Nov 18/04	Elsa Feeder	YECL customers- 10 YEC customers- 4	Weather	4 minutes, 48 seconds	Heavy snow at the time of this outage.
Nov 21/04	Johnson's Crossing	16	Weather	9 hours, 4 minutes	Snow and icing on the lines caused this outage.
Nov 24/04	Johnson's Crossing	16	Weather	1 hour, 31 minutes	Snow and icing on the lines caused this outage.
Nov 24/04	Johnson's Crossing	16	Weather	15 minutes	Snow and icing on the lines caused this outage.
Nov 28/04	Johnson's Crossing	16	Weather	6 hours, 14 minutes	Snow and icing on the lines caused this outage.

File #2700-05-04

 Outage / Disturbance Report January 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Jan 28/05	Johnson's Crossing	16	Loss of Supply - Heavy Snow	1 hour 15 min	YECL reported this outage, which was initiated at Marsh Lake OCR S9657.
Jan 28/05	Johnson's Crossing	16	Loss of Supply - Heavy Snow	1 hour 30 min	Second Outage - YECL reported this outage, which was initiated at Marsh Lake OCR S9657

File #2700-05-04

 Outage / Disturbance Report February 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Feb 16, 2005	Dawson - All Feeders Elsa Feeder	Dawson - 1169 YECL customers- 10 YEC customers- 4	Human Error	Feeder 1 - 8 min Feeder 2 - 9 min Feeder 3 - 28 min L174 - 20 min MH0 52-F1 - 13 min	While installing new speed sensing equipment on the Mayo hydro units, the online unit was inadvertently tripped. At the time of this event only one hydro unit was on line, the remaining generation came from Mayo diesel.
Feb 28, 2005	Elsa Feeder	YECL customers- 10 YEC customers- 4	Melting Snow	1 min, 57 sec	The suspected cause of this outage is snow melting causing tracking on a bad insulator.

File #2700-05-04

 Outage / Disturbance Report March 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
March 30/05	Faro - Feeder 1 (Breaker 506)	152	Suspect Animal Contact	13 minutes	Cause of this event a suspected bird contacting the line. Phase to phase fault.
March 30/05	Mayo-Dawson	2	Planned	5 minutes	Switch In - Outage due to switching so crew could work on the Mayo Dawson line. Partridge & Moose Creek customers.
March 30/05	Mayo-Dawson	2	Planned	6 minutes	Return to Normal - Outage due to switching so crew could work on the Mayo Dawson line. Partridge & Moose Creek customers.

File #2700-05-04

 Outage / Disturbance Report April 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
April 28, 2005	Faro	284	Animal Contact	506 – 19 min, 11 sec 507 – 36 sec	At 07:42:08 Faro Breakers 506 and 507 tripped. SCC reclosed Faro 507, which closed and held. SCC unsuccessfully reclosed Faro 506. The Faro serviceman performed a line patrol. And reported a dead raven found near switch S7584. At 08:01:19 SCC reclosed Faro 506, which closed and held.
April 29, 2005	L174/Dawson	Dawson – 1166 L174 - 6	Animal Contact	Feeder 1 – 30 min, 57 sec Feeder 2 – 43 min, 42 sec Feeder 3 – 43 min, 6 sec L174 - 25 min, 14 sec	The cause of this outage was found to be a squirrel contacting the line at the Dawson airport; the contact was at a riser pole that feeds the pad mount transformer. During the Dawson restoration the fuel automatic shut off valve was tripped causing delays to the restoration. Suspected cause is dead batteries to the valve.
April 30, 2005	Johnson Crossing	15	Loss of supply – tree contact	2 hours, 35 min	Tree contacted the 9L line. YECL provided the restoration.

File #2700-05-04

 Outage / Disturbance Report May 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
May 3, 2005	Dawson Feeders 1 and 2	Feeder 1 -- 389 Feeder 2 - 473	Human Error	Feeder 1 - 16 min, 11 sec Feeder 2 -- 17 min, 1 sec	Dawson feeders 1 and 2 were being fed from diesel at the time of this event. An electrician was working on the fire system and unintentionally closed the fuel valve to the units.
May 12, 2005	Haines Junction Feeder	3 -- YEC 1 -- YECL (Haines Jct)	Animal Contact	S167 52-2 - 37 min, 51 sec	The cause of this outage was found to be a squirrel-contacting transformer S167 T2. Haines Junction went to diesel backup with 3 minutes.
May 14, 2005	Whitehorse S6838 S150 52-21 S150 52-22	1 - YECL	Loss of Generation	S6838 -- 20 min 37 sec S150 52-21 -- 18 min 36 sec S150 52-22 -- 9 min 11 sec	Aishihik unit #1 tripped off line due to a "Lower Guide Bearing Temperature" trip. At the time of this event the unit was at 10.2 Mw, the loss of this generation caused an under frequency condition on the system.

File #2700-05-04

 Outage / Disturbance Report June 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
June 8/05	Mayo - Silver King Mine	1	Equipment Failure - Opened fuse	60 minutes	S7744 Fell open, not blown
June 10/05	Partridge Creek	5	High Winds - Tree hit line	2 hours, 45 minutes	T174P 89-2 Fuse operated
June 12/03	Dawson - All Feeders L174 (Partridge & Moose Creek)	1169 6 Total - 1175	Wind Storm	Feeder 1 10 minutes Feeder 2 10 minutes Feeder 3 2 hours, 51 minutes L174 - 1 hour, 5 minutes	Relay coordination problems caused L174 to trip resulting in a Dawson outage; the cause was multiple tree contacts on the Hunker Creek feeder. Rock Creek was isolated so that Hunker and Henderson could be reenergized while repairing the line and cutting trees.
June 14/05	Mayo - Gov Subdivision	29	High Winds - Tree hit line	1 hour, 15 minutes	S7727 Fuse operated
June 17/05	Mayo - Gov Subdivision	29	High Winds - Tree hit line	52 minutes	S7727 Fuse operated
June 17/05	Mayo - Group Home Road	12	High Winds - Tree hit line	1 hour, 43 minutes	S7702 Fuse operated
June 17/05	Mayo - Lot 5 Alder drive	1	High Winds - Tree hit line	45 minutes	Tree Broke Triplex
June 27/05	L170 (Takhini to Faro line)	331 - Includes Fox, Drury, Braeburn and Faro	Lightning Strike	L170 customers 4 min Faro customers 8 min	Suspected cause of this outage is lightning. YECL Carmacks and Ross River transferred to diesel at the onset of this disturbance.
June 30/05	Braeburn	1	Animal Contact - Raven	6 hours est.	Long time frame due to YEC serviceman traveling back from Faro and the lack of notification from the customer (fuse found open when meter reading).

File #2700-05-04



Outage / Disturbance Report

July 2005

Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
July 1/05	Faro - 506	142	Animal Contact	9 min, 37 sec	Dead raven found on the feeder.
July 5/05	Elsa Transmission Line	5 - YEC 11-YECL	Lightning	1 st - 1 min 2 nd - 1 min 3 rd - 2 min	Line tripped 3 separate times due to lightning strikes. A subsequent line patrol identified Halfway Lakes and Silver King Mine fuses had blown (see below).
July 5/05	Halfway Lakes	2	Lightning	1 hour, 48min	Found on patrol. Customer wasn't home
July 5/05	Silver King Mine	1	Lightning	2 hours, 23min	Found on patrol.
July 5/05	Dawson / L174	1172	Lightning	Feeder 1 - 15 min Feeder 2 - 16 min Feeder 3 - 34 min L174 - 41 min	The cause of this outage is a suspected lightning strike on L174, tripping S249 52-2.
July 14/05	Silver King	1	Unknown	2 hours, 16min	Fuse was burned off. Had problems with this fuse last month
July 14/05	Elsa Transmission Line	5 - YEC 11-YECL	Requested By Lineman in the field	5 min	Fuse was burned off at Silver King, Had to have Elsa line de-energized to safely remove fuse
July 16/05	Mayo Airport	1	Animal Contact	6 hours, 15 min	Fuse blue at 9am but customer had back up generator. Didn't call until 3pm and power was restored at 3:15pm
July 22/05	Faro - 507	142	Animal Contact	3 min	Raven contacted a transformer causing the feeder breaker to trip. A subsequent line patrol identified a 50 KVA transformer blown (see below).
July 22	Faro - 525 Douglass	6	Animal Contact	1 hour, 10 min	Raven caused 50 KVA transformer fuse to blow.
July 25/05	Elsa Line & Dawson Feeder 3	Elsa Line - 5 - YEC 11-YECL Dawson Feeder 3 - 304	Equipment Failure	Elsa/Keno - 14 min, 15 sec Dawson Feeder 3 - 28 min, 52 sec 21	MHI slip ring was arcing badly; SCC was unable to replace the generation from this unit before it tripped. SCC tripped the Elsa line, Dawson feeder 3 tripped on U/F.
July 26/05	Mendenhall	33	Planned	5 min n	Scheduled outage to place Mendenhall on mobile diesel in preparation for a line outage.
July 26/05	Champagne	30	Planned	4 min	Scheduled outage to place Champagne on mobile diesel in preparation for a line outage.



Outage / Disturbance Report August 2005

Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Aug 15-16/05	Whitehorse L171	1 -- YECL 65 -- YEC	Equipment Failure	Champagne -- 6 hours, 24 min Mendenhall -- 6 hours, 19 min (YECL) Takhini River PT -- 8 hours, 19 min	A faulty lightning arrestor at the Mendenhall PT sub was the cause of these disturbances. Note the outage durations are a summary of three separate events related to the same outage cause.
Aug 15/05	Faro -- 505 & 506	505 -- 142 506 -- 142	Animal Contact	505 -- 2 min 506 -- 21 min	Raven contacted the line tripping both 505 and 506 breakers. SCC was unable to closed 506, which was successfully closed locally.
Aug 16/05	Mayo, Bill Leary's Garage	1	Equipment Failure - Connection failed at mast	30 min	Changed connections and replaced melted triplex
Aug 17/05	Dawson -- S250 52-2	304	Lightning	24 min	Suspected cause of this outage is lightning tripping feeder 3 and the synchronous condenser off line.
Aug 18/05	Whitehorse	1 -- YECL 15 - YEC	Equipment Failure	S6838 -- 31 min S150 52-17 -- 21 min S150 52-18 -- 27 min S150 52-22 -- 19 min	Loss of WH4 due to a bus bar failure caused this outage. Diesel generation was required during the restoration.
Aug 19/05	Whitehorse -- S150 52-22	1 -- YECL 15 - YEC	Equipment Failure	5 min	YECL gang-switch failure caused S150 52-22 to operate.
Aug 20/05	WAF Total Outage	1 -- YECL 444 - YEC	Equipment Failure	Faro 505 -- 10 min Faro 506 -- 11 min Faro 507 -- 12 min S6837 -- 25 min S6838 -- 23 min S150 52-17 -- 35 min S150 52-18 -- 18 min S150 52-21 -- 55 min S150 52-22 -- 23 min L170 -- 29 min L171 -- 5 min L355 -- 5 min	Exciter fault on WH4 caused the unit to trip off line resulting in a WAF outage.
Aug 22/05	Champagne	30	Planned	5 min	Champagne placed on mobile diesel in preparation for L171 line maintenance.
Aug 23/05	Mendenhall	33 -- YEC	Planned	3 min	Outage required to open a line switch for the Safe Work Permit issued for L171 line maintenance.
Aug 25/05	Champagne Mendenhall	63 -- YEC	Planned	Champagne -- 5 min Mendenhall -- 2 min	Outages required returning L171 to normal after line maintenance, Champagne off diesel.

 Outage / Disturbance Report September 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Sept 2/05	Whitehorse S6838	1 - YECL	Equipment Failure	23 min	WH4 tripped off line due to a burnt bus bar. Feeder breaker S6938 tripped on under frequency.
Sept 13/05	Faro - 505	12 -- YEC 1 -- YECL (Ross River)	Animal Contact (Raven)	17 sec	Cause of this outage was found to be a raven contacting the line.
Sept 24/05	Elsa line	16 -- YEC 1 -- YECL (Keno City)	Lightning	2 min	Lightning is the suspected cause of this outage as reported by the Mayo serviceman.
Sept 26/05	Whitehorse S150 52-17 S6838	1 - YECL	Equipment Failure	S6838 – 13 min S150 52-17 – 19 min	WH4 was placed on line after the bus bar repair; the unit began to motorize tripping feeder breakers S6838 and S150 52-17 on under frequency. WH4 tripped off line on reverse power.

File #2700-05-04

 Outage / Disturbance Report October 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Oct 12/05	Dawson - Hunker Feeder	304	Inadequate Generation	27 minutes	Dawson was islanded (L174 line maintenance) and on diesel at the time of this event. Due to suspected sequencer problems there was inadequate generation on line as the load started to increase.

File #2700-05-04

YUKON
ENERGY



Outage / Disturbance Report November 2005

Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Nov 17/05	Elsa line	16	Weather	1 min	Heavy snow at time, possible tree contacting the line due to snow loading.

File #2700-05-04

 Outage / Disturbance Report December 2005					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Dec 26/05	Elsa Transmission Line	5 --- YEC 11-YECL	Snow	4 minutes	Suspected cause of this outage is snow buildup on the line.

File #2700-05-04

YUKON ENERGY



Outage / Disturbance Report
January 2006

Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments																										
Jan 10/06	Faro S870	264	Planned	7 minutes	Required to pickup the Faro mine site (power quality), L170 isolated for line maintenance. Switching as per ES 06-1																										
Jan 11/06	Faro -- 505	12 -- YEC 1 - YECL	Weather - Frost	42 minutes	Reports light snow and frost building on lines, breaker opened on an over-current condition. Long duration cause by lack of SCADA visibility.																										
Jan 16/06	Champagne	30	Weather - Frost	2 hours, 15 minutes	Fuse tripped due to frost build-up on the lines.																										
Jan 19/06	Champagne	30	Tree contact	1 hour, 48 minutes	Fuse tripped due to a tree contact.																										
Jan 22/06	Faro -- 505	12 -- YEC 1 - YECL	Weather - Frost	Less than 1 minute	Reports light snow and frost building on lines, breaker auto reclosed.																										
Jan 23/06	Faro S870	264	Planned	4 minutes	Required to pickup the Faro mine site (power quality), L170 isolated for line maintenance. Switching as per ES 06-15																										
Jan 29/06	WAF blackout	YEC -- 446 YECL - 1	Loss of Generation	<table><tr><th>Feeder</th><th>Variance</th></tr><tr><td>S6838</td><td>3:16 196</td></tr><tr><td>S6837</td><td>3:14 194</td></tr><tr><td>S150 52-17</td><td>2:19 137</td></tr><tr><td>S150 52-21</td><td>2:25 175</td></tr><tr><td>S150 52-22</td><td>3:39 219</td></tr><tr><td>S150 52-18</td><td>3:37 217</td></tr><tr><td>Faro 505</td><td>0:10</td></tr><tr><td>Faro 507</td><td>0:10</td></tr><tr><td>S164 52-3 (L170)</td><td>7:20:54 140</td></tr><tr><td>L171</td><td>2:26:56 146</td></tr><tr><td>L355</td><td>7:10 730</td></tr><tr><td>Mendenhall</td><td>15:09 est. 909</td></tr></table>	Feeder	Variance	S6838	3:16 196	S6837	3:14 194	S150 52-17	2:19 137	S150 52-21	2:25 175	S150 52-22	3:39 219	S150 52-18	3:37 217	Faro 505	0:10	Faro 507	0:10	S164 52-3 (L170)	7:20:54 140	L171	2:26:56 146	L355	7:10 730	Mendenhall	15:09 est. 909	A cable failure at the Aishihik plant initiated this disturbance, for complete details of this event reference the outage report. ...\\Outage Reports\2006\1st Quarter (January-March)\Jan 29 2006 W.A.F System Blackout.rtf
Feeder	Variance																														
S6838	3:16 196																														
S6837	3:14 194																														
S150 52-17	2:19 137																														
S150 52-21	2:25 175																														
S150 52-22	3:39 219																														
S150 52-18	3:37 217																														
Faro 505	0:10																														
Faro 507	0:10																														
S164 52-3 (L170)	7:20:54 140																														
L171	2:26:56 146																														
L355	7:10 730																														
Mendenhall	15:09 est. 909																														

File #2700-05-04

 Outage / Disturbance Report February 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Feb 12, 2006	WAF -- Whitehorse	1 YECL	Loss of Generation	S6838 -- 14 min S150 52- 17 - 16 min	WH4 tripped off line due to a bus bar failure. Feeders tripped on under-frequency as a result of the lost generation
Feb 13, 2006	WAF -- Whitehorse	1 YECL	Loss of Generation	S6838 -- 41 min S150 52- 17 - 37 min	WH4 was placed on line after the bus bar repairs, the unit reversed powered causing an under frequency condition on the system. WH1 and WH2 tripped on over speed closing the unit headgate, which delayed the restoration.

File #2700-05-04

 Outage / Disturbance Report March 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
March 6, 2006	Braeburn	1 - YTG	Animal	2 hours	Squirrel contacted the transformer.
March 14, 2006	NWTEL - Little Fox	1	Planned	30 min	PCB sample
March 22, 2006	Mayo -- Government subdivision	26	Planned	55 min	Required to remove a transformer from service.
March 30, 2006	NWTEL -- Mendenhall	1	Planned	1 hour	Required to take conductor measurements at the site.

File #2700-05-04

 Outage / Disturbance Report April 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
April 10, 2006	Dawson	1170	Animal Contact	Feeder 1 -- 7 min Feeder 2 -- 8 min Feeder 3 -- 36 min L174 -- 2 hrs, 3 min 123	A squirrel contacted S250 RT-1 causing an over current condition tripping L174 feeder breaker S249 52-2. The three Dawson feeder breakers cleared on under-voltage. Dawson was restored with diesel; L174 restoration was delayed until crews working near the line could be contacted.
April 26, 2006	WAF	YECL YEC -- 279	Animal Contact	YECL -- 46 min YEC -- 16 min	This outage originated in the YECL Lewes Blvd substation with a squirrel contacting and extensively damaging a breaker. Aishihik was split (S164 52-1) from the system and remained on line feeding the L170 and L171 customers, with the exception of Faro (U/V), which was restored with local diesel. System protection coordination between utilities may have caused this disturbance to escalate beyond the main Riverdale feeder.
April 27, 2006	Dawson	233	Planned	Feeder 1 -- 4 hrs, 45 min	Planned late night outage on a section of feeder 1 to install an in-line pole and replace another.

File #2700-05-04

 Outage / Disturbance Report May 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
May 5-6, 2006	Dawson -- Rock Creek	47	Flooding	27 hrs, 55 min	As a result of flooding in the Rock Creek area electrical supply to this section of Dawson was isolated. Once the levels had receded the power was restored.
May 19, 2006	Whitehorse S6838	1 (YECL)	Human Error	7 min	Contractor tripped AH2 off line resulting in a system under frequency condition tripping breaker S6838.
May 19, 2006	Whitehorse L171	67	Transmission Failure	Mendenhall -- 4 hrs, 50 min Champagne -- 5 hrs, 4 min L171 -- 42 hrs, 44 min	A faulty insulator on L171 was the cause of this disturbance. At the time of this failure Aishihik was isolated to install new cables, which minimized the effect of the outage. Mendenhall was supplied by a mobile diesel initially with Champagne and Mendenhall later fed from P130 while repairs were being completed. With the loss of P130 generation backup diesel generation was required to meet peak.
May 25, 2006	Mayo	1	Animal Contact	1 hour	Squirrel contacted the line causing the fuse to blow.

File #2700-05-04

 Outage / Disturbance Report June 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
June 6, 2006	Mendenhall	39	Planned	2 hrs, 33 min	Planned outage required to replace transformer and install lightning arrestor.
June 7, 2006	Whitehorse	1 – YECL S6838 S150 52-17	Human Error	S6838 – 5 min, 13 sec S150 52-17 – 4 min, 20 sec <i>160</i>	Emergency stop inadvertently activated on WH4 during on line testing of the unit. Unit tripped with 12 Mw of load, resulting in breakers S6838 and S150 52-17 tripping on under-frequency.
June 10, 2006	Whitehorse	1 – YECL 15 - YEC S6837 S6838 S150 52-17 S150 52-18 S150 52-21 S150 52-22	Line Contact	S6837 – 49 min, 33 sec S6838 – 15 min, 42 sec S150 52-17 – 14 min, 12 sec S150 52-18 – 17 min, 30 sec S150 52-21 – 39 min, 45 sec S150 52-22 – 11 min, 25 sec	S164 52-1 tripped on a distance relay de-energizing L172, WH4 was unable to supply the load at S150 and S170 by itself resulting in an under voltage condition tripping the feeder breakers at each substation L355, L170 and L171 remained energized and fed from AH1. YECL reports a possible high load contact over the weekend that may have caused this outage. They found a burnt primary conductor in the Marwell area fed from S7192 in the services substation. There may be problem with relay coordination between YEC and YECL; this fault should not have escalated past the YECL distribution protection.
June 13, 2006	Dawson	2	Unknown	57 min	Cause of this event is unknown, occurred at the Dome subdivision.
June 26, 2006	Dawson	1184	Line Fault Suspected Lightning	F1 – 9 min, 25 sec F2 – 12 min, 30 sec F3 – 16 min, 51 sec L174 – 13 min, 5 sec	A B phase fault on the Mayo-Dawson line caused this disturbance; to date the cause of the fault has not been determined. Dawson was restored with diesel and later synchronized back to mayo hydro.
June 28, 2006	Johnson Crossing	15	Insulation failure	4 hours, 10 min	An insulation failure on 9L resulted in this disturbance affecting both YEC and YECL customers. Extended duration due to the time to find the failure and its location.
June 29, 2006	Whitehorse	1 - YECL S6838	Generation Failure	10 min, 23 sec	While re-energizing S150 T2, WH1 tripped off line (phase 87 O/C) causing S6838 to trip on under frequency.
June 30, 2006	Mayo	26	Tree Contact	25 min	Tree contacted the line in the government subdivision.

File #2700-05-04

 Outage / Disturbance Report July 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
July 5/06	Braeburn	1	Animal Contact	1 hour, 22 min	Bird contacted the line resulting in a blown fuse.
July 8//06	Mayo	3	Animal Contact	10 hours est.	Power went out on the evening of July 8. Customer called SCC trouble line and reported, however when asked if she wanted her power restored she said it could wait until morning. An employee had his neighbor knock on his door at 7:30 next morning complaining his power was out. Employee then called serviceman. Total of 3 customers out.
July 12/06	Mayo	26	Tree Contact	1 hour, 21 min	High winds resulted in a tree contacting the line.
July 13/06	Mayo	16	Lightning	13 min, 33 sec	Lightning strike on the Elsa line caused an instantaneous over-current trip of the feeder.
July 14/06	WAF	443	Human Error	51 minutes Note: Feeders were closed at various times. The above duration indicates the last SCADA controlled feeder closed.	The cause of this disturbance was found to be an incorrect CT wiring on S150 52-15. The breaker had been replaced the week of July 10, 2006. On the return to normal switching one of the last steps was to close this breaker completing the circuit through S150 T7. However once the breaker was closed S150 T7 indicated a differential trip resulting in breakers S150 52-1, S150 52-15 and circuit switcher S150 52-23 opening. As a consequence of these switches opening the WAF system was split; WH2 and WH3 feed the S150 load and WH4 and AH1 feeding the remaining WAF system.

File #2700-05-04

 Outage / Disturbance Report August 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Aug 17/06	L174 - Dawson	1190	Lightning	Dawson F1 – 12 min Dawson F2 – 15 min Dawson F3 – 31 min L174 – 55 min Stewart – 1 hr, 9 min	Suspected cause of this event is lightning in the Stewart area. Delays restoring Stewart were a YECL issue.
Aug 21/06	Mayo	3	Animal Contact	1 hr, 30 min	A raven contacted the line on 2 nd avenue.
Aug 27/06	WAF	1 - YECL 15 - YEC	Equipment Failure	S150 52-17 – 10 min S150 52-22 – 10 min S6837 – 37 min S6838 – 34 min	The loss of WH4 generation as a result of a bus-bar failure caused this event. Breakers tripped on under-voltage.

File #2700-05-04

 Outage / Disturbance Report September 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Sept 13/06	Elsa Line	16	Unknown	1 minute, 25 seconds	At the time of the event there were no adverse weather conditions.
Sept 13/06	Elsa Line	16	Unknown	1 minute	At the time of the event there were no adverse weather conditions.
Sept 20/06	Mayo	310	Planned	6 hours	Scheduled outage to accommodate the town feeder project.
Sept 20/06	Mayo	310	Planned	6 hours, 25 minutes	Scheduled outage to accommodate the town feeder project.

File #2700-05-04

 Outage / Disturbance Report October 2006						
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments	
Oct 10/06	L170	Faro – 296 L170 - 29	Tree Contact	Dury Creek – 5 hours, 34 min Braeburn & Little Fox – 3 hours 12 min Faro – 18 min	Two separate tree contacts on the L170 transmission line between Carmacks and Faro were identified as the cause of this event. Faro and Dury Creek were placed on diesel. Total duration to return the system to normal was 35 hours and 5 minutes, due to darkness and the requirement to fly the line to locate the tree contacts.	
Oct 11/06	L170 Braeburn & Little Fox	15	Scheduled	4 min	Planned outage to switch L170 back to normal from the Oct 10 outage.	
Oct 25/06	L170 Braeburn & Little Fox	15	Scheduled	7 min	Planned outage to accommodate work on the L170 transmission line.	
Oct 27/06	L170 Braeburn & Little Fox	15	Scheduled	4 min	Planned outage to accommodate work on the L170 transmission line.	
Oct 31/06	L170 Braeburn & Little Fox	15	Scheduled	3 min	Planned outage to accommodate work on the L170 transmission line.	

File #2700-05-04

 Outage / Disturbance Report November 2006					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Nov 2/06	L170 Braeburn & Little Fox	29	Scheduled	2 min	Planned outage to accommodate work on the L170 transmission line.

File #2700-05-04

Outage / Disturbance Report December 2006



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Dec 18/06	Dawson	1190	Adverse Weather (Snow)	F1 - 11 min F2 - 11 min F3 - 27 min L174 - 8 hours	The suspected cause of this outage is snow loading on the L174 transmission line, which resulted in the phase slapping when the snow released. Due to the time of this event and the failure of an attempted reclose the line remained de-energized for the night, with Dawson remaining on diesel.
Dec 18/06	Dawson (Feeder 3)	318	Loss of Supply (Generation)	F3 - 31 min	P158 was put in economic dispatch after a previous line outage. The economic dispatch didn't function properly resulting in two of the three generators coming off line resulting in under frequency condition tripping the Hunker Creek feeder S250 52-2. P158 left in manual until economic dispatch mode adjusted.
Dec 18/06	Dawson and Elsa Line (L250)	1208 (L250 22) (Dawson 1186)	Loss of Supply (Generation)	F1 - 29 min F2 - 25 min F3 - 46 min L250 - 1 hr, 3 min	MHO 52-F2 tripped on an ABC instantaneous over-current, however SCADA still indicated closed. Trouble calls were received from Elsa and Keno confirming L250 was down. SCC opened MHO 52-F2 in SCADA and MH2 52-1 opened tripping the unit on over-speed. P158 F1, P158 F2 and S250 52-2 opened on under frequency as a result of MH2 going offline. See this events outage report for recommendations and actions.

File #2700-05-04

Outage / Disturbance Report January 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Jan 1/07	Elsa Line - L250	16	Weather - Heavy Snow	1 min	Outage caused by heavy snow conditions in the district, snow loading on the line.
Jan 10/07	Dawson	1198	Relay Failure	F1 - 8 min F2 - 10 min F3 - 20 min 11	A faulty protective relay (51V) on MH2 caused the unit to trip off line, resulting in an under-frequency condition initiating trips to the three Dawson feeders. Feeders were restored using P158 generation.
Jan 10/07	Dawson	318	Relay Failure	F3 - 5 min	The same relay mentioned above failed a second time, however with two P158 units on in base-load and MH2 running at a reduced load the outage was limited to the F3 feeder.
Jan 16/07	Dawson	880	Human Error	F1 - 17 min F2 - 18 min 17	This event took place during the plant automation commissioning. Outage caused by the shorting out a pressure switch on DD3 which caused the 24 volt system to trip. The feeder DC power supply is fed from same supply resulting in Feeder #1 and Feeder #2 tripping.
Jan 24/07	Dawson & L174	1198	Weather - Heavy Snow	F1 - 9 min F2 - 9 min F3 - 30 min L174 - 1 hr, 20 min 32	Suspected cause of this event is snow / frost loading on the L174 transmission line, which caused S249 52-2 to open and lock-out. Dawson Diesel started and the system was separated to aid in restoration.
Jan 24/07	L174	7	Weather - Heavy Snow	52 min	Suspected cause of this event is snow / frost loading on the L174 transmission line, which caused S249 52-2 to open and lock-out. Due to the extreme weather conditions (snow / frost) Dawson was isolated from Mayo hydro resulting in a lower customer impact.
Jan 24/07	L174	7	Weather - Heavy Snow	15 min	Suspected cause of this event is snow / frost loading on the L174 transmission line, which caused S249 52-2 to open and lock-out. Due to the extreme weather conditions (snow / frost) Dawson was isolated from Mayo hydro resulting in a lower customer impact. The line was flown the Jan 25/07 and re-energized.
Jan 29/07	Dawson	1198	Equipment Failure	F1 - 9 min F2 - 9 min F3 - 30 min 16	MH2 tripped off on 86 lock-out. Problem was failed power supply to governor. On restoration with diesels load was picked up with units in base load causing poor power quality. Diesels should be in sharing mode when picking up feeders.

Outage / Disturbance Report February 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Feb 27, 2007	Mayo - NND Subdivision	5	Failed Connection	4 hours	A connection failed on an open wire secondary causing this outage. Delays in reporting of the failure resulted in the increased duration.
Feb 27, 2007	Dawson Feeder 2	483	Human Error	10 minutes	While working on the Dawson automation project the employee inadvertently hit the test/reset button on the 27/59T coil which tripped P158-52-F2. Power was restored using P158 diesel.

File #2700-05-04

 Outage / Disturbance Report March 2007					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
					No outage to report for this month

File #2700-05-04

Outage / Disturbance Report April 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
April 16/07	Haines Junction Line (L355)	1 - YECL 2 - YEC	Protective Relaying	2 min, 35 sec	During the return to normal switching of transmission line L171 (Aishihik) the line was re-energized with AH2. The line breaker closed, however AH2 tripped off line due to a phase differential on the unit, resulting in an outage to the L355 customers. The cause of the loss of AH2 is still under review.
April 17/07	Faro - L356 (505)	1 - YECL 147 - YEC	Damaged Line Structure	7 hours 46 min (Tintina Subdivision)	Cause of this disturbance was a broken pole on the L356 transmission line to Ross Rive. The majority of the customers affected were restored within 42 min once the damage section of the line was isolated; however the Tintina Subdivision experienced an extended outage duration due to the requirement to transport a mobile diesel from Whitehorse to the site.
April 27/07	Dawson	7	Scheduled Outage	1 hour, 30 min	Planned outage to remove from service PCB transformers.
April 27/07	Faro - L356 (505)	1 - YECL 147 - YEC	Customer Equipment Failure	8 min	A problem with customer equipment (bad meter base) resulted in a failed transformer bank feeding the Faro pump-house initiated this outage.
April 27/07	Dawson	1198	MH1 Governor Tracking Error	16 min, 48 sec	P158 52-F1 Dawson Town Feeder #1, P158 52-F2 Dawson Town Feeder #2 and S250 52-2 Hunker Creek all tripped on U/F resulting from MH1 shedding its load, due to a unit governor tracking error. The restoration was performed using the remaining Mayo hydro unit and Dawson diesel.
April 28/07	Dawson	20	Unknown	30 min	Blown distribution fuse cause this outage. Serviceman checked the transformer for damage and for evidence of an animal contact, with nothing found the fuse was replaced and closed.
April 28/07	Mayo - Elsa Line	1 - YECL 18 - YEC	Customer Equipment Failure	1 hour, 39 min	The cause of this disturbance was found to be a broken pole on the Bell Keno line, which is owned by the mine. The serviceman found one fuse tripped, he opened the remaining two and the line was successfully energized. The feed to the line is currently de-energized, until Arctic Power can make repairs. Extended duration due to the operational procedure to sectionalize the line to define the problem area.
April 30/07	Faro Town-site	282	Scheduled Outage	5 min	Planned outage to allow for the safe switching (bypass) of the Faro voltage regulator. The regulator controller had previously failed.

Outage / Disturbance Report
May 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
May 3/07	Dawson - Klondike Highway near Callison	1	Animal Contact	1 hour, 25 min	Blown fuse caused by a bird contact.
May 14/07	Mayo - Airport Subdivision	26	Scheduled	1 hour, 20 min	Planned outage to install line jumpers.
May 21/07	Dawson - Airport	3	Tree Contact	1 hour, 15 min	Tree contacted the line resulting in a blown fuse.

File #2700-05-04

Outage / Disturbance Report June 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
June 4/07	South Fox	6	Scheduled	12 minutes	Scheduled outage required to connect backup diesel for substation deficiency work.
June 5/07	South Fox	6	Scheduled	11 minutes	Scheduled outage required to disconnect backup diesel from the June 4/07 substation deficiency work.
June 5/07	Elsa Line	18	Lightning	1 hour, 32 minutes	MHO 52-F2 is tagged for fire rating (extreme). Outage duration long due to the requirement to patrol the line from Mayo to Keno in extreme fire hazard conditions. Nothing found and the line was successfully re-closed.
June 6/07	L355 – Haines Junction Line	5	Scheduled	2 hours, 41 minutes	Scheduled outage required to accommodate the installation of 2 poles for the new YECL subdivision.
June 13/07	Dawson F1	231	Scheduled	1 hour, 10 minutes	Scheduled outage required to install a new pole downtown Dawson.
June 13/07	Dawson F1	20	Scheduled	3 hours, 20 minutes	Scheduled outage required to install a new pole downtown Dawson. Majority of customers were restored earlier in the above scheduled outage.
June 13/07	L174	7	Scheduled	2 hours 12 minutes	Scheduled outage required to remove damaged lightning arrestors in S249 and S250 substations. Dawson islanded from Mayo hydro for this work.
June 16/07	Faro – Breaker 507	135	Animal Contact	8 minutes	Raven contacted the line resulting in blown fuses on transformer banks.
June 17/07	WAF – L170, S6838 and S150 52-17	1 - YECL 310 - YEC	Lightning	L170 – 2 hrs, 48 min S150 52-17 – 40 min S6838 – 53 min Faro – 5 min	The cause of this event has been determined to be a lightning strike on L170. Due to the loss of load (U/F breakers) WH1 and WH2 tripped on over-speed, closing the head-gates and delaying the restoration process.
June 29/07	Dawson – Feeder 2 & 3	801	Lightning	F2 – 14 minutes F3 – 16 minutes	Lightning storm in the Dawson district cause this outage. Restoration was performed using both diesel and hydro. Due to the storm Dawson was islanded from Mayo to minimize any additional outages.

Outage / Disturbance Report July 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
July 1/07	Faro - F1	135	Animal Contact	506 - 4 minutes	Dead raven found at a transformer.
July 3/07	Dawson	1205	Lightning	F1 - 8 minutes F2 - 9 minutes F3 - 17 minutes L174 - 21 minutes	A lightning strike on L174 tripped the line off resulting in an outage to the Dawson and L174 customers. Dawson was restored using diesel generation and L174 was re-energized up to Callison. Dawson remained islanded until the storm passed.
July 3/07	L174	7	Lightning	L174 - 20 minutes	A lightning strike on L174 tripped the line. Dawson was islanded (see above) at the time and was not affected.
July 3/07	Dawson	1	Lightning	4 hours, 20 minutes	Localized lightning strike on a distribution tap caused this outage.
July 3/07	Dawson	1	Lightning	23 hours, 40 minutes	Localized lightning strike on a distribution tap caused this outage (same outage as above). Customer was not on site, this drop was repaired the following day July 4/07.
July 4/07	Mayo	3	Animal Contact	45 minutes	Dead raven found at a transformer.
July 7/07	Dawson	1205	Lightning	F1 - 37 minutes F2 - 36 minutes F3 - 55 minutes L174 - 59 minutes	A lightning strike on L174 tripped the line off resulting in an outage to the Dawson and L174 customers. Dawson was restored using diesel generation and L174 was re-energized up to Callison. There were delays in the restoration due to the P158 diesel units failing to pick up load (see outage report).
July 11/07	Dawson	11	Scheduled	1 hours, 30 minutes	Scheduled outage required to change out a PCB transformer.
July 11/07	Dawson	11	Unknown	1 hours, 30 minutes	Transformer fuse blown; cause unknown.

July 11/07	Dawson	11	Scheduled	3 hours	Scheduled outage required to install pole for Arctic Inland Sawmill.
July 12/07	Faro - F1	135	Animal Contact	506 - 7 minutes	Dead raven found at a transformer.
July 14/07	Dawson	1205	Lightning	F1 - 8 minutes F2 - 9 minutes F3 - 18 minutes L174 - 19 minutes	A lightning strike on L174 tripped the line off resulting in an outage to the Dawson and L174 customers. Dawson was restored using diesel generation and L174 was re-energized up to Callison. Dawson remained islanded until the storm passed.
July 14/07	WAF	1- YECL 14 - YEC (9L)	Unknown	S6837 - 33 min S6838 - 60 min S150 52-17 - 45 min S150 52-21 - 38 min S150 52-22 - 7 min	At the time of this disturbance YECL was trouble-shooting in the Cooper Ridge subdivision and picked up 1.74 Mw, which resulted AH1 tripping and causing a under-frequency and under voltage condition on the system tripping the feeders. There was no definitive cause identified for this outage, the YECL load pickup should not have tripped AH1 off.

File #2700-05-04

Outage / Disturbance Report August 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Aug 1/07	WAF (66%)	354	Equipment Failure	SI50 52-17 – 54 min SI50 52-21 – 34 min SI50 52-22 – 37 min S6838 – 59 min L170 - 1 hour, 53 min 33 minutes	A governor hydraulic valve failure caused WH4 to trip offline, as a result the system collapsed due to lack of generation. Restoration was delayed as L171 the Aishihik line was isolated for maintenance prohibiting the use of Aishihik generation. Whitehorse hydro and diesel were utilized in the restoration.
Aug 6/07	L174	7	Lightning	33 minutes	Dawson had been islanded prior to the disturbance to minimize the potential outage impact, of the forecasted lighting in the area.
Aug 6/07	L355 Haines Junction Line	7	Equipment Failure	2 minutes	The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank.
Aug 14/07	WAF (100%)	433	Equipment Failure	Total outage duration was 40 minutes (see outage report for feeder details)	A governor hydraulic valve failure caused WH4 to trip offline, as a result the system collapsed due to lack of generation.
Aug 18/07	Faro - 506	135	Unknown	1 minutes	No targets or flags on breaker 506, breaker was closed remotely.
Aug 20/07	L355 Haines Junction Line	7	Equipment Failure	3 hours, 37 minutes	The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank. The line was flown during this event line fault detectors were installed to help locate the problem.
Aug 21/07	L355 Haines Junction Line	7	Equipment Failure	36 minutes	The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank.
Aug 28/07	Faro - 506	135	Animal Contact	1 minutes	A dead raven was found near a transformer with a blown fuse.

File #2700-05-04

Outage / Disturbance Report September 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Sept 2/07	L355 Haines Junction Line	7	Equipment Failure	52 minutes	The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank.
Sept 3/07	L355 Haines Junction Line	7	Equipment Failure	15 minutes	The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank. Repaired Sept 15/07.
Sept 11/07	Dawson	1205	Unknown	F1 – 7 minutes F2 – 7 minutes F3 – 29 minutes L174 - 48 minutes	Cause of this event is unknown (D-60 relays – Zone 1 ground operation – Phase under voltage on A-B-C). The line was successfully re-closed after Dawson was restored with diesel.
Sept 15/07	WAF (100%)	433	Equipment Failure	Total outage duration was 1 hour, 27 minutes (see outage report for feeder details)	The cause of this disturbance was found to be a failed coil in the WH4 creep detector resulting in a DC system fault taking the unit off line, with insufficient generation the system collapsed.
Sept 24/07	Faro - 505	12	YECL Equipment Failure	9 minutes	The cause of this disturbance was a failed YECL bypass switch on the metering tank in Ross River.

File #2700-05-04

YUKON ENERGY Outage / Disturbance Report October 2007					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Oct 10/07	L355 Haines Junction Line	7	Equipment Failure	2 minutes	Line feeder breaker tripped and was remotely re-closed. The cause of this and future outages on the L355 was later identified as a failed arrestor on the line side off the metering tank.
Oct 17/07	Mayo / Dawson	1549	Human Error	L174 – 51 minutes Dawson F1 – 13 minutes Dawson F2 – 14 minutes Dawson F3 – 43 minutes Mayo TF – 9 minutes Elsa Feeder – 8 minutes	The system setup at the time of this event had MH1 out of service under a WAP for annual preventive maintenance with DD5 on line in base-load to supplement MH2 generation. Work was also taking place on the SCADA RTU, which involved replacing the old Pentium with a new Scout RTU. As part of the RTU work the employee was reconnecting the 4/20mA transducer loops to the RTU analog cards. The on line hydro unit MH2 received a “Gate Tracking Error” which shut the unit down. With insufficient generation on line the system collapsed, the Dawson feeders tripped on under-frequency, DD5 tripped on over-speed and S249 52-2 (L174) on under-voltage.
Oct 17/07	Mayo – NND Admin Building	1	Unknown	30 minutes	Blown transformer fuse, no dead animals found.

File #2700-05-04

Outage / Disturbance Report November 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Nov 14/07	Whitehorse	1 - YECL	Loss of Supply	S6838 - 7 minutes	AH1 tripped off line resulting in the under-frequency tripping of breaker S6838. The cause of the AH1 trip was due to insulator problems on the slip rings.
Nov 17/07	Whitehorse	1 - YECL 14 - YEC (9L)	Human Error	S150 52-17 - 16 minutes S150 52-18- 21 minutes S150 52-21 - 27 minutes S150 52-22 - 37 minutes S170 S6838 - 24 minutes	Workers were commissioning the new RTU in S171 and reset the 94/L150 relay, this caused S171 52-3 S171 52-4 and S171 52-1 to open producing a split system. Haines Junction,, Faro, and S6837 stayed energized being fed from AH2 .
Nov 25/07	Dawson - Rock Creek	30	Unknown	1 hour, 42 minutes	A blown fuse was found, however there is no definitive cause for this outage. Recent heavy snow in the area may have caused the lines to slap. There were no calls to indicate the power was out until for approximately 1 hour after what we can determine is the start of this event.

File #2700-05-04

Outage / Disturbance Report December 2007



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Dec 4/07	Dawson Feeder 2	483	Unknown	22 minutes	The system load and frequency where surging prior to the loss of feeder 2 in Dawson, indicating a possible line contact i.e. tree. The relay set point on feeder 2 caused it to trip before feeder 3. No definitive cause for this event was found.
Dec 11/07	Johnson Crossing	15	Animal Contact	59 minutes	The YECL breaker S9567 operated twice and held. The responding YEC servicemen found a blown transformer fuse and dead raven in the Johnson Crossing area.

File #2700-05-04

Outage / Disturbance Report January 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Jan 4/08	Dawson	1205	Adverse Weather (Snow)	Dawson F1 – 18 minutes Dawson F2 – 18 minutes Hunker Creek – 30 minutes L174 - 42 minutes	Suspected phase slap on the L174 transmission line caused this outage. Dawson diesel was used to restore power in Dawson.
Jan 10/08	Faro – 506	142	Animal contact	31 minutes	Dead raven found on Faro feeder #2.
Jan 10/08	Faro RCMP Office	1	Animal contact	3 hours, 59 minutes	Part of a previous outage (see above) caused by a raven contacting the line the customer fuse was frozen and did not drop out as is usual. The customer did not inform YEC for quite some time their power was still out.
Jan 13/08	Johnson Crossing	15	Tree contact	5 hours, 39 minutes	The YEC/L owned sub transmission line south had multiple tree contacts, resulting in this outage.
Jan 13/08	Champagne	29	Improper fusing	5 hours, 58 minutes	The fuse feeding the Champagne area was too low, due to the cold temperatures to demand was high enough to burn the fuse. Delays in restoration due to the on call serviceman dealing with the Johnson Crossing outage (see above).
Jan 17/08	Elsa Line	16	Unknown	47 seconds	Line breaker tripped and was immediately re-closed. A line patrolled was performed, nothing obvious was found. Weather at the time was clear and calm.
Jan 18/08	Dawson school	1	Planned	25 minutes	The Dawson school was de-energized to allow for repairs to connections found in an infrared scan.

File #2700-05-04

 Outage / Disturbance Report February 2008					
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Feb 3, 2008	Dawson F2	483	Unknown -- Possible Line Contact	58 minutes	P158 52-F2 tripped (Ground Over current Relay) After P158 52-F2 reclose failed the system was sectionalized at S7942. P158 52-F2 then held but tripped again when S7942 was closed. Dave Wray recommended the Neutral current trip set point be set from Normal to High. P158 52-F2 was closed a third time and held when S7942 was later closed. All feeder operations took place with DD 2, 3 & 5 online in sharing.

File #2700-05-04

**Outage / Disturbance Report
March 2008**



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
March 8, 2008	Mayo – Mease Farms	1	Defective Equipment	1 hour	Fuse barrel dropped out. This piece of equipment is old and will be replaced this spring/summer.
March 26, 2008	Dawson – Airport Nav. Beacon	2	Scheduled Outage	1 hour	Outage required installing new switch and switching plate at the Dawson airport navigation beacon feeder. This site has diesel backup.

File #2700-05-04

Outage / Disturbance Report April 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
April 2/08	Dawson F3 (Hunker Creek)	318	Planned Outage	2 hours, 38 minutes	Outage required for gang-switch maintenance.
April 2/08	Dawson F1	40	Planned Outage	1 hour, 12 minutes	Outage required to rebuild copper risers on feeder one.
April 2/08	Dawson F2	140	Planned Outage	47 minutes	Outage required to rebuild copper risers on feeder two.
April 3/08	Dawson F3 & L174	F3 -318 L174 -7	Planned Outage	F3 - 5 hours, 36 minutes L174 - 25 minutes	This outage was required to reframe a 66kv pole and install an overhead guy on the 66kv. This section of the line is a double circuit and required the isolation of both L174 and F3 for the crew's safety.
April 4/08	Dawson F2	483	Planned Outage	3 hours, 35 minutes	Outage necessary for the removal of two gang switches, reframe structures and re-harness two transformer banks.
April 9/08	L250 <i>CLSA</i>	18	Planned Outage	37 minutes	Outage required for transmission line maintenance.

File #2700-05-04

Outage / Disturbance Report May 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
May 1/08	Faro	296	Equipment Failure	13 min, 42 seconds	A failed lightning arrestor on 502T transformer was the cause of this event.
May 4/08	WAF	443	Vandalism	4 hours, 14 minutes	The cause of this disturbance was found to be shot insulators on L172 transmission line between S171 and S164 substations. At this critical juncture of the system, it produced a split system and without insufficient generation from the Aishihik plant the system collapsed.
May 6/08	WAF S6838 S150 52-21	1 (YECL)	Equipment Failure	S6838 – 17 min, 11 sec S150 52-21 – 21 min, 10 sec	The cause of this event was a failed insulator on the YECL owned distribution system. S150 52-21 tripped on over-current, the fault dropped the system frequency low enough to cause S6838 to trip.
May 10/08	Faro	12	Tree Contact	24 seconds	Breaker over-current tripped and was successfully re-closed. The cause was determined to be a tree contact.
May 16/08	WAF S6838 S150 52-17	1 (YECL)	Generation Failure	S6838 – 28 min, 40 sec S150 52-17 – 18 min, 54 sec	WH4 governor issues (proportional valve) resulted in the loss of this unit, SCC was able to reduce the output from the unit prior to the unit tripping reducing the outage impact. Feeder breakers S6938 and S150 52-17 tripped on under-frequency.
May 22/08	WAF S6838	1 (YECL)	Generation Failure	S6838 – 25 min, 18 sec	WH3 governor issues (LVDT), resulted in the unit shedding load causing an under-frequency condition that tripped breaker S6838.

File #2700-05-04

Outage / Disturbance Report June 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
June 5/08	Elsa line	16	Scheduled	27 minutes, 10 seconds	Planned outage to remove danger trees from the line
June 8/08	Faro (Feeder 2)	142	Unknown	5 minutes	Breaker tripped on a ground fault, the line was patrolled no definitive cause was found.
June 9/08	L355 (Haines Junction)	2	Adverse Weather - Snow	5 minutes , 53 seconds	Haines Junction YECL serviceman reports the outage was caused by large amounts of snow on the lines at Canyon City.
June 9/08	L355 (Haines Junction)	2	Adverse Weather - Snow	26 minutes , 16 seconds	Second disturbance on L355 again caused by heavy snow near Canyon City. Delays in re-energizing the line due to servicemen working in the area removing snow from the line.
June 11/08	Faro (Feeder 2)	142	Foreign Interference (bird)	3 minutes	Cause of this outage was determined to be a bird contacting the line.
June 11/08	Dawson	40	Lightning	3 hours, 44 minutes	Significant storm activity near the Rock Creek subdivision caused this event, resulting blown fuses at the river crossing and 9 transformers.
June 19/08	Dawson	1	Unknown	3 hours, 30 minutes	Blown transformer fuse caused this outage, the fuse may have been damaged/weakened by the June 11/08 storm.
June 25/08	Faro (Feeder 2)	142	Foreign Interference (squirrel)	20 minutes	Cause of this outage was determined to be a squirrel contacting the line.

File #2700-05-04

Outage / Disturbance Report July 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
July 1/08	Mayo - L250	16	Adverse Weather	2 hours, 6 minutes	The Elsa line tripped and was sectionalized to determine the location of the fault. Storm reported in the area.
July 4/08	Faro F2	142	Animal Contact	41 sec	Bird contacting the line caused the feeder to trip. Reclosed via SCC.
July 5/08	Mayo - L250	16	Adverse Weather	1 minute	The Elsa line tripped and was reclosed by SCC. Storm reported in the area.
July 6/08	Mayo - L250	16	Transmission Failure	2 hours, 2 minutes	The Elsa line tripped and was sectionalized to determine the location of the fault. Broken conductor was found on the transmission line near Keno. Keno placed on mobile diesel during the repairs.
July 15/08	Faro - L356	3	Transmission Failure	7 hours, 13 minutes	Ross River line tripped, SCC was unable to reclose the line. Serviceman dispatched from Whitehorse, the line was sectionalized and flown. Cause was a failed structure. Ross River and the YEC customers on diesel while repairs took place.
July 15/08	Faro F2	142	Unknown	7 minutes	Cause unknown for this event. Breaker was locally closed in.
July 7-16/08	Dawson	1	Flood - Eroded river bank	208 hours	Flooding of the Klondike River near Rock Creek caused bank erosion resulting in the loss of the river crossing feeding one customer. Limited access required the use of a helicopter to reconstruct the crossing.
July 16/08	Dawson	30	Scheduled	30 minutes	Planned outage required to cut in the river crossing noted above.
July 19/08	WAF - 9L	15 YEC 1 -YECL	Tree Contact	5 minutes	Bump S6839 (9L) tripped loss of 0.90 Mw. On the attempt to re-close S150 52-22 tripped. A tree was later found on the line.

July 25/08	Mayo	1	Animal Contact	30 minutes	Bird contacted line causing blown fuse. (Airport)
July 25/08	Mayo	1	Defective Equipment	15 minutes	Blown fuse in customers panel. (Airport)
July 26/08	Mayo	2	Animal Contact	30 minutes	Squirrel contacted line causing blown fuse. (Band Office)
July 28/08	Mayo	1	Animal Contact	30 minutes	Squirrel contacted line causing blown fuse on one phase of a three phase bank. (Dick Ewing Shop)
July 30/08	Mayo	3	Animal Contact	40 minutes	Squirrel contacted line causing blown fuse.
July 30/08	WAF - L355 655	6	Loss of Supply	44 minutes	The SCADA communication with Aishihik was down at the time of this event, YECL informed SCC that Haines Junction was on diesel. The feeder breaker was reclosed locally from the plant.

File #2700-05-04

Outage / Disturbance Report August 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Aug 4/08	Faro - F2	142	Unknown	3 minutes	Cause unknown, closed locally (506).
Aug 4/08	WAF - 9L	15 YEC 1 -YECCL	Tree Contact	36 minutes	S150 52-22 tripped, reclosed after YECCL sectionalized the line.
Aug 6/08	Mayo - L250	16	Adverse Weather	2 hours, 30 minutes	The Elsa line tripped and was reclosed by SCC after the line was sectionalized. Heavy rain reported in the area.
Aug 8/08	Dawson & L174	1190	Lightning	Dawson: F1 - 5 min F2 - 4 min F3 - 17 min L174 - 26 min	Heavy lightning in the Mayo district is the suspected cause of this disturbance. Dawson was restored with P158 diesel.
Aug 20/08	Faro - F2	142	Unknown	13 minutes	Cause unknown, closed locally (506).
Aug 28/08	WAF - L355 <i>H.I.</i>	6	Unknown	44 secs	Cause unknown, closed by SCC.

File #2700-05-04

Outage / Disturbance Report September 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Sept 2/08	WAF L355 HJ	6	Flooding	17 hours, 5 minutes	As a result of heavy rain and plant flow from Aishihik the river bank eroded taking out a river crossing near Canyon Creek. The YECL diesel back-fed the line to a temporary open point and a mobile unit fed Dimock timber until repairs were completed. Required the use of a helicopter to pull the damaged structure from the river and re-string the crossing.
Sept 21/08	Faro F2	142	Human Error	5 minutes	YEC employee working on the 502T transformer protection inadvertently caused a differential trip of feeder breaker 507.
Sept 29/08	WAF - S6838	1 - YECL	Transmission Failure - YECL	16 minutes	Breaker S6838 tripped while YECL was restoring a power outage in the Lake Labarge area. When YECL called for a close on breaker S8306 it was a hard hit to the WAF grid and caused S6838 to trip. The cause was found to be a span off of S8306 was lying on the ground.
Sept 30/08	WAF - S6838	1 - YECL	Transmission Failure - YECL	19 minutes	Breaker S6838 tripped while YECL was restoring a power outage in the Lake Labarge area. When YECL called for a close on breaker S8306 it was a hard hit to the WAF grid and caused S6838 to trip. Cause was found to be a vehicle hitting a guy wire taking down two poles.

File #2700-05-04

Outage / Disturbance Report October 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Oct 5/08	WAF	448	Loss of Generation	50 minutes	Loss of WH4 generation resulted in a complete system outage. WH4 failure is suspected to be a governor issue, possibly a stuck proportional valve. The SCC operator received a WH4 governor status alarm prior to the trip which indicates a governor related issue. Update: The cause of this and the following outages related to WH4 was investigated by L&S (governor specialists); the failure was a cartridge valve in the governor manifold. The new manifold does not use these types of valves.
Oct 5/08	Dawson	5	Unknown	20 minutes	A customer called reporting the outage; the line tech was unable to determine the cause of event and re-fused the tap.
Oct 7/08	Mayo	2	Unknown	30 minutes	A customer called reporting the outage; the line tech was unable to determine the cause of event and re-fused the tap.
Oct 9/08	Elsa Line	16	Unknown	1 minute	The line feeder breaker tripped, SCC successfully re-closed the breaker. No definitive cause found for this event. Weather was clear and -3 C at the time.
Oct 9/08	Elsa Line	16	Unknown	>1 minute	The line feeder breaker tripped, SCC successfully re-closed the breaker. No definitive cause found for this event. Weather was clear and -5 C at the time.
Oct 12/08	WAF	448	Loss of Generation	1 hour, 7 minutes	Loss of WH4 generation resulted in a complete system outage. WH4 failure is suspected to be a governor issue, possibly a stuck proportional valve. The SCC operator received a WH4 governor status alarm prior to the trip which indicates a governor related issue. Update: The cause of this and the following outages related to WH4 was investigated by L&S (governor specialists); the failure was a valve in the governor manifold. The new manifold does not use these types of valves.
Oct 13/08	WAF	448	Loss of Generation	2 hours, 35 minutes	The WH3 digital governor lost its gate position indication causing the unit to shutdown, the unit breaker tripped on reverse power (timed). In combination with the loss of generation from WH3 and the reverse power (> 9 Mw) the unit absorbed, the system frequency dropped enough to initiate the under-frequency protected breakers to trip. This load loss was not enough to recover the system frequency, both Aishihik units tripped off line. The system restoration was longer than normal due to WH4

					being out of service from the Oct 12/08 failure and the initial assumption that the cause of the event was distribution related.
Oct 16/08	Elsa Line	16	Unknown	>1 minute	The line feeder breaker tripped, SCC successfully re-closed the breaker. No definitive cause found for this event. Weather was clear and -3 C at the time. This and the previous Elsa line outages may be related to failed insulation on the line.
Oct 20/08	WAF - S6838	1 - YECL	Loss of Generation	4 minutes	The second outage caused by the WH3 gate position feedback to the PLC, resulting in feeder breaker S6838 to trip on under frequency.
Oct 29/08	WAF - Faro	282	Equipment Failure	8 minutes	The initial cause of this outage was thought to be a 701T transformer issue as the protective flags indicated a neutral over-current. Faro was restored with local diesel. Further investigation found the vacuum interrupter on B phase of circuit switcher S255 52-2 was improperly setup during commissioning of the new Carmacks substation equipment.

Outage / Disturbance Report November 2008



Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments
Nov 12/08	WAF	448	Loss of Generation	47 minutes	Loss of WH4 generation resulted in a complete system outage. One of the output cards in the PLC used by the governor failed. The specific card that failed provides the run indication for the unit. The vendor was aware of these card failures, however did not send YEC the notification of the required upgrade. A non essential card was switched over to return this unit to service.

 Outage / Disturbance Report December 2008						
Date	Location	Number of Customers Affected	Cause	Duration (Outage to Restoration)	Comments	
Dec 1/08	WAF	448	Equipment Failure	1 hour, 12 minutes	The cause of this disturbance was found to be a failed pot-head from the bus work to the S167 reactor gang-switch, causing S167 52-1 and P130 52-F2 to trip separating the P130 generation from the rest of the grid. At the time of the event WH4 was off line under a permit for hydro testing. WH4, P126 and eventually P125 units were used for the system restoration.	
Dec 9/08	Dawson	1166	Extreme Weather	27 minutes	The suspected cause of this outage is the release of frost build up on the L174 (Mayo-Dawson) transmission line.	

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Was the power outage on the WAF system that occurred near mid October 2008
6 in any way associated with trials or inadvertent switching / hookup operations
7 related to feeding power to or from the Minto Mine?

8
9 **ANSWER:**

10
11 **(a)**

12
13 No.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) When will the SCADA system be operational at the Minto diesel facility so as to
6 allow this plant to be integrated into the WAF grid? Please explain why this
7 SCADA equipment was not installed by the time that the Minto mine began
8 receiving power from the WAF grid.
9

10 **ANSWER:**

11
12 **(a)**

13
14 It is expected that the Minto Diesel facility will be connected to the WAF SCADA system
15 by year end 2009. The SCADA connection for the substation at the Minto Mine will be
16 complete by August 2009.
17

18 The diesel connection was not part of the Carmacks Stewart Transmission Line project.
19 The substation control was delayed due to other project priorities, and with the
20 knowledge that Minto Mine personnel would be available to operate some YEC
21 equipment under instruction from YEC.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Please provide, on a monthly basis, the actual amount of electrical energy
6 supplied by YEC to the Minto mine at the Industrial Primary Rate from the time of
7 hook up to at least the end of January 2009.

8
9 **ANSWER:**

10
11 **(a)**

12
13 Minto Mine billing from the time of hook up to the end of January 2009 is as follows:

14

<u>Month</u>	<u>KWh</u>	<u>KVA (billed demand)</u>
November	784,980	1,315
December	2,415,504	4,383
January	2,459,856	4,383

REFERENCE:

QUESTION:

- a) Please provide, on a monthly basis, the actual separate amounts of YEC electrical energy generated by diesel, hydro and wind on the WAF system from the time of hook up of Minto to at least the end of January 2009.

ANSWER:

(a)

Please see table provided below for actual separate amounts of YEC electrical energy generated by diesel, hydro and wind on the WAF system from the time of Minto hook up until end of January.

	<u>November</u>	<u>December</u>	<u>January</u>
Total Hydro (kWh)	31,469,430	35,346,068	35,059,529
Total Diesel (kWh)	31,256	663,618	700,879
Total Wind (kWh)	101,390	6,450	0
Total Generation (kWh)	31,602,076	36,016,136	35,760,408

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Has YEC completed in depth independent or internal inspection condition reports
6 on the Minto diesel engines and electrical generators? If so please provide the
7 inspection assessment reports on each of these three units. Have any of these
8 units recently had or will they require a minor or major overhaul as contemplated
9 or provided for under the PPA?

10
11 **ANSWER:**

12
13 **(a)**

14
15 No independent assessment was completed for the Minto diesel units. The Power
16 Purchase Agreement with Minto (section 10.2(f)) provides that YEC's obligation to take
17 an assignment of the Cat Leases is conditional upon (among other factors) Minto
18 performing prior to purchase by YEC.

- 19
20 (i) A minor or top end overhaul on each of the Diesel Units, in accordance with
21 manufacturer recommendations for an overall on such a Diesel Unit with
22 approximately 8,000 hours of operations; and

- 23
24 (ii) For each of the Diesel Units with 16,000 hours of operation or more, a major
25 overhaul in accordance with manufacturer recommendations for an overhaul of
26 such a Diesel Unit with approximately 16,000 hours of operation.

27
28 Three of four units have had the required minor, top end overhauls completed. None of
29 the units is approaching the 16,000 operating hour threshold for the major overhaul.

1 **REFERENCE:**

2

3 **QUESTION:**

4

5 a) Is Minto currently disputing or in arrears in payments for any of its financial
6 obligations under the PPA? If so please provide details.

7

8 **ANSWER:**

9

10 **(a)**

11

12 Minto is not currently in arrears on their payments, and is not disputing its financial
13 obligations under the PPA.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Could any of the capital projects proposed in the GRA be eligible for and take
6 advantage of the recently announced Federally funded infrastructure program? If
7 so which ones and if approved what impact would such cash infusions have on
8 YEC' revenue requirements for the test years?

9
10 **ANSWER:**

11
12 **(a)**

13
14 The only projects in YEC's capital spending plans (Tab 5) that are anticipated to qualify
15 and be put forward for federal funding support are Carmacks-Stewart Stage 2, and Mayo
16 B. Funding for these project will have no effect on YEC's revenue requirement in the test
17 years as the projects are not in service in the test years, and remain in Work in
18 Progress.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) In light of current economic conditions and low metal prices it seems unlikely that
6 the CSTP Stage Two extension would be required to meet new mine loads by
7 2010 or 2011. Could the \$1 million allocated for this project in 2009 not be
8 “safely” deferred to some future test years?
9

10 **ANSWER:**

11
12 **(a)**

13
14 Yukon Energy project budgets are reassessed on a regular basis in light of current
15 conditions and forecasts. With regard to planning related to the CSTP Stage 2, the
16 following relevant factors continue to be considerations:
17

- 18 • **Alexco Resources Corp. Connection** – With potential connection of Alexco in
19 2010, there remains a need to ensure ability to reduce potential diesel usage due
20 to that mine load connecting to the grid in that year.
21
22 • **Available Government Infrastructure Funding** – To the extent government
23 infrastructure funds become available, the ability to be ready to advance and
24 proceed with the project in the near term is critical.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) In light of current economic conditions is it realistic to expect that customer
6 extensions will cost YEC \$150,000 over the test years?
7

8 **ANSWER:**

9
10 **(a)**

11
12 Yes.

13
14 As it does only a small degree of distribution, Yukon Energy has limited customer
15 connections in any given year, typically small customers. The standard annual budget
16 for this has been \$475,000, offset by an estimated \$400,000 in customer contributions.
17 The actual spending on this item varies greatly over the years, however, from \$983,000
18 in 2005 to \$96,000 in 2007.
19

20 There is no evidence current economic conditions will materially affect the rate of
21 residential and small commercial customer connections in the communities YEC serves
22 directly. The best estimate YEC can provide of the rate of customer connections is as
23 set out in the GRA.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) As a consequence of the present and projected economic down turn has YEC, in
6 conjunction with YECL, revised its estimate that non-industrial growth on the
7 WAF will continue at the approximate 1MW per year?

8
9 **ANSWER:**

10
11 **(a)**

12
13 The forecasts included in the GRA remain the best estimates for the test years. There is
14 no evidence to suggest a specific revision to the test year forecasts, or that current
15 economic conditions will materially affect non-industrial growth in the test years.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Do YEC and YDC share the same office space, administrative staff, corporate
6 officers and Board meeting rooms all of which are located at #2 Miles Canyon
7 Road and even the same P. O. Box 5920 mailing address plus a common Board
8 of Directors?

9
10 **ANSWER:**

11
12 **(a)**

13
14 YDC rents office space in YEC's Whitehorse corporate offices. Administrative services
15 are provided on a cost recovery basis. Corporate officers are not all the same. Mail can
16 be received by YDC via P.O. Box 5920 or via Yukon Government central mail (P.O. Box
17 2703 (D-1)).

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) What problems are there with the J. D. Edwards financial software package
6 (page 5-17) that require its replacement? Will the replacement system if
7 approved by the Board of Directors will this be for the exclusive use of YEC or
8 will this system also be used by YDC?
9

10 **ANSWER:**

11
12 **(a)**

13
14 The JDEdwards Financial software package was originally installed in 1999 and has
15 been deemed to be at its end-of-life. The supplier has stopped support for this version of
16 this software.
17

18 The current system is owned by YDC, and YEC pays a lease fee to be able to use the
19 product. The replacement system will be owned by YEC. Yukon Energy provides YDC
20 with accounting services on a cost recovery basis, including use of the replacement
21 financial software package.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Will the Electronic Document Management system (page 5-17) be for the
6 exclusive use of YEC or will this system also be used by YDC?
7

8 **ANSWER:**

9
10 **(a)**

11
12 The Electric Document Management System is software for use by YEC.
13

14 The software is not being designed for YDC's purposes. In the event it could serve YDC,
15 it is likely that the software would be used for YDC's purpose as well, on a cost recovery
16 basis.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) What are the annual direct and indirect costs for YEC to be registered under the
6 Yukon Business Corporations Act as a private corporation? What administrative,
7 operational, tax, legal, etc. cost advantages or savings does YEC benefit from by
8 being a private corporation versus being a Yukon Crown Corporation?

9
10 **ANSWER:**

11
12 **(a)**

13
14 Business Corporations Act (BCA) incorporation requires YEC to pay \$150 per year for
15 corporate address registration, plus \$15 per year to file our annual report. In addition,
16 there is a \$15 cost to file changes to Directors and Officers.

17
18 The comparison question is not relevant as Yukon Energy has no option; it must be a
19 BCA Corporation. Only the Yukon Government can create legislated Corporations.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Does the President and Chief Executive Officer of YEC also hold the same or
6 similar position with YDC? Does the President and Chief Executive Officer of
7 YEC report only to and hold office at the pleasure of the YEC' Board of
8 Directors? Does the YEC' President and Chief Executive Officer position have,
9 through its connection to YDC, de facto Deputy Minister status and access to the
10 Yukon Minister Responsible for YDC and thus to the Yukon Cabinet?

11
12 **ANSWER:**

13
14 **(a)**

15
16 The President and Chief Executive Officer of YEC also holds the position of Chief
17 Executive Officer for YDC. The President and Chief Executive Officer of YEC reports to
18 and holds office at the pleasure of the YEC's Board of Directors. The President and
19 Chief Executive Officer does not have de facto Deputy Minister status as described
20 above.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Has YEC undertaken any new studies or steps to reduce ice damming problems
6 on the Yukon River near the Marwell area?

7
8 **ANSWER:**

9
10 **(a)**

11
12 YEC conducted investigations in 2006-2008 to ensure that the Whitehorse Rapids hydro
13 plant could be operated to the planned output level in winter (as set out in the Resource
14 Plan at a firm 24 MW capacity) without causing icing or other winter water-related
15 issues. The studies were not oriented specifically at new steps to “reduce ice damming”
16 near Marwell, but did provide Yukon Energy with forecasts of flow adjustments that may
17 be required under certain conditions to minimize ice damming problems during an
18 extreme icing event.

REFERENCE:

QUESTION:

- a) In Table 2-5 page 2-19, why did the diesel generation in 2007 at Mayo rise to 21 MWh and in Dawson to 757 MWh? Why are there 0 MWh forecast for Mayo in 2008 and 2009?

ANSWER:

(a)

The 21 MWh of diesel generation in 2007 at Mayo was mainly due to maintenance run ups of diesels or to provide generation when the Mayo hydro plant was down for preventative maintenance.

The 757 MWh of generation in 2007 at Dawson City was due to the following activities (at the approximate generation amounts):

Islanding due to lightning risk in June/July	342 MWh
Loss of L174 or Mayo hydro outages	176 MWh
Scheduled outages / maintenance	239 MWh

YEC does not forecast diesel generation for Mayo in 2008 and 2009 because the minimal amount of diesel typically required for Mayo has historically been included in the general provision for diesel generation on the Mayo Dawson system which is forecast in 2009 as 2% of the overall generation required for Dawson City.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) In light of the resistance from Marsh Lake residents when YEC last suggested
6 greater storage on Marsh Lake, what has changed that would indicate that YEC's
7 new study and proposal to increase winter storage on the lake would be
8 acceptable to local residents? Please provide the record of the public meeting
9 that YEC and its consultants had previously with Marsh Lake residents on this
10 issue.

11
12 **ANSWER:**

13
14 **(a)**

15
16 YEC has been working with the residents of Marsh Lake over the past two summers to
17 further their understanding of the natural causes of high water levels on Marsh Lake and
18 to provide assistance and public notice of potential high water levels. Local residents of
19 Marsh Lake have also indicated what bio-physical aspects of Marsh Lake may need to
20 be studied in order to assess the environmental and socio-economic effects of storing
21 more water in the fall of each year after the peak water levels start to drop. A copy of the
22 record of the Sept 11, 2006 public meeting is provided as Attachment 1 to this response.

23
24 During the same period, the Yukon Government has also been working with the
25 residents of Marsh Lake, towards addressing issues related to fall flooding at the Lake.



YUKON ENERGY CORPORATION MEMORANDUM

DATE: September 21, 2006

File: 1700-02-04

TO: H. Campbell / D. Morrison / J. Patterson (via email)

FROM: Ron Gee

RE: Marsh Lake Public Meeting

Meeting Date: September 11, 2006

Time: 7 PM

Location: Marsh Lake Recreation Centre

Company Representation: D. Morrison, W. Phelps, J. Duke, E. McKennirey, M. Guilbeault, N. Steffen, L. Turney, A. Ball, R. Gee

Approximately 50 members of the public attended meeting.

Meeting format:

1. Introduction and opening statements by D. Morrison
2. Context and rationale of project, review of water level issues, review of operations, potential impacts by W. Phelps
3. Introduction of GLL and NHC consultants by J. Duke
4. Open forum

Issues or comments raised in the open forum:

1. If the Corporation is allowed a greater license range, they will attempt to use the water to the greatest extent possible and this will negatively effect the residents
2. Muskrats used to be plentiful, but now they experience freeze out during the draw down period
3. Fish habitat and other wildlife concerns should be looked at as well
4. Request was made to know when the last increase in storage range was granted
5. Question was asked if the Corporation has applied to any regulatory bodies for permits for this project
6. In this current year, would the 1 foot proposal have resulted in higher water?
7. Question as to why the Corporation is not building wind turbines instead of this project
8. What is the Corporations low water target and how close to the low supply level can be achieved?
9. Marsh Lake Advisory Committee would like a copy of all reports produced by the consultant
10. Wave action is the key factor to erosion, it must be considered both from the predominate direction, the south, as well as when it changes to a north wind

11. Mike Larson is the contact person for the MLAC
12. Corporation should come back to the group when it has a methodology for the studies
13. The Corporation is considering other means of increasing generation that provide a greater annual benefit than increasing the license range on Marsh Lake. The Corporation should pursue those alternatives and leave Marsh Lake levels alone because the benefit is small and the opposition will be great
14. Concerns ranged from open water erosion, groundwater in basements, effects on septic fields, and water levels in low lying areas behind the property freezing

\\documents\memo\rg3110

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) As I recall there was in the past opposition from Atlin residents regarding a
6 previous proposal by YEC to increase storage on Atlin Lake and there was little
7 or no support for this proposal from BC Hydro. What has changed that would
8 indicate that it would be wise for YEC' to undertake a new study and proposal to
9 increase storage on the lake that would be acceptable to local residents and
10 would receive BC Hydro' blessing?

11
12 **ANSWER:**

13
14 **(a)**

15
16 In the early 1980's Northern Canada Power Commission studied the potential to store
17 water in Atlin Lake in the fall and use it in the winter, utilizing top storage to raise the lake
18 level well above its natural high.

19
20 Yukon Energy is considering a much smaller development that would store water in Atlin
21 Lake within its natural high water levels and release it over the winter, very similar to
22 what is currently undertaken with regard to Marsh Lake.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) What policies and procedures are in place that govern YEC' contract tendering
6 and procurement processes. In particular, how are sole source, standing offer
7 and invitational tendering procedures protected and monitored to ensure fairness
8 and prevent preferential treatment?

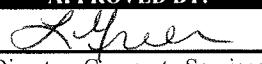
9
10 **ANSWER:**

11
12 **(a)**

13
14 YEC has numerous corporate policies in place which govern procurement processes.
15 The following policies and procedures are provided as Attachment 1 to this response:

- 16
17 • GS-001 Goods and Services Definitions
18 • GS-002 Signing Authority Guideline
19 • GS-003 Purchasing Agreements Guideline
20 • GS-004 Competitive Bid Guideline
21 • GS-005 Competitive Bid Threshold Guideline
22 • GS-006 contracts for Service Guideline
23 • GS-007 Evaluation Criteria Guideline
24 • GS-008 Bid Security Guideline
25 • GS-009 Emergency Purchases Guideline
26 • GS-010 Non-Competitive Purchases Guideline
27 • GS-011 Purchase Order Guideline
28 • GS-012 Standing Agreements Guideline
29 • GS-013 Vendor Registration Guideline
30 • GS-014 Pre-Qualified Vendor Guideline
31 • GS-015 Goods and Services Guidelines
32 • GS-016 Local Purchase Order Guideline
33 • GS-017 Invoice Approval Guideline
34 • GS-018 Incoming Shipping Negotiation Guideline
35 • GS-019 Shipping Invoice Approval and Payment guideline

- 1 Yukon Energy has a procurement group which monitors purchasing in the Corporation
- 2 and ensures appropriate purchasing practices are respected.

	Goods & Services Guidelines GS-001	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Definitions
		ISSUED:	REVIEW DATE:	APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

Award The notification to a bidder that their bid has been accepted and that Yukon Energy will be issuing a legal binding agreement to that bidder.

Best Value Means overall best choice, as defined by the evaluation criteria (i.e. quality, availability, price, compatibility, qualifications, proposal process, innovation, etc.)

Bid An offer, as a price, whether for payment or acceptance. Usually a proposal submitted to the corporation in response to a request for bids to supply goods or services.

Bid Close The time and date indicated in the bid document after which bids/responses will not be accepted.

Bid Deposit/ Surety Bond

A guarantee, in the form of a bond or deposit, that the bidder, if selected, will sign the contract as bid: otherwise, the bidder (in case of a deposit) or the bidder or their guarantor (in the case of a bond) will be liable for the amount of the bond or deposit.

Bid— Formal

A bid/tender that is requested and responded to in writing.

Bid – Invitational

A bid that is extended to a selected number of firms by invitation. An invitational bid may be restricted (only those invited may bid) or non-restricted (other firms may bid if they wish).

Bid Shopping

The act of asking a vendor(s) if they can better an acceptable low bid (price) from another vendor on a commodity or service. The action allows other vendors to provide a better priced bid or some other aspect that would better the lowest acceptable bid that the corporation received. Such action is unethical, illegal and if done under a competitive bid process is, in fact, an attempt at bid manipulation.

Bidder A person, proprietorship, partnership or corporation that submits a proposal.

Bond – Payment/Labour

Protection for the buyer against liens which may be granted to vendors of material and labor to the bidder, in the event the bidder does not make proper payments to its vendors.

Bond – Performance

A guarantee that the work done will be done according to specifications and in the time specified. If the Yukon Energy has to go to another vendor for rework or to get the order completed, Yukon Energy is indemnified for these extra costs.

Competitive Bid

A process where all bidders compete with one another when bidding upon the same bid.

Construction

Work to build, repair, renovate, restore, maintain or demolish a structure and includes the hiring of equipment and services necessary for that work.

Consultant

A person, proprietorship, partnership or corporation with qualifications, by education (credentials) or by experience, in scientific, technical, managerial, accounting or any other field that is required to perform specialized services.

Contract A deliberate verbal or written agreement between two or more competent persons to purchase goods and or services and perform construction or services.

Contracting Authority

Any employee having authority to enter into a contract on behalf of Yukon Energy.

Contractor Any person, proprietorship, partnership or corporation which contracts to perform work or supply goods or services in accordance with a Purchasing Agreement.

Delegated Financial Authority

A person who has been designated and approved to purchase goods or supplies within stated financial parameters.

Emergency Purchase

An emergency purchase is classified as a procurement which is needed to “protect life and property, prevent substantial economic loss, and/or prevent the interruption of essential services.”

Evaluation Criteria

Criteria against which bids are evaluated for determining qualified bids and for the selection of the winning bid.

Letter of Acceptance

A letter pursuant to a bid provided to the successful bidder, approved and signed by Corporate Services which indicates that the submitted bid has been accepted and that Yukon Energy will be issuing a legal binding contract to that bidder.

Letter of Intent

A letter indicating a preliminary contractual arrangement customarily used in situations where the items, quantities, price and delivery dates are known, but where the principal contract provisions require additional time-consuming negotiations. It is used to enter into an interim agreement, pending a definitive contract, so as to permit that start of construction, production, or delivery of the vendors or materials

Local Contractor

A person, proprietorship, partnership or corporation whose main place of business is the community in which the work is to be performed.

Lump Sum Price

A price agreed upon between the vendor and purchaser for a group of items without breakdown of individual values: a lot price. In construction, "lump sum" means a fixed total price for the complete project, as specified. Further, the price is the total amount and the total price will not decrease or increase except by the approval of a change to the work approved by Corporate Services.

Pre-Qualify Vendor

A formal process undertaken either on a project specific basis or on a regular operational basis to qualify vendors who are able to bid, undertake and complete specific types of work (contracts) for Yukon Energy in a safe and competent manner.

Price-Driven Contract

A contract entered into as the result of a bid that has price as its' primary criteria (greater than 51%) of the award.

Proposal A written form of bid or submission from a person, proprietorship, partnership or corporation.

Public Tender

An invitation to tender that is advertised publicly and to which any interested firm may submit a tender bid.

Purchasing Agreements

Purchasing Agreements can be initiated by Corporate Services or by an outside party, usually the vendor. Purchasing Agreements generated by Corporate Services may include, without limitation, purchase orders, standing agreements, contracts, letter of intent (for purchase), partnership agreements and other written purchase documents.

Purchasing Agreements initiated by an outside party may cover the purchase of materials, equipment, professional services, construction and lease/rental agreements.

Quotation – (Informal)

A statement of price, terms of sale and a description of goods or services offered by a vendor; a bid that is requested and responded to orally or in writing. When given in response to an inquiry, is usually considered an offer to sell.

Request for Bid (RFB)

A competitive bid process that is undertaken typically for transactions where price is the key factor in the purchasing decision.

Request for Proposals (RFP)

A competitive bid process that is undertaken typically for higher dollar value and/or complex transactions. Factors other than price will be used to make the final purchasing decision. An invitation to perform or provide a function, service or product that cannot be fully defined or specified.

Scope The technical conditions and specifications of a job; the overall requirements or deliverables of a specific project.

Signing Authority

Authority delegated to specific employees of Yukon Energy, empowering them to financially commit the Corporation to legally binding obligations, but which are limited by dollar amounts and may be limited to certain types of obligations. Exercising of an individual Signing Authority is typically limited to the area of the employee's functional role and responsibility, unless otherwise stated within their job responsibilities.

Single Source

A method of purchase where the purchase is made from one single vendor or source even though other vendors exist that can bid or supply the goods/materials or services.

Sole Source

A method of purchase where there is only one source of supply for the requirements of the corporation. This type of purchase is done because of the commodity's technological, specialized or unique character that only a sole vendor can provide.

Standing Agreement

A purchase agreement or contract used to provide direct access to a pre-determined vendor for the supply of specific goods and/or services, on an as-required basis, for specific periods of time, at prearranged prices and delivery conditions.

Subcontractor

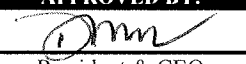
A person, proprietorship, partnership or corporation who contracts with a prime contractor of Yukon Energy to perform all or any part of the prime contractor's obligations in a particular prime contract.

Tender

A document defining the minimum standards or specifications to be met by bidders and the requested terms and conditions of the contract so as to permit the evaluation of bids on the basis of price.

Value-Driven Contract

A contract entered into as the result of a “Request” that uses indicators other than price alone for evaluation.

 YUKON ENERGY Goods & Services Guidelines GS-002	DEPARTMENT:	INQUIRIES TO:	TOPIC:
	All	Corporate Services	Purchasing Agreements Signing Authority Guideline
	ISSUED:	REVIEW DATE:	APPROVED BY:
	March 2006	February 2009	 President & CEO

1.00 Purpose

- 1.01 To clearly identify, control and provide guidance so that Purchasing Agreements are signed/approved in accordance with Yukon Energy's Signing Authority Guideline (FG-001).

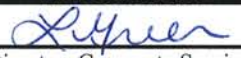
2.00 Purchasing Signing Authority Matrix

- 2.01 All purchasing agreements for Yukon Energy are to be signed in accordance with the following signing authority matrix:

Required Approval	Category	O & M Limit	Capital Limit
Board approval - signed by 1 Board Director and 1 Officer*	- Inventory Stock - Non-stock goods & Services	Over \$500,000	Over \$1 million
President & CEO	- Inventory Stock - Non-Stock goods & Services	Up to \$500,000	Up to \$1 million
Director, Corporate Services	Non-stock Goods & Services	Up to \$250,000	Up to \$500,000
Director, Operations	Inventory Stock	Up to \$250,000	Up to \$500,000
Leadhand, SCC & Materials Management	Inventory Stock	Up to \$50,000	Up to \$100,000
Buyer	Non-stock goods & Services	Up to \$50,000	Up to \$100,000
Assistant Buyer	Non-stock goods & Services	Up to \$50,000	Up to \$100,000
Industrial Warehouseperson	Inventory Stock	Up to \$10,000	Up to \$10,000

***Note:** As of January 1, 2005, Yukon Energy Officers are the: Chair, Board of Directors, President & CEO, Chief Financial Officer and the Corporate Secretary.

- 2.02 From time to time the Board may delegate signing authority for major purchasing agreements, by resolution of the Board, to the President & CEO and/or Chief Financial Officer or Director of Corporate Services.
- 2.03 All leases and licenses or conditional Sale Agreements (i.e. lease to purchase -- operating or capital), regardless of the amount, will require the signature of the Director Corporate Services and the Chief Financial Officer.

 YUKON ENERGY	Goods & Services Guidelines GS-003	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Purchasing Agreements Guideline
		ISSUED:	REVIEW DATE:	APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 To define and establish parameters for the use of various purchasing agreements for consistent application and due process. Such guidelines will ensure standards are established that will be applied to the daily processing and preparation of the various purchasing agreements.
- 1.02 Corporate Services can provide advice on the procedures to follow and the purchasing agreement to use depending upon the particular circumstance.
- 1.03 Corporate Services issues all contracts, purchase orders for non-stock items and standing agreements to ensure that all bidding and mandatory elements of the purchase have been completed correctly and within established signing authorities.
- 1.04 All purchasing agreements will be executed in a confidential and timely manner with all legal, safety and risk management issues addressed.

2.00 Minor Works Contracts

- 2.01 Minor Works Contracts are used primarily for service and construction requirements of a minor financial value for the corporation. Yukon Energy considers minor works to be purchases for a financial value not to exceed \$250,000.00.

3.00 Construction Contracts

- 3.01 Construction Contracts are used primarily for work to build, repair, renovate, restore, maintain or demolish a structure and includes the hiring of equipment and services necessary for that work or when performance bonding/protection is required. Any purchase requisition that has a total estimated financial value greater than \$250,000.00 shall be reviewed as to whether a bid security is required.

4.00 Consulting Contracts

- 4.01 Consulting Contracts are to be used to secure professional and consulting services. Usually, these consulting services are for 'soft' services such as audits, managerial reviews, operational reviews, engineering, architectural and other services which are more conceptual and theoretical in nature.
- 4.02 Consulting Contracts specify the specialty in which the consultant is to provide services, and details carefully the obligation of the consultant. Consulting Contracts shall specify

the nature of the work/service, a list of deliverables, timeframes/milestones, confidentiality, name of project manager and information on invoice processing, etc.

- 4.03 Consulting Contracts shall comply with Yukon Energy's Contracts for Service Guideline (GS-006).

5.00 Purchase Orders

- 5.01 Purchase Orders are used for the purchase of goods, equipment, materials or services primarily with a financial value greater than \$5,000.00.

- 5.02 Purchase Orders shall comply with Yukon Energy's Purchase Order Guideline (GS-011).

6.00 Local Purchase Orders (LPO's)

- 6.01 Local Purchase Orders (LPO's) are used for the purchase of local goods, equipment, materials or services with a financial value not to exceed \$5,000.00.

- 6.02 Local Purchase Orders allows end-users, owner's designate or authorized field personnel to purchase small value items or services and expedite the acquisition of the requirements and needs of these individuals. There is no need to obtain competitive bids but it is expected that the issuer will obtain the best value available in the area.

- 6.03 Local Purchase Orders shall comply with Yukon Energy's Local Purchase Order Guideline (GS-015).

7.00 Standing Agreements

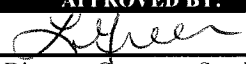
- 7.01 Standing Agreements are used for the purchase of repetitively purchased, lower dollar value goods, equipment, materials or services during a specified period.

- 7.02 Standing Agreements shall comply with Yukon Energy's Standing Agreements Guideline (GS-012).

8.00 Corporate Purchasing Cards

- 8.01 Corporate Purchasing Cards are used as a convenient cost efficient method for the purchase of goods, equipment, materials or services with a financial value not to exceed \$5,000.00.

- 8.02 Corporate Purchasing Cards shall comply with Yukon Energy's Corporate Purchasing Card Guideline (GS-014).

 YUKON ENERGY Goods & Services Guidelines GS-004	DEPARTMENT:		INQUIRIES TO:	TOPIC:
	All		Corporate Services	Competitive Bid Guideline
	ISSUED:		REVIEW DATE:	APPROVED BY:
	March 2006		February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 Yukon Energy is committed to a fair and transparent process for all purchases made on behalf of the Corporation. The competitive bid process ensures that the Corporation receives the best overall value for the all purchases.
- 1.02 All purchases are subject to the competitive bid thresholds set out in the Purchasing Policy (HR-021) and the Competitive Bid Threshold Guideline (GS-005). In addition, proposed purchases below the thresholds may be subject to a competitive bid process at the discretion of Corporate Services, in consultation with the requestor.
- 1.03 Corporate Services oversees the acquisition of services and non-stock goods and ensures that all applicable policies and procedures, as well as all applicable federal and provincial legislation and regulations governing the acquisition of goods and services are adhered to.

2.00 Overview

- 2.01 Corporate Service has clearly defined methods of soliciting competitive bids from vendors based on the dollar value and complexity of the proposed purchase.
- 2.02 Corporate Services requests pricing, product and market information through various solicitation requests (RFP, RFQ, RFI, etc).
- 2.03 Solicitation requests should not be construed as an agreement to procure services. The Corporation may elect to cancel or reject all bids/responses received and will not be liable to any respondent for any claims, whether for costs or damages incurred by a respondent in preparing its bid, loss of anticipated profits in connection with any final contract, or any other matter whatsoever.

3.00 Procedure

The following is the procedure to initiate a competitive bid:

- 3.01 Requestor submits a completed and properly signed Purchase Requisition to Corporate Services clearly indicating the goods and services to be purchased and the estimated purchase price.
- 3.02 Requestor identifies the potential sources of supply (if known). Corporate Services may add other potential sources of supply.

- 3.03 Requestor and Corporate Services establish appropriate evaluation criteria and weighting which will be used to evaluate responses (if other than price), prior to Corporate Services preparing solicitation request documents.
- 3.04 Corporate Services prepares the appropriate solicitation request documents for distribution.
- 3.05 Solicitation requests may be posted on Yukon Energy's electronic website for the vendor community at large.
- 3.06 Responders are to be given a reasonable period of time (based on the size, complexity and urgency of the proposed purchase) to provide a response to the solicitation request.
- 3.07 Corporate Services reviews all responses received by the designated closing date and time to ensure commercial compliance with the mandatory requirements of the solicitation request document.
- 3.08 Evaluators document the methodology for awarding/deducting points and use this methodology consistently in evaluating all responses received.
- 3.09 Corporate Services prepares and distributes score sheets to evaluators for each bid.
- 3.10 An evaluation committee of at least three employees, consisting of Corporate Services, the requestor and one other employee, shall evaluate all responses.
- 3.11 All evaluators must provide a signed and completed evaluation score sheet clearly showing the point scores awarded, and the reasons for the allocation of points for each response. If evaluation criteria are being used, all responses must be evaluated as per the stated criteria. Evaluators shall keep all information and pricing confidential and handle responses in such a manner as not to disclose any information to a competing vendor.
- 3.12 If a response is of such a highly competitive or strategic nature to the corporation, the responses can be held in the offices of Corporate Services. All reviews will be conducted at the Corporation's premises, to ensure proper handling of sensitive information and the release of information in an orderly and diligent manner.
- 3.13 The successful vendor is selected based solely on the evaluation criteria. All documentation is to be returned to Corporate Services and should clearly indicate the successful vendor as well as the items to be purchased.
- 3.14 Corporate Services will notify the successful vendor and issues the appropriate Purchasing Agreement.
- 3.15 No goods and services are to be provided to the Corporation until a fully executed Purchasing Agreement is in place.

- 3.16 Any revisions/corrections to a Purchasing Agreement must be done by Corporate Services by way of a Change Order request.

4.00 Public Openings

- 4.01 The following information will be released for public openings: Name and address of the bidder; price, and if required, whether bid security has been included and the form of that security.

5.00 Bid Security Requirements

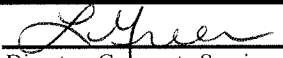
- 5.01 Purchase Requisitions that has a total estimated value over \$250,000 shall be reviewed as to whether a bid security is required and if not required, justification provided as to that decision. Bid security requirements will be in accordance with the Corporation's Bid Security Guideline (GS-008).

5.00 Signing Authority

- 5.01 All purchase transactions are to be requested only by authorized employees in accordance with the Corporation's Signing Authority Guideline.

6.00 Document Retention

- 6.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-005	DEPARTMENT:		INQUIRIES TO:	TOPIC:
	All		Corporate Services	Competitive Bid Threshold Guideline
	ISSUED:		REVIEW DATE:	APPROVED BY:
	March 2006		February 2009	 Director, Corporate Services

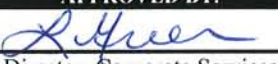
1.00 Purpose

- 1.01 To clearly identify and provide guidance to the various departments of the corporation in determining when competitive bids are required and the financial thresholds that determine the use of various competitive bids.

2.00 Competitive Bid Thresholds

- 2.01 Competitive Bid Thresholds are provided to identify when certain competitive bids are required in the procurement of goods, services and equipment for the Corporation.
- 2.02 a) The President & CEO may waive any provision of this policy when it would be in the best interest of Yukon Energy to do so.
- b) Directors may award non-competitive contracts up to a maximum value of \$25,000.00. The President & CEO must approve all other non-competitive contracts. The criteria as set out in the Non-Competitive Purchases Guideline (GS-010) shall be adhered to.
- c) In all other cases, competitive bidding will be applied as follows:

<i>Purchase Value Threshold</i>	<i>Competitive Bid Application</i>
Up to \$5,000	Competitive bids not required; delegated purchasing/contracting authorities may enter into a Purchasing Agreement (minor works contract, Consulting Contract, Purchase Order, LPO, VISA, Standing Agreement, etc.)
\$5,001 to \$25,000	Competitive bids required – a minimum of two (2) phone vendor quotations are required.
\$25,001 to \$50,000	Competitive bids required – a minimum of three (3) written vendor quotations are required
\$50,001 to \$100,000	Competitive bids required – Corporate Services solicits bids from a minimum of three vendors.
More than \$100,000	Competitive bids required – Corporate Services releases a Public bid where any number of vendors can compete. A minimum of three vendors should be invited.

 YUKON ENERGY	Goods & Services Guidelines GS-006	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Contracts for Service Guideline
		ISSUED:	REVIEW DATE:	APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 Contracts for Service are required to ensure that the successful vendor:
- Is informed of its obligations including the services to be provided;
 - Is provided the scope of work or work requirements and a schedule for services;
 - Provides the required WCB and insurance coverage; and
 - Complies with other terms and conditions of the contract, including cancellation.

2.00 Procedure

The following is the procedure for implementing a Contract for Service and/or Purchase Order for services:

- 2.01 Submit a completed Purchase Requisition to Corporate Services clearly indicating the nature of the service to be provided, along with any pertinent terms and conditions for the provision of service. The Purchase Requisition is the authorization to initiate the procurement process and enables a Purchase Agreement to be generated.
- 2.02 When initiating a request for a Contract for Services, the requisition must clearly define the scope of work, the term of the project and an estimated value for the work which will be completed.
- 2.03 A fully executed Purchase Agreement must be in place prior to commencement of any work or services. To be considered fully executed, the agreement must be signed by an authorized representative of Corporate Services, an authorized representative of Yukon Energy and the Contractor.
- 2.04 Any revisions/corrections to Purchasing Agreements must be done by way of Change Order request issued by Corporate Services.

3.00 Contracts for Service Signing Authority

- 3.01 All Contracts for Services are to be requested only by authorized employees in accordance with Yukon Energy's Signing Authority Guideline (FG-001).

4.00 Document Retention

- 4.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-007	DEPARTMENT:		INQUIRIES TO:	TOPIC:
	All		Corporate Services	Evaluation Criteria Guideline
	ISSUED:		REVIEW DATE:	APPROVED BY:
	March 2006		February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 The purpose of this guideline is to identify the procedure for developing relevant evaluation criteria and methods to weight the criteria to score a vendor response.

2.00 Procedure

- 2.01 Corporate Services, the requestor and/or the evaluation committee identifies criteria that are relevant to properly evaluate a vendor response. The number of evaluation criteria should not be so numerous so as to make it impossible for the evaluators to determine whether a vendor has satisfied them all.

- 2.02 The following are some examples of evaluation criteria that may be considered:

Technical: Include the vendor's understanding of the procurement; their management plan; the quality of the proposed design for certain goods; the experience and qualifications of key personnel; and vendor resources.

Qualifications of the vendor: The qualifications and experience of the vendor and, in particular, the project team members, including the consultants, proposed to be assigned to the project.

Experience/familiarity with similar projects: The vendor's performance record and/or familiarity with similar projects/scope with respect to such factors as control of costs, quality of the work, and the ability to meet schedules.

Availability of the vendor: The availability of key personnel, equipment, and facilities assigned to provide the goods and/or perform the services.

Cost: For the procurement of goods and nonprofessional services only, cost criteria include the vendor's proposed price (for fixed-price contracts); the realistic expected cost of performance, plus any proposed fixed fee (for cost-reimbursement contracts); and other costs, such as that of ownership, including transportation costs, and life-cycle costs (installation, operation, maintenance, security and disposal).

Financial strength: The financial strengths and weaknesses of a vendor affect its capability to respond to the needs of the corporation. Individual financial measures that may be examined include, but are not limited to, credit rating, capital structure, profitability, ability to meet interest and dividend obligations, working capital, inventory turnover, current ratio and return on investment.

Remote Geographic Support: With certain requirements of the corporation for remote geographical areas, support for local suppliers may need to be considered and given a weighting depending on a number of factors (size of award, type of service, etc.).

Ability To Satisfy The Corporation's Requirements: Includes but are not limited to following elements: quality, safety, price, continuity of supply, capacity, reliability, environmental profile and ethical compliance.

3.00 Ranking of Evaluative Criteria

- 3.01 The evaluation criteria should be properly weighted in accordance with its importance.
- 3.02 The evaluation criteria should be ranked prior to issuing any bids for the procurement of goods and/or services.
- 3.03 The evaluators may determine a minimum threshold score that a potential vendor will have to attain in order to be accepted or considered for pre-qualification.

4.00 Evaluation Assessments

- 4.01 The following types of evaluation assessments can be conducted at the Corporation's discretion:
 - Formal assessments – Where an evaluation committee evaluates responses.
 - Semi-formal assessments – Where the requestor evaluates responses.
 - Other assessments tools – Other assessment tools can be used as mutually agreed and upon the discretion of Corporate Services and the requestor.

5.00 Scoring Responses

- 5.01 Corporate Services and the requestor use their discretion in determining how to score responses provided that it is not arbitrary.
- 5.02 The following are some methods for scoring responses:
 - By adjective (excellent, good, fair . . .);
 - Numerical (10, 9, 8 . . .); or
 - Narrative and ranking. A narrative evaluation may be the most effective scoring procedure in situations where the evaluation committee must present its results to the board of supervisors. Narratives can communicate specific information that adjectives and numbers cannot.

	Goods & Services Guidelines GS-008	DEPARTMENT:		
		INQUIRIES TO:		
		TOPIC:		
		ISSUED:		
		All	Corporate Services	Bid Security Guideline
		REVIEW DATE:		APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 To define requirements for bid security, performance and payment bonds.
- 1.02 Purchase Requisitions that have a total estimated value over \$250,000 shall be reviewed as to whether bid security is required and if not required, justification provided as to that decision.
- 1.03 Bid security submitted by the bidder guarantees that the bidder will execute a contract with the Corporation at the bid price upon award of the bid. If the successful bidder refuses to enter into a contract, the bid security will be forfeited to the Corporation.

2.00 Procedure

- 2.01 Bid security is normally required for a Purchase with an estimated value of \$250,000 or more for construction and or building requirements. The security may take the form of a bid bond or a certified cheque in the amount identified in the bid document. Performance bond and/or a labour and materials payment bond may be required.
- 2.02 Bid security in the amount of ten percent (10%) of the bid price is normally required with all bids for construction projects when the construction cost is estimated value over \$250,000.00. The Corporation may authorize bid security for procurements if such a requirement is advantageous to the Corporation.
- 2.03 Corporate Services should use their discretion as to whether or not performance bonds are required as the costs associated with bonds may outweigh the advantages. If performance bonds and labour and material bonds are required, the bond shall be in effect until twelve months after the certificate of final completion.
- 2.04 Corporate Services may authorize certified cheques in lieu of a bid bond for the purpose of bid security if the project can be best served and competitiveness can be enhanced.
- 2.05 A bid submitted without proper bid security when requested shall be disqualified unless the Director, Corporate Services determines in writing that the bid substantially complies with the security requirements.
- 2.06 No payment shall be made on a contract where surety is required until the requested form of surety has been furnished.

4.00 Performance and Payment Bonds

- 4.01 Performance and/or payment bonds may be required for all construction contracts. Corporate Services and the requestor shall determine the percentage of the contract price required for performance and/or payment bonds.
- 4.02 Performance and/or payment bonds submitted by the successful bidder upon award of the contract guarantee faithful performance of the contract and payment of materials and labour by the contractor to all subcontractors, material suppliers and employees
- 4.03 Performance bonds for service contracts may be required to protect the interests of the Corporation. The amount of the bond shall be determined by the Corporation.

5.00 Bid Withdrawal

- 5.04 Before Bid Closing: If a bid is withdrawn at any time before bid closing, the bid security shall be returned to the bidder.
- 5.05 After Bid Closing: A successful bidder may not withdraw the bid after bid closing without forfeiture of bid security unless the bidder can establish by clear and convincing evidence that a nonjudgmental mistake was made in the bid. If withdrawal of a bid after bid closing is permitted by the Director, Corporate Services, no action may be taken against the bidder or bid security.

	Goods & Services Guidelines GS-009	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Emergency Purchases Guideline
		ISSUED:	REVIEW DATE:	APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 Situations arise whereby an exception to Yukon Energy's Purchasing Policy and related Guidelines may be required. Emergency purchases represent one of these potential situations. Typically, emergency purchases result when an unforeseeable situation or urgency exists. Failure to anticipate a need or lack of planning is not of itself considered a bona fide emergency. Proper planning will eliminate most "emergency" purchases.

2.00 Procedure

The following is the procedure for requesting an emergency purchase:

- 2.01 Submit a completed Purchase Requisition to Corporate Services clearly indicating the goods and services to be purchased. Any associated documents (e.g. Vendor quote, drawings, etc.) must be included with the Purchase Requisition.
- 2.02 Clearly mark "Emergency Purchase" on the Purchase Requisition and state the nature of the emergency to qualify for processing under the guidelines.
- 2.03 Proposed emergency purchases will be processed in the most expeditious manner to secure the goods or services in a timely manner to satisfy the emergency situation. The appropriate processing action will be taken by Corporate Services and can include a non-competitive purchase. The authorized employee will need to complete a Non-competitive request form.
- 2.04 Corporate Services will issue a Purchase Order and/or Contract to the Supplier.
- 2.05 Any revisions/corrections to an emergency purchase must be done by way of Change Order request. Corporate Services will issue all Change Orders.

3.00 Emergency Purchase Signing Authority

- 3.01 All emergency purchase transactions are to be requested only by authorized employees in accordance with Yukon Energy's Signing Authority Policy.

4.00 Document Retention

- 4.01 Corporate Services will retain all original documents, including bids complete with supporting documentation for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-010	DEPARTMENT:		INQUIRIES TO:	TOPIC:
	All		Corporate Services	Non-Competitive Purchases Guideline
	ISSUED:		REVIEW DATE:	APPROVED BY:
	March 2006		February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 The purpose of the Non-Competitive Purchases Guideline is to identify and provide guidance and justification to wave the competitive bid process and proceeding directly to acquisition by means of a single or sole source purchasing process.

2.00 Procedure

The following procedure outlines the steps involved in initiating a purchase involving a Non-Competitive Purchases request:

- 2.01 Requestor submits a completed Non-Competitive Purchases request to Corporate Services (attach to the Purchase Requisition) clearly stating the reasons for the non-competitive purchase.
- 2.02 Requestor submits a completed and properly signed Purchase Requisition to Corporate Services clearly indicating the goods and services to be purchased and the estimated purchase price.
- 2.03 Requestor identifies the potential source of supply (if known).
- 2.04 Exception requests will be reviewed and evaluated by Corporate Services and where applicable, the department head and/or the President & CEO.
- 2.05 Approved Non-Competitive Purchases will be processed by Corporate Services.
- 2.06 Any revisions/corrections to a Non-Competitive Purchase must be done by way of Change Order request. Corporate Services will issue all Change Orders.

3.00 Non-Competitive Purchases

- 3.01 Non-Competitive Purchases may be requested if the following conditions are identified:

- **Sole Source:** There is only one source of supply; or
- **Single Source:** There are other suppliers, but Yukon Energy elects to purchase from one single supplier due to one of the following:
 1. The work is of a proprietary nature and only one supplier can do the work within timeline;
 2. The work to be undertaken is an emergency;

3. For purposes of community support, the purchase will be awarded to a specific supplier; or
4. The President & CEO or Directors authorizes that work be given to a specific company.

3.02 Directors may award Non-Competitive Purchases up to a maximum value of \$25,000.00. The President & CEO must approve all other Non-Competitive Purchases contracts.

4.00 Signing Authority

4.01 All Non-Competitive Purchases are to be requested only by authorized employees in accordance with Yukon Energy's Signing Authority Policy.

5.00 Document Retention

5.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.

	Goods & Services Guidelines GS-011	DEPARTMENT:		
		INQUIRIES TO:		
		TOPIC:		
		ISSUED:		
		All	Corporate Services	Purchase Order Guideline
		REVIEW DATE:		APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

1.01 The purpose of a Purchase Order is to:

- Provide a basic instrument that describes the item(s) purchased and the circumstances under which it is to be produced and delivered, as well as the legal consideration under which the contract is to be performed and paid for; and
- Identify the total dollar value authorized to be paid for the items identified to be purchased.

2.00 Procedure

The following is the procedure for ordering goods, services and equipment:

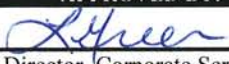
- 2.01 Submit a completed Purchase Requisition to Corporate Services clearly indicating the goods, services and/or equipment to be purchased. Any associated documentation (e.g. specifications, quotes, drawings, etc.) must be included with the Purchase Requisition. The Purchase Requisition must be properly authorized to initiate the procurement process and provide valid coding.
- 2.02 Purchase requisitions will be processed and subject to the competitive bid process except where the non-competitive purchase guidelines are justified.
- 2.03 Corporate Services will issue a Purchase Order to the successful vendor on behalf of the Corporation (and requestor).
- 2.04 Any revisions/corrections to a Purchase Order must be done by way of Change Order request. Corporate Services will issue all Change Orders.

3.00 Signing Authority

- 3.01 All purchase requisitions or transactions are to be requested only by authorized employees in accordance with Yukon Energy's Signing Authority Policy.

4.00 Purchase Document Retention

- 4.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-012	DEPARTMENT:	INQUIRIES TO:	TOPIC:
	All	Corporate Services	Standing Agreements Guideline
	ISSUED:	REVIEW DATE:	APPROVED BY:
	March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 The purpose of Standing Agreements is to provide a procurement method for repetitively purchased, lower dollar value goods and services for a specified period.
- 1.02 Standing Agreements are a method of purchase used to provide direct access to a pre-qualified vendor for the supply of specific goods and/or services, on an as-required basis, for specific periods of time, at prearranged prices and delivery conditions.
- 1.03 Standing Agreements shall only be awarded as a result of a competitive bid process undertaken by Corporate Services and approved by the Director of Corporate Services or President, when appropriate.
- 1.04 Standing Agreements may be requested if:
 - Yukon Energy is purchasing a large number of units of goods or services over time and the total volume of purchases is relatively predictable and consistent over time;
 - The specification of each unit varies very little from unit to unit; and
 - There are other value add services or elements that could be achieved by a long-term agreement.

2.00 Procedure

The following is the procedure for implementing Standing Agreements:

- 2.01 Submit a completed Purchase Requisition to Corporate Services clearly indicating the goods and/or services to be purchased, and the estimated annual usage (both in quantity and estimated dollar amount).
- 2.02 All Purchase Requisitions requesting a Standing Agreement will be subject to the Competitive Bid or Non-Competitive Purchases Guidelines where appropriate to that particular potential purchase.
- 2.03 The award of Standing Agreements will be made by Corporate Services, once proper processing and if necessary proper bidding procedures have been completed.
- 2.04 Standing Agreements will normally be issued on a yearly basis and are subject to review (renewal or cancellation) annually coordinated by Corporate Services and with input from the user departments.

- 2.05 Any revisions/corrections to a Standing Agreements must be done by way of a Change Order request. Corporate Services will issue all Change Orders.

3.00 Signing Authority

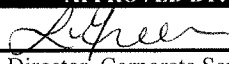
- 3.01 Standing Agreements and all associated acquisitions/ transactions are to be accessed only by authorized employees in accordance with Yukon Energy's Signing Authority Policy.

4.00 Accessing Standing Agreements

- 4.01 Authorized employee can access or use a Standing Agreements by:
- a) Checking Standing Agreements log to ensure Standing Agreement exists with vendor;
 - b) Checking to ensure valid proof of Insurance and WCB;
 - c) Purchasing goods and/or services where there is compliance with (a) and (b);
 - d) Requesting vendor to put Standing Agreement number on all invoices;
 - d) Coding purchases;
 - e) Obtaining second authorized signature for purchase; and
 - f) Forwarding purchasing documents to Accounts Payable for processing.

5.00 Standing Agreements Document Retention

- 5.01 Corporate Services will retain all original documents, complete with supporting documentation for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-013	DEPARTMENT:	INQUIRIES TO:	TOPIC:
	All	Corporate Services	Vendor Registration Guideline
	ISSUED:	REVIEW DATE:	APPROVED BY:
	March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 Yukon Energy's Vendor Registration List is a directory of vendors who want to conduct business with the Corporation.
- 1.02 Vendor Registration is a procurement tool that allows vendors to register the goods and/or services that they are qualified and able to provide to the Corporation.

2.00 Procedure

- 2.01 Interested vendors complete and submit the Vendor Registration form that provides information and identifies the type of goods and/or services that the vendor is qualified and able to provide.
- 2.02 Vendors are responsible for providing any required licenses, tickets or levels of expertise.
- 2.03 Registered vendors may be given the opportunity to bid on competitive purchases made on behalf of the Corporation.
- 2.04 Registration on Yukon Energy's Registration List does not mean a vendor will automatically receive copies of all tenders. Vendors may contact Corporate Services to receive copies of tender packages.
- 2.05 Corporate Services is responsible for the on-going maintenance of the Vendor Registration list.

3.00 Document Retention

- 3.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.



YUKON ENERGY CORPORATION VENDOR REGISTRATION

Yukon Energy Corporation
2008-2009 General Rate Application
PWP/HML-YEC-1-42(a) Attachment 1

Vendor Name:	Phone Number:
Mailing Address:	Fax Number:
City, Territory/Province	Postal Code:
Contact Name(s):	Phone Number(s):
Email Address:	
Please provide a short description of your services/goods/expertise:	

WEB SITE

www.yukonenergy.ca

confirm that this is a Yukon Business as defined below ☐ YES ☐ NO

Must meet at least two (2) of the following:

- The business employs Yukon residents
- The business operates a permanently staffed office in the Yukon
- The business owns, for purposes directly related to the operation of the business, real property in the Yukon
- The business is owned, or is a corporation that is owned, 50% or more by Yukon residents

Vendor's Authorized Signature

Date

Vendor's Authorized Name-please print

Note: Please select the fields (with an **X**) on the attached Products and Service List that identifies that type of goods/services that you are qualified to provide to Yukon Energy.

Corporate Services Use Only

The above vendor has been added to Yukon Energy's Vendor Registration List

Yes

☐

Corporate Services Signature

Date

YUKON ENERGY CORPORATION
Purchasing (Corporate Services)
PRODUCTS AND SERVICES LISTING

"A"	
Advertising	
Air Purification Equipment	
Air Conditioning Equipment	
Audio Equipment	
Audio Visual Supplies	
Automotive Equipment	
Automotive Equipment/Repair Shop	
"B"	
Bags and Sacks	
Banking Services	
Batteries, Dry	
Batteries, Wet	
Bearing, Mounted	
Bearing, other	
Bearing, Unmounted	
Binders	
Boilers	
Bolts	
Books & Pamphlets	
Boring Machines	
Boxes, Cartons	
Brokerage	
Brushing	
Brush & Weed Control	
Buoys	
"C"	
Cabinets, Lockers, Shelving	
Cable and Wire	
Calculator	
Cameras, Still Picture	
Cameras, Motion Picture	
Capacitors	
Chain Link Fencing	
Chemical, Janitorial	
Chemical Analysis Instrument	
Chemicals	
Circuit Boards	
Circuit Breakers	
Cleaning & Polishing Compounds	
Clothing	
Communication Equipment	
Compressors and Pumps	
Computer, terminal	
Computer forms	

Computer, disk drive	
Computer, floppy drive	
Computer, hard drive	
Computer, mainframe	
Computer, Microsoft Windows	
Computer, modem	
Computer, monitor	
Computer, plotter	
Computer, server	
Computer, software	
Computer, Windows NT	
Computer, workstations	
Computer/Printer supplies	
Computers	
Concrete	
Connectors	
Construction Equipment	
Construction Material, other	
Consulting Services	
Containers, other	
Contract Administration	
Converters	
Copiers	
Copying & Blueprinting	
Cranes	
Crates	
Crushing	
Cultural, Heritage, History	
Cutting Tools for Machine Tools	
Cylinder	
"D"	
Data Collection	
Demolition	
Desktop Publishing	
Distance Measuring Device	
Drafting Supplies	
Drafting Equipment	
Drafting and Surveying	
Drawings	
Driers, Dehydrators,	
Drill Bits	
Drilling and Tapping Machines	
Drilling-Wells and Core Samples	
Drywall	
Drums and Cans	

YUKON ENERGY CORPORATION
Purchasing (Corporate Services)
PRODUCTS AND SERVICES LISTING

"E"	
Earth Moving/Excavating Equipment	
Electric Arc Welding Equipment	
Electric Control Equipment	
Electrical Components, other	
Electrical Systems Components	
Electronic Measuring Instruments	
Elevator Parts	
Engine Accessories	
Engineering Services	
Engines Gas, Auto, Truck	
Engines, Diesel	
Engines, Jet	
Engines, other	
Equipment Rentals	
Explosives	
"F"	
Facilitator	
Facsimile Equipment	
Fan and Blower Equipment	
Fastening Devices	
Feasibility Studies	
Fences and Gates, Metal	
Fences and Gates, Wood	
Fences and Gates, other	
Fertilizers	
Fiber Optic Cables	
Fiber Rope, Cordage and Twine	
Fiber Optic Conductors	
Fiber Optic Devices	
Fiber Optic Kits, other	
Film, Processed	
Film Processing	
Filters, heating, other	
Fire Fighting & Safety Equipment	
Fire Fighting Equipment	
Fire Extinguishers	
Fire Protection Services	
First Aid Kits and Supplies	
First Aid Training	
Fittings for Rope, Cable and Chain	
Fittings, other	
Flag or Pennant	
Floor Polishers & Vacuum Cleaner	
Floor Coverings	
Footwear	

Forging Machines & Hammers	
Forms	
Framing, mats	
Framing equipment, other	
Framing material	
Framings, tapes	
Framing, tools	
Freezer	
Freight services	
Fuel Delivery	
Fuel System Components	
Fuels Bulk Petroleum	
Furnaces	
Furnishings, draperies & blinds	
Furnishings, other	
Furnishings, floor coverings	
Furniture, mailroom	
Furniture, other	
Furniture, office	
Furniture, library	
Fuses	
"G"	
Gardening Equipment, Mowers	
Gardening Tools	
Gas Welding & Heat Cutting	
Gases, Compressed & Liquefied	
Gear Cutting & Finishing Machines	
Generators, Electrical	
Geology	
Glass Materials	
Glass, Tile, Brick, Block	
Graphic, Visual Arts	
Grinding machines	
Groceries	
"H"	
Handyman	
Hardware Supplies, other	
Hazard Sampling Supplies	
Hazard Detecting Instrument	
Health Services	
Heat Exchanger & Steam Condensers	
Heating Equipment & Supplies	
Historical Items	
Hose & Tubing, Flexible	

YUKON ENERGY CORPORATION
Purchasing (Corporate Services)
PRODUCTS AND SERVICES LISTING

"I"	
Inspection Services	
Instruction Services	
Insulating Equip., protective covering	
Insulating Supplies, other	
Insulation Fasteners/Adhesives/Mastics	
Insulators	
Insurance, Risk Management	
Insurance Adjusters, Customs Broker	
Intercommunication & Public Address	
Iron & Steel, bars & rods	
Iron & Steel, structural shapes	
Iron & Steel, plates	
Iron, Steel, Wire	
IT Development and Support	
"J"	
Janitorial Services	
Janitorial Supplies, Brooms, Brushes	
Job Description, Qualifications Writing	
"K"	
Kitchen Equipment	
Kitchen, cutlery and flatware	
Kitchen Equipment & Supplies, other	
Kitchen, tableware	
Kitchen Utensils	
"L"	
Lamps	
Land Use Planning	
Lathes, Metal	
Leasing	
Legal Services	
Level	
Licenses & Permits	
Life Saving and Diving Equipment	
Life Skills Training	
Lighting Equipment	
Lighting Controls, other	
Lighting Fixtures, Outdoor	
Lighting Fixtures, Indoor	
Locksmith Services	
Lubricants	
Lubrication Equipment & Accessories	
Lugs Terminals	
Lumber and Related Wood Material	

"M"	
Machine and Tools, other	
Machine Tools	
Magazine	
Mailing Machines	
Maintenance & Repairs	
Manuals	
Mapping Station	
Maps, Charts, Topography	
Material Handling Equipment/Supplies	
Meals, Catering Services	
Media Services	
Metal Finishing Equipment	
Metal Shapes, other	
Microcomputer	
Microfilm	
Microphones and Speakers, Headsets	
Milling Machines	
Motors	
"N"	
Nails	
Newspaper and Periodicals	
Nuts and Washers	
"O"	
Occupational Health & Safety Services	
Office Equipment	
Offices Supplies	
Oils, other	
"P"	
Packaging & Storage, other	
Paint Brushes, Rollers	
Paint Supplies	
Painting Services	
Paint & Varnishes	
Paper Goods	
Paper	
Paperboard	
Pest Control Agents	
Pest Control Services	
Photographic Development & Finishing	

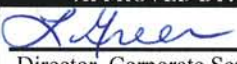
YUKON ENERGY CORPORATION
Purchasing (Corporate Services)
PRODUCTS AND SERVICES LISTING

Photographic Equip. & Supplies, other		Resistors	
Photographic Equipment		Rivets	
Photographic Supplies		Road Clearing & Cleaning	
Pipe and Conduit, Nonmetallic		Roofing, Siding	
Pipe and Tube		Rope, other	
Pipe Fittings		Rubber Materials	
Plant Material			
Plastic Laminating Presses		"S"	
Plastic Materials		Safety Supplies	
Plumbing Fixtures & Supplies		Safety & Rescue Equipment	
Plumbing, Heating, Ventilation		Sand Blasting	
Plywood and Veneer		Sand, Gravel, Rock	
Postal Scales		Satellite Receiver	
Postal Services		Saws and Filing Machines	
Power & Hand Pumps		Scales and Balances	
Power Plant Equipment, other		Screws	
Power Supply		Sealing Compounds	
Prefabricated Structures, other		Security Equipment Systems	
Prefabricated towers		Security Devices & Accessories	
Printer		Security Services	
Printer, dot matrix		Semiconductors	
Printer, laser		Signs and Displays	
Printing Equipment, other		Snow Removal	
Printing Services		Snow Removal Equipment	
Printing supplies		Soldering & Supplies	
Printing Supplies Paper		Sound Equipment, Underwater	
Printing, Duplicating, Bookbinding		Sound Recording/Reproducing Equip.	
Professional Services		Special Events Management	
Project Management Services		Stationery	
Projector		Steelworks	
Promotional Items		Stereoscope	
Propane Gas		Stop Watches	
Public Relation Services		Storage Tanks	
		Storage, Warehouse	
"R"		Strategic Planning	
Radio & T.V. Communication Equip.		Stretchers	
Reclamation, Remediation, Environ		Structures and Scaffolding	
Clean-up		Subscription	
Recycling		Surveyor-Engineering	
Records Management Services		Surveyor-Legal	
Recreational Services, Supply		Surveyor-Quantity	
Refrigeration Equipment		Surveying & Mapping Equipment	
Refrigerator		Surveys	
Registration fees		Switches, Electronic	
Relays and Solenoids			
Rental Service		"T"	
Repairs, Services, Maintenance		Taps, Ties and Collets	
Research		Taxi Services	

YUKON ENERGY CORPORATION
Purchasing (Corporate Services)
PRODUCTS AND SERVICES LISTING

Telecommunication Services	
Telemarketing	
Telephone & Telegraph Equipment	
Temporary Help Services	
Testing Equipment, meter	
Testing Instrument, other	
Testing Equipment, generator	
Testing Instrument, pressure, temp	
Testing Instrument, signal	
Tires and Tubes Repair Material	
Tires and Tubes, other	
Tires and Tubes Solid & Cushion	
Toiletry Paper Products	
Toner Cartridges	
Tool Boxes	
Tools, other	
Tools, hand, non-powered	
Tools, hand, powered	
Track Material	
Trailers	
Training Aids	
Training & Development	
Transcribing, Reporting Services	
Transformers, Electronic	
Transformers, Electrical	
Transport Services	
Travel Services	
Trucking	
“U”	
Uniforms	
Upholstery Services	
“V”	
Valves, other	

Valves, powered	
Valves, non-powered	
Vehicles Auto, Vans, Light Trucks	
Vehicles, Chrysler	
Vehicles, Medium & Heavy duty	
Vehicles, Toyota	
Vehicles, Medium & Heavy Duty	
Vehicles, Ford	
Vehicles, other	
Vehicular parts and Supplies	
Vehicular Accessories	
Vehicular Brake, Steering, Axle	
Vehicular Detailing	
Vehicular Power Transmission	
Vehicular Cab, Body & Frame	
Vocational Training	
“W”	
Warehouse Trucks	
Waste Removal Management Services	
Water Purification Equipment	
Water Delivery	
Welding Equipment	
Winches, Hoists, Cranes	
Window Coverings	
Windows and Doors	
Windows and Doors, Metal	
Window and Doors, Wood	
Wire Rope and Chain	
Wire and Cable, Electrical	
Wood Material, other	
Wrapping & Packaging Equipment	
Writing Services	

	Goods & Services Guidelines GS-014	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Pre-Qualified Vendor Guideline
		ISSUED:	REVIEW DATE:	APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.00 A Pre-Qualified Vendor list is a procurement tool that allows pre-qualified vendors to participate in competitive and non-competitive procurement of goods and/or services for Yukon Energy.

2.00 Procedure

- 2.01 Corporate Services and/or requestor identify the types of goods and/or services required in conducting business on behalf of the Corporation.
- 2.02 Corporate Services publicly advertises and promotes interested vendors to submit application form(s) for consideration for pre-qualification. The pre-qualification of vendors may be done on a project specific basis.
- 2.03 Corporate Services forwards the applicable application form(s) to potential vendors for consideration for pre-qualification.
- a) **General Pre-Qualification Application** - This form requests such information as name, address, name of principles, name of insurance coverage, WCB information, business license, OH&S compliances and policies, management policies and other forms of general information important to the corporation.
- b) **Technical Pre-Qualification Application Form** – This form requests information to ascertain technical or engineering qualification, list of past projects or work, distribution capabilities and other required information as to ascertain the suppliers' ability to meet the Corporation's standards.
- 2.04 Interested vendors complete and submit the appropriate application form(s) that provides information and identifies qualifications.
- 2.05 Selection of pre-qualified vendors will be assessed based fully on information disclosed in the completed application form(s) regarding the vendor's qualifications and their ability to meet the Corporation's requirements and standards.
- 2.08 Corporate Services will notify interested vendors in writing as to the status of their application once the pre-qualification process is complete.
- 2.09 Pre-Qualified vendors will be added to Yukon Energy's Pre-Qualified Vendors list.

2.10 Pre-qualified vendors shall be given the opportunity to bid on Purchasing Agreements (contracts, purchase orders, standing agreements, etc).

2.11 Corporate Services maintains the Pre-Qualified Vendor list to ensure that qualified vendors are provided with the opportunity to bid on goods and/or services.

3.00 Tenure of Vendor Pre-Qualification

3.01 The evaluation team determines the appropriate period of qualification for a pre-qualified vendor. The tenure should be for a minimum of three years subject or at the discretion of the Corporation.

4.00 Responsibilities

4.01 Each representative is responsible for their respective area of expertise and due diligence is required in completing these responsibilities. All assessments will be documented to ensure accountability and transparency of the decisions made and the actions taken in the pre-qualification process.

5.02 Corporate Services is responsible for: the operation and on-going maintenance of system; assessing potential vendors; repository of information gathered and release of assessment decisions.

5.03 Major users of the goods and/or services participate in the assessment of potential suppliers through review of application form(s) for technical, engineering and safety requirements.

6.00 Post Evaluation of Pre-Qualified Vendors

6.01 For the purposes of simplicity and to ensure the vendor pre-qualification system is as efficient as possible, post evaluation of pre-qualified vendor's performance is required.

7.00 Document Retention

7.01 Corporate Services will retain all original documents complete with supporting documentation for a period of six years plus current year for audit purposes.

YUKON ENERGY  Goods & Services Guidelines GS-015	DEPARTMENT:		INQUIRIES TO:	TOPIC:
	All		Corporate Services	Corporate Purchasing Card Guideline
	ISSUED:		REVIEW DATE:	APPROVED BY:
	March 2006		February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 The purpose of the Corporate Purchasing card is to provide a convenient, cost-effective and efficient method of procuring and paying for lower dollar value goods by:
- Simplifying the procurement and payment process;
 - Reducing the use of small dollar purchase orders (LPO's);
 - Decreasing the use of petty cash in departments;
 - Reducing personal credit card reimbursement for goods and services;
 - Improving order cycle time;
 - Enabling both user and support areas to make more effective use of their resources;
 - Reducing paperwork; and
 - Expediting supplier payments.
- 1.02 Employees are encouraged to use Corporate Purchasing cards for the purchase of goods where it is efficient, economical and operationally feasible to do so and within stated parameters.

2.00 Procedure

- 2.01 Requests for a Corporate Purchasing card are triggered by completion of the "Signing Authorities" form by the requestor's immediate supervisor. The form shall be forwarded to Finance. Finance shall forward a copy of the form to Corporate Services for processing and retention.
- 2.02 Corporate Purchasing cards are issued and controlled by Corporate Services. Employees must sign an "Employee acknowledgement of Responsibilities and Obligations" form prior the issue of the purchasing card.
- 2.03 Card limits are set for each position in accordance with Yukon Energy's Signing Authority Guideline.
- 2.04 Corporate Purchasing cards must be used only to make legitimate purchases for Yukon Energy within the limitations established for the card. Only the employee whose name appears on the card is authorized to use the card.
- 2.05 An "Expenditure Statutory Declaration" form must be completed for all lost receipts.

3.00 Responsibilities

3.01 Cardholders are responsible for:

- Signing the Employee Acknowledgement of Responsibilities and Obligations form;
- Following established procedures for the usage and safeguarding of the Corporate Purchasing card;
- Keeping adequate records of transactions for audit scrutiny;
- Matching receipts to monthly statements;
- Coding and signing monthly statements;
- Forwarding individual statements and receipts to your immediate supervisor and budget owner for review and approval;
- Reporting loss or suspected fraudulent or misuse of the card immediately to VISA and Corporate Services; and
- Returning the Corporate Purchasing card prior to leaving Yukon Energy's employ.

3.02 Corporate Services is responsible for:

- Controlling, distributing and canceling Corporate Purchasing Cards;
- Monitoring compliance with established policies and procedures; and
- Analyzing purchases.

4.00 Restricted items

- a) Cash advances;
- b) Personal purchases;
- c) Goods stocked in Yukon Energy's warehouse;
- d) **Meals;
- e) Services;
- f) **Airline tickets;
- g) **Tuition and professional fees;
- h) Charges incurred by independent contractors;
- i) Capital budget purchases;
- j) Furniture purchase;
- k) Goods and materials covered by master agreements or standing purchase orders.

**Senior Management may waive any provisions of this guideline when it is in the best interest of Yukon Energy to do so.

5.00 Cancellation of Corporate Purchasing Card

5.01 Any breach of this guideline may result in the cancellation of the cardholder's corporate purchasing card.

	Goods & Services Guidelines GS-016	DEPARTMENT:	INQUIRIES TO:	TOPIC:
		All	Corporate Services	Local Purchase Order Guideline
		ISSUED: March 2006	REVIEW DATE: February 2009	APPROVED BY:  Director, Corporate Services

1.00 Purpose

- 1.01 The purpose of a Local Purchase Order (LPO) is to provide a basic instrument for purchases up to a value of \$5,000.00.
- 1.02 Employees are encouraged to use LPO's for the purchase of goods where it is efficient, economical and operationally feasible to do so and within stated parameters.
- 1.03 Local Purchase Orders are to be used only if the Corporate Purchasing card is not accepted.

2.00 Procedure

- 2.01 LPOs must be used only to make legitimate purchases for Yukon Energy within established limitations.
- 2.02 The Local Purchase Order is a three part form and is to be distributed as follows:

Page Colour	Receiver	Action/Rationale
White	Supplier	• given at time of purchase for their records, after the signature is affixed at the bottom of the form, • if the LPO is faxed to the supplier then the Terms and Conditions on the reverse side of the document must be faxed as well
Pink	Accounts Payable	• forwarded to AP for payment to the vendor after the supervisor's signature is affixed at the bottom of the page or held in the LPO book until requested by AP
Green	Originator	• retained in the LPO book

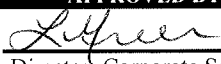
- 2.03 All relevant fields of the LPO shall be completed by the issuer (e.g. vendor name and address, type of purchase; date; item; quantity; part number; item description/scope of work/ unit cost; extension; remarks/special conditions; sub-total; GST and total).
- 2.04 The issuer must request the vendor to provide proof of valid insurance and WCB coverage for services performed on Yukon Energy premises/sites.
- 2.05 Fully used LPO books shall be returned to Corporate Services which will trigger the issue of a new LPO book.

3.00 Signing Authority

- 3.01 All LPO's shall be issued by authorized employees in accordance with Yukon Energy's Signing Authority Guideline.

4.00 Document Retention

- 4.01 Corporate Services will retain all completed LPO books for a period of six years plus current year for audit purposes.

 YUKON ENERGY Goods & Services Guidelines GS-017	DEPARTMENT:	INQUIRIES TO:	TOPIC:
	All	Corporate Services	Invoice Approval Guideline
	ISSUED:	REVIEW DATE:	APPROVED BY:
	March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

1.01 The process for approving invoices or 'signing off' a purchasing agreement invoices requires the attention, diligence and cooperation of three areas:

- Owner's Designate (Owner Department);
- Corporate Services; and
- Accounts Payable

2.00 Responsibilities

2.01 **Owner's Designate** is responsible for ensuring that that the work being billed for has in fact been completed and to the satisfaction of the owner department.

- Audit invoice and verify that the scope of work or deliverables invoiced for is identified within the contract;
- Audit invoice to verify that the invoice has correct pricing and is according to any specified billing schedule;
- Attach all back-up documentation;
- Verify the coding is correct;
- Affix authorized signatory to invoice confirming goods and/or services have been completed to the satisfaction as identified within the scope of the contract;
- Obtain budget owner's signature and
- Once the invoice is signed, forward the invoice to the Corporate Services for their review, recording and approval.

2.02 **Corporate Services** is responsible for ensuring that the commercial terms and conditions of the contract have been adhered to and to track the progress of the contract in terms of the financial encumbrance and the release of funds through the approval process.

- Verify that the owner's designate and the budget owner has authorized the invoice within their financial authority. If either signature is absent, the invoice should be returned to the owner's designate;
- Verify that the vendor has satisfied all regulatory and statutory obligations (e.g. insurance, WCB, guarantees, warranties, etc.);
- Verify that all commercial terms and conditions have been satisfied by the contractor;
- Verify proper purchasing agreement reference number;
- Ensure that invoice has not exceeded the financial limit or the timeframe stipulated in the contract and/or change orders;
- Verify that the invoice has not already been paid;
- Verify there are sufficient funds remaining on the purchasing agreement;
- Record invoices accordingly (files, logs, etc); and

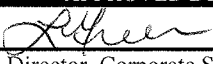
- When the invoice has met the criteria, sign and forward the invoice to Accounts Payable for processing.

2.03 **Accounts Payable** is responsible for ensuring that there are two authorized signatures and that they have the accountability for the level of expenditure as per FA-004 Signing Authority Guidelines.

- Forward invoice to owner's designate for approval or disapproval;
- Upon return of the invoice from the Corporate Services, verify that there are three authorized signatures on the invoice, owner's designate, budget owner and Corporate Services. If any invoice fails to have the authorized signatures, accounts payable should return the invoice to the area(s) requiring a signature;
- When accounts payable receives an invoice with three correct signatures, this is notification of, and satisfies the requirement for due diligence and they may proceed to make payment; and
- Accounts payable to perform final check for accuracy, record and process invoice for payment.

3.00 **Signing Authority**

3.01 All invoices are to be approved only by authorized employees in accordance with the Corporation's Signing Authority Guideline.

	Goods & Services Guidelines GS-018	DEPARTMENT:		
		INQUIRIES TO:		
		TOPIC:		
		ISSUED:		
		All	Corporate Services	Incoming Shipping Negotiation Guideline
		REVIEW DATE:		APPROVED BY:
		March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 To ensure incoming material requirements are shipped in the most cost effective manner.

2.00 Procedure

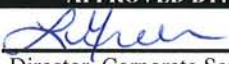
The following is the procedure for securing the most economic and safe shipping service for incoming shipments.

- 2.01 Shipping instructions should be done in conjunction with establishing the F.O.B. point. Corporate Services should clearly define the routing and mode of transportation, if the corporation is to pay the freight charges or have ownership of the goods in transit. Terms such as 'Best Way' and 'Fastest Way' are too ambiguous and indefinite and provide no control or means of tracing shipments and are to be avoided.
- 2.02 When the corporation bears the shipping costs and ownership of goods in transit, the following factors need to be considered in determining the best mode of transportation, selection of carrier and in establishing the routing of the shipment.
- Determine the type of transportation service which will best meet the delivery requirements.
 - Review the shipment needs in terms of:
 - The required delivery date and the type of service that best meets those transit time requirements;
 - Size of the shipment;
 - Susceptibility of the commodity to damage;
 - Cost of the transit service;
 - Carrier accessorial services; and
 - Selection of adequate and safe equipment – special equipment is often needed for shipments of excessive height, width, length or weight measurements.
 - Select a specific carrier or carriers. The factors to consider are:
 - Financial condition of the carrier;
 - Quality of service;
 - Service at supplier's point of shipment;
 - Dependability;
 - Over-the-road service;
 - Tracing and expediting shipments;

- Loss and damage claims;
- Overcharge claims;
- Insurance capabilities; and
- Miscellaneous services – i.e. handling complaints, remittance of COD's, rate notifications, document handling.

d) Perform a periodic check of the transportation service once the shipment(s) are moving.

- 2.03 Shippers will be requested to provide a 'Bill of Lading' with the shipment clearly identifying the carrier, a description of the goods and the terms for the freight charges.
- 2.04 Shippers will be instructed to provide information to the Corporation's Custom Broker so they may prepare certified invoices for customs clearance for shipments originating outside Canada.
- 2.05 Corporate Services will negotiate critical delivery of good/equipment when required.
- 2.06 Yukon Energy reserves the right to cancel the order if goods are not shipped within the period specified, at no cost to the purchaser. (This must be clearly stated on the PO and must be accepted in writing by the supplier to be enforceable and without penalty to Yukon Energy).

 YUKON ENERGY Goods & Services Guidelines GS-019	DEPARTMENT:	INQUIRIES TO:	TOPIC:
	All	Corporate Services	Shipping Invoice Approval & Payment Guideline
	ISSUED:	REVIEW DATE:	APPROVED BY:
	March 2006	February 2009	 Director, Corporate Services

1.00 Purpose

- 1.01 The process for approving and processing payment for shipping invoices requires the attention, diligence and cooperation of all relevant parties.

2.00 Procedure

The following is the procedure for the payment of incoming shipping invoices:

- 2.01 Payment of incoming shipping invoices will be made provided:
- Terms of the purchase order have been fulfilled, if shipping is stated as a critical item of importance on the face of the purchase order (agreement).
 - Freight or transportation invoices must be supported by a corresponding Bill of Lading from the shipper.
- 2.02 Any claims, which are the supplier's responsibility, will be subject of adjustment after goods have arrived at the point of final destination.
- 2.03 Freight invoices which relate to a Purchasing Agreement will be paid according to the negotiated freight terms and FOB point as stated on the purchase document. Exceptions are to be referred to Corporate Services for further handling and action.
- 2.04 Only those specific shipping costs identified on the Purchasing Agreement will be paid. No other costs will be paid without the specific approval from Corporate Services.
- 2.05 All incoming international shipments (outside of Canada) must be supported by certified Customs Invoices prepared by Yukon Energy's custom brokers.
- 2.06 Supplier invoices which include items relating to shipping charges beyond the agreed to terms stated by the FOB point, must be forwarded to Corporate Services for investigation and, if necessary, approval.
- 2.07 Shipping invoices which identify boxing or packing charges will not be paid, unless stated on the corresponding Purchasing Agreement.
- 2.08 Prior to payment of a shipping invoice, efforts must ensure there is compliance with all terms, conditions and special requirements outlined on the Purchasing Agreement.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) Please explain why YEC, which is a relative small primarily energy generating
6 utility with only one primary wholesale and only one industrial and relatively few
7 retail customers, requires the services of a full time Communications position.
8

9 **ANSWER:**

10
11 **(a)**

12
13 Yukon Energy's Communications Supervisor carries out the following functions:
14

- 15 • **Corporate Communications:** Responsible for creating, implementing and
16 overseeing communications programs that effectively describe and promote the
17 organization and its products. Duties are wide ranging and include development
18 of communication strategies, writing/producing various documents including
19 annual reports and business plans, coordination/writing of ad campaigns,
20 promotional material, and speeches.
21
- 22 • **Media Relations:** The Communications Supervisor is Yukon Energy's primary
23 contact for media outlets, and along with Yukon Energy's president, is the
24 primary spokesperson for the Corporation. Duties include researching and
25 answering media questions, writing and distributing news releases and media
26 FYIs, organizing news conferences and media briefings and monitoring media
27 coverage of Yukon Energy.
28
- 29 • **Community Relations:** The Communications Supervisor is a primary contact for
30 members of the public who have questions about Yukon Energy. Duties include
31 answering questions through written or oral means, helping to select Yukon
32 Energy scholarship recipients, helping to select non-profit groups that are to
33 receive Yukon Energy corporate sponsorship funding, attending public
34 functions/speaking engagements on behalf of Yukon Energy.

- 1 • **Public Consultation Coordinator:** Developing and executing public
2 consultation plans for various projects/initiatives, organizing public meetings, and
3 preparing all communication materials for each meeting.
4
- 5 • **Webmaster:** Duties include writing for and maintaining public web site and public
6 blog.
7
- 8 • **Internal Communications:** Responsible for overseeing and implementing
9 communications among Yukon Energy staff, including a monthly employee
10 newsletter, and for helping to organize staff events.
11
- 12 • **Whitehorse Rapids Generation Station Fish Ladder:** Responsible for
13 overseeing the operations at the fish ladder and for the production of all the
14 educational/display materials at the fish ladder. Involved in the hiring/training of
15 the fishladder staff.
16
- 17 • **Education Coordinator:** Responsible for organizing school tours of Yukon
18 Energy's facilities and for giving some of the tours.

1 **REFERENCE:**

2
3 **QUESTION:**

- 4
5 a) What is YEC' policy on the customer contribution for the installation of a new pole
6 required as a result of a customer requested pole relocation? For example, if the
7 existing pole is at the end of its useful life and a new pole is installed at the
8 relocation site, does the customer just pay for the labour, supplies and equipment
9 installation costs with the new pole provide by YEC at no cost as the old pole
10 would have required immanent replacement because of its age and condition?
11

12 **ANSWER:**

13
14 **(a)**

15
16 Generally, the cost of a customer-requested relocation would be the responsibility of the
17 customer. YEC does not have a policy dealing with the specific scenario raised;
18 however, if the pole was deemed to be at end of life, the customer would be responsible
19 for any incremental costs associated with the relocation, i.e., any additional labour or
20 materials (e.g. different pole height due to different terrain, adjacent pole relocations,
21 conductor changes due to customer's request) would be the responsibility of the
22 customer.