



The Yukon Electrical Company Limited
An *ATCO* Company

July 12, 2013

Yukon Utilities Board
P.O. Box 31728
Whitehorse, Yukon Y1A 6L3

Attention: Deana Lemke, Yukon Utilities Board Executive Secretary

Dear Deana:

Re: Service Interruptions

In accordance with Board Decision 1989-5, attached is the summary of major unplanned outages for the months of April, May and June, 2013. A major outage has, for the purposes of these reports, been defined as an interruption of any length involving either a significant number of customers or a small community.

Please contact me at 633-7003, if you require any additional information or clarification.

Yours Sincerely,

THE YUKON ELECTRICAL COMPANY LIMITED
An *ATCO* Company

Dwight Redden,
General Manager, Yukon Electrical Company Limited

DR:cm
Encl.

Board Report (>50 custs)



Service Area 571 Whitehorse

Date Reported 2013-04-16 Time Reported 8:47
 Outage Number SMB00081 Time Interrupted 8:45
 Planned Unplanned Time Restored 9:01
 Sub Number 303 Primary Cause 6 Vehicles
 Line Number 4L311 CEA Coding Foreign Interference
 Location Whitehorse-Downtown

of Customers 644
 Avg. Customer Duration 0.33

Explanations Comments
 Garbage truck struck power pole causing blown fuses & breaker outage. Restored power to majority of customers, replaced the damaged pole restoring power to last few customers.

Service Area 571 Whitehorse

Date Reported 2013-05-04 Time Reported 18:00
 Outage Number RSM00205A Time Interrupted 18:00
 Planned Unplanned Time Restored 18:06
 Sub Number 17 Primary Cause 16 YEC System Outage
 Line Number 5L626 CEA Coding Loss of Supply - Yukon Energy
 Location Whitehorse-Multiple Areas

of Customers 2572
 Avg. Customer Duration 0.10

Explanations Comments
 Underfrequency load shed due to closing on a fault, which caused a brief outage to breaker S6838

Service Area 571 Whitehorse

Date Reported 2013-05-21 Time Reported 15:07
 Outage Number SMB00091 Time Interrupted 15:07
 Planned Unplanned Time Restored 15:35
 Sub Number 6 Primary Cause 14 Unknown
 Line Number 4L304 CEA Coding Unknown/Other
 Location Whitehorse-Porter Creek

of Customers 766
 Avg. Customer Duration 0.47

Explanations Comments
 Loss of 1.5MW from S6838 when S9403 feeder in Porter Creek substation opened. Patrolled lines no cause found. Reclosed, breaker held

Board Report (>50 custs)

Service Area 571 Whitehorse

Date Reported 2013-05-23 Time Reported 12:51

Outage Number SMB00092 Time Interrupted 12:51

Planned Unplanned Time Restored 13:00

Sub Number 6 Primary Cause 14 Unknown

Line Number 4L304 CEA Coding Unknown/Other

Location Whitehorse-Multiple Areas

of Customers 2461
Avg. Customer Duration 0.26
Explanations Comments
 Breaker S9403 opened on a phase to phase fault, which operated Stage 1 underfrequency and opened S6838. Line patrol found no cause. Re energized in stages.

Service Area 571 Whitehorse

Date Reported 2013-06-01 Time Reported 7:30

Outage Number RJZ00321 Time Interrupted 7:30

Planned Unplanned Time Restored 9:25

Sub Number 21 Primary Cause 8 Equipment Failure

Line Number 5L648 CEA Coding Defective Equipment

Location Whitehorse-Alaska Hwy North

of Customers 198
Avg. Customer Duration 2.95
Explanations Comments
 Transformer pole at Takhini River Subdivision burnt down, sectionalized up to the tap off and replaced pole.

Service Area 571 Whitehorse

Date Reported 2013-06-02 Time Reported 10:30

Outage Number RJZ00323 Time Interrupted 12:50

Planned Unplanned Time Restored 13:30

Sub Number 21 Primary Cause 8 Equipment Failure

Line Number 5L628 CEA Coding Defective Equipment

Location Whitehorse-Crestview

of Customers 681
Avg. Customer Duration 0.67
Explanations Comments
 Crossarm burnt off. A phase floating. Outage taken to customers in Crestview & Kulian to replace equipment.

Board Report (>50 custs)

Service Area 571 Whitehorse

Date Reported 2013-06-04 Time Reported 11:34

Outage Number W/AF130604-571 Time Interrupted 11:34

Planned Unplanned Time Restored : 0

Sub Number WAF Primary Cause 16 YEC System Outage

Line Number WAF CEA Coding Loss of Supply - Yukon Energy

Location

Explanations Comments
 YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line.

of Customers 11584

Avg. Customer Duration 0.00

Service Area 571 Whitehorse

Date Reported 2013-06-17 Time Reported 12:00

Outage Number SMB00098 Time Interrupted 12:00

Planned Unplanned Time Restored 17:50

Sub Number 28 Primary Cause 14 Unknown

Line Number 4L306 CEA Coding Unknown/Other

Location Whitehorse-Range Road

Explanations Comments
 No cause found, suspect fuse in the switch undersized. Upgraded from 50 to 80amp fuse

of Customers 50

Avg. Customer Duration 5.83

Service Area 571 Whitehorse

Date Reported 2013-06-17 Time Reported : 0

Outage Number SMB00099 Time Interrupted 13:00

Planned Unplanned Time Restored 13:31

Sub Number 3 Primary Cause 2 Trees

Line Number 4L319 CEA Coding Trees

Location Whitehorse-Riverdale

Explanations Comments
 Emergency outage to S9400 to remove a burning tree, extreme winds at the time

of Customers 484

Avg. Customer Duration 0.52

Board Report (>50 custs)



Service Area 571 Whitehorse

Date Reported 2013-06-17 Time Reported 11:40
 Outage Number SMB00100 Time Interrupted 11:40
 Planned Unplanned Time Restored 12:01
 Sub Number 28 Primary Cause 2 Trees
 Line Number 4L305 CEA Coding Trees
 Location Whitehorse-Range Road

of Customers 650
 Avg. Customer Duration 0.35

Explanations Comments
 Tree fell on line near the creek on Range Road. Tree was removed and power restored

Service Area 571 Whitehorse

Date Reported 2013-06-17 Time Reported 13:06
 Outage Number SMB00101 Time Interrupted 13:06
 Planned Unplanned Time Restored 13:27
 Sub Number 28 Primary Cause 2 Trees
 Line Number 4L306 CEA Coding Trees
 Location Whitehorse-Multiple Areas

of Customers 1300
 Avg. Customer Duration 0.46

Explanations Comments
 Tree fell on the main line, breaker opened, isolated and re energized customers, removed tree and restored remaining customers

Service Area 571 Whitehorse

Date Reported 2013-06-27 Time Reported 18:55
 Outage Number MP100032 Time Interrupted 18:50
 Planned Unplanned Time Restored 20:01
 Sub Number 21 Primary Cause 1 Lightning
 Line Number 5L645 CEA Coding Lightning
 Location Whitehorse-Mayo Road

of Customers 63
 Avg. Customer Duration 0.77

Explanations Comments
 Blown transformer hit by lightning, blown main line fuse as well.

Board Report (>50 custs)



Service Area 571 Whitehorse

Date Reported 2013-06-30 Time Reported 12:41
 Outage Number SMB00103 Time Interrupted 12:41
 Planned Unplanned Time Restored 12:57
 Sub Number 17 Primary Cause 22 YEC Generation/Transm
 Line Number 5L626 CEA Coding Loss of Supply - Yukon Energy
 Location Whitehorse-Multiple Areas

of Customers 2461
 Avg. Customer Duration 0.30
Explanations Comments
 YEC lost L170 causing a stage 1 under frequency trip on S6838. Deep Creek customers back on system at 1612hrs.

Service Area 572 Haines Junction

Date Reported 2013-06-01 Time Reported 8:01
 Outage Number RTW00265 Time Interrupted 8:00
 Planned Unplanned Time Restored 8:08
 Sub Number 20 Primary Cause 14 Unknown
 Line Number 5L609 CEA Coding Unknown/Other
 Location

of Customers 277
 Avg. Customer Duration 0.13
Explanations Comments
 Breaker S8343 opened and locked open, turned to local and reclosed. Unknown cause at the time, under investigation.

Service Area 572 Haines Junction

Date Reported 2013-06-04 Time Reported 11:34
 Outage Number WAF130604-572 Time Interrupted 11:34
 Planned Unplanned Time Restored : 0
 Sub Number Primary Cause 16 YEC System Outage
 Line Number WAF CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 495
 Avg. Customer Duration 0.00
Explanations Comments
 YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line. Backup generation did not start.

Board Report (>50 custs)



Service Area 573 Watson Lake

Date Reported 2013-05-13 Time Reported 19:15
 Outage Number RGG00075 Time Interrupted 19:15
 Planned Unplanned Time Restored 19:43
 Sub Number 31 Primary Cause 6 Vehicles
 Line Number 5L619 CEA Coding Foreign Interference
 Location Watson Lake

of Customers 400
 Avg. Customer Duration 0.47

Explanations Comments
 Power outage due to a vehicle hitting communication line causing the 25kV line to slap together.

Service Area 574 Carcross

Date Reported 2013-05-04 Time Reported 16:50
 Outage Number RSM00204 Time Interrupted 16:50
 Planned Unplanned Time Restored 18:58
 Sub Number S150 Primary Cause 2 Trees
 Line Number 5L623 CEA Coding Trees
 Location Whitehorse-Carcross Road

of Customers 710
 Avg. Customer Duration 2.13

Explanations Comments
 Tree across the main power line caused outage to breaker S6839

Service Area 574 Carcross

Date Reported 2013-06-04 Time Reported 11:34
 Outage Number WAF130604-574 Time Interrupted 11:34
 Planned Unplanned Time Restored : 0
 Sub Number Primary Cause 16 YEC System Outage
 Line Number 5L601 CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 317
 Avg. Customer Duration 0.00

Explanations Comments
 YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line.

Board Report (>50 custs)



Service Area 575 Carnacks

Date Reported 2013-05-04 Time Reported 17:40
 Outage Number SMB00085 Time Interrupted 17:38
 Planned Unplanned Time Restored 22:09
 Sub Number Primary Cause 2 Trees
 Line Number 5L606 CEA Coding Trees
 Location

of Customers 80
 Avg. Customer Duration 4.52
Explanations Comments
 Tree came down through the line, causing an outage to customers on River Road

Service Area 575 Carnacks

Date Reported 2013-06-04 Time Reported 11:34
 Outage Number WAF130604-575 Time Interrupted 11:34
 Planned Unplanned Time Restored : 0
 Sub Number Primary Cause 16 YEC System Outage
 Line Number 5L606 CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 289
 Avg. Customer Duration 0.10
Explanations Comments
 YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line. Backup generation did start.

Service Area 575 Carnacks

Date Reported 2013-06-30 Time Reported 12:41
 Outage Number SMB00107 Time Interrupted 12:41
 Planned Unplanned Time Restored 12:45
 Sub Number Primary Cause 22 YEC Generation/Transm
 Line Number L170 CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 350
 Avg. Customer Duration 0.07
Explanations Comments
 Brief outage before Carnacks went on diesel back up see DIR SMB00103

Board Report (>50 custs)



Service Area 576 Teslin

Date Reported 2013-04-02 Time Reported 6:15
 Outage Number RJZ00316 Time Interrupted 2:43
 Planned Unplanned Time Restored 2:45
 Sub Number S150 Primary Cause 4 Icing
 Line Number 5L622 CEA Coding Adverse Weather
 Location

of Customers 353
 Avg. Customer Duration 1.06
Explanations Comments
 S9562 tripped on phase to phase fault due to heavy snow loading.
 Back up diesel generator picked up Village of Teslin after a brief outage.

Service Area 576 Teslin

Date Reported 2013-05-31 Time Reported 19:00
 Outage Number GLP00032 Time Interrupted 19:00
 Planned Unplanned Time Restored 21:40
 Sub Number 27 Primary Cause 8 Equipment Failure
 Line Number 5L622 CEA Coding Defective Equipment
 Location Teslin

of Customers 50
 Avg. Customer Duration 2.67
Explanations Comments
 Broken insulator caused outage to a number of customers in Teslin

Service Area 576 Teslin

Date Reported 2013-06-04 Time Reported 20:26
 Outage Number RJZ00325 Time Interrupted 20:16
 Planned Unplanned Time Restored 21:23
 Sub Number S150 Primary Cause 2 Trees
 Line Number 5L622 CEA Coding Trees
 Location Teslin

of Customers 827
 Avg. Customer Duration 3.11
Explanations Comments
 Large tree fell on the 3 phase 34kVA line breaking the line, fire started. Fire extinguished, line repaired, power restored in stages.

Board Report (>50 custs)

Service Area 576 Teslin

Date Reported 2013-06-04 Time Reported 11:34

Outage Number WAF130604-576 Time Interrupted 11:34

Planned Unplanned Time Restored : 0

Sub Number WAF Primary Cause 16 YEC System Outage

Line Number WAF CEA Coding Loss of Supply - Yukon Energy

Location

of Customers 351

Avg. Customer Duration 0.00

Explanations Comments

YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line. Backup generation did not start.

Service Area 578 Beaver Creek

Date Reported 2013-06-05 Time Reported 11:58

Outage Number CLAA000001 Time Interrupted 11:58

Planned Unplanned Time Restored 12:06

Sub Number Unplanned Primary Cause 21 YEC Plant Outage

Line Number 0L CEA Coding Loss of Supply - Yukon Electrical

Location

of Customers 120

Avg. Customer Duration 0.13

Explanations Comments

Community was on standby generation for plant maintenance when the unit cut out due to a faulty temperature switch. Power restored after a brief outage.

Service Area 579 Old Crow

Date Reported 2013-04-16 Time Reported 16:12

Outage Number PTM000125 Time Interrupted 16:12

Planned Unplanned Time Restored 16:36

Sub Number Unplanned Primary Cause 21 YEC Plant Outage

Line Number 0L CEA Coding Loss of Supply - Yukon Electrical

Location Old Crow

of Customers 199

Avg. Customer Duration 0.40

Explanations Comments

Unit #1 developed a coolant leak which activated the fuel spill float shutting down the plant.

Board Report (>50 custs)

Service Area 579 Old Crow

Date Reported 2013-05-01 Time Reported 18:52
 Outage Number PTM00126 Time Interrupted 18:52
 Planned Unplanned Time Restored 18:54
 Sub Number Primary Cause 21 YECCL Plant Outage
 Line Number 0L CEA Coding Loss of Supply - Yukon Electrical
 Location Old Crow

of Customers 197
 Avg. Customer Duration 0.03
Explanations Comments
 Plant outage in Old Crow due too operator error, units were brought on line to quickly.

Service Area 582 Ross River

Date Reported 2013-06-04 Time Reported 11:34
 Outage Number WAF130604-582 Time Interrupted 11:34
 Planned Unplanned Time Restored : 0
 Sub Number Primary Cause 16 YEC System Outage
 Line Number 5L618 CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 218
 Avg. Customer Duration 1.12
Explanations Comments
 YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs); Ross River diesel back up did not come on line. Backup generation did not start.

Service Area 582 Ross River

Date Reported 2013-06-30 Time Reported 12:41
 Outage Number SMB00108 Time Interrupted 12:41
 Planned Unplanned Time Restored 12:45
 Sub Number Primary Cause 22 YEC Generation/Transm
 Line Number L170 CEA Coding Loss of Supply - Yukon Energy
 Location

of Customers 200
 Avg. Customer Duration 0.07
Explanations Comments
 Brief outage when community went on back up diesel see DIR SMB00103

Board Report (>50 custs)



Service Area 583 Pelly Crossing

Date Reported 2013-06-04 Time Reported 11:34

Outage Number WAF130604-583 Time Interrupted 11:34

Planned Unplanned Time Restored : 0

Sub Number Primary Cause 16 YEC System Outage

Line Number 4L302 CEA Coding Loss of Supply - Yukon Energy

Location

Explanations Comments

YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line. Backup generation did start.

of Customers 180

Avg. Customer Duration 0.10

Service Area 585 Tagish

Date Reported 2013-06-04 Time Reported 11:34

Outage Number WAF130604-585 Time Interrupted 11:34

Planned Unplanned Time Restored : 0

Sub Number Primary Cause 16 YEC System Outage

Line Number 5L600 CEA Coding Loss of Supply - Yukon Energy

Location

Explanations Comments

YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line.

of Customers 373

Avg. Customer Duration 0.00

Service Area 592 Marsh Lake

Date Reported 2013-04-01 Time Reported 21:30

Outage Number MP100028 Time Interrupted 21:30

Planned Unplanned Time Restored 1:11

Sub Number 24 Primary Cause 8 Equipment Failure

Line Number 0L CEA Coding Defective Equipment

Location Marsh Lake

Explanations Comments

Line equipment failed during a snow storm, crew replaced equipment and restored power to the area in sections.

of Customers 384

Avg. Customer Duration 1.89

Board Report (>50 custs)



Service Area 592 Marsh Lake

Date Reported 2013-06-04 Time Reported 11:34

Outage Number WAF130604-592 Time Interrupted 11:34

Planned Unplanned Time Restored : 0

Sub Number Primary Cause 16 YEC System Outage

Line Number 9L CEA Coding Loss of Supply - Yukon Energy

Location

of Customers 458

Avg. Customer Duration 0.00

Explanations Comments

YEC partial grid outage to the North of Whitehorse areas including Stewart Crossing and Keno (on at 12:35hrs). Ross River diesel back up did not come on line.