

ATCO Electric

YUKON

November 28, 2016

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 July, August and September 2016. 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 633-7080, if you require any additional information or clarification.

Yours Sincerely,

ATCO Electric Yukon



For: Jay Massie,
Manager

JM:cm
Encl.

YUB\yubout16

Board Report (>50 Customers)



Service Area 575 Carmacks

Date Reported 2016-07-05
 Time Reported 23:45
 Outage Number MWG00249
 Time Interrupted 23:45

Planned Unplanned
 Time Restored 23:48

Sub Number 18
 Primary Cause 22 YEC Generation/Transmission
 Line Number 5L606
 CEA Coding Loss of Supply - Yukon Energy

Location Carmacks

Service Area 583 Pelly Crossing

Date Reported 2016-07-05
 Time Reported 23:45
 Outage Number MWG00250
 Time Interrupted 23:45

Planned Unplanned
 Time Restored 23:47

Sub Number 304S
 Primary Cause 22 YEC Generation/Transmission
 Line Number 3L407
 CEA Coding Loss of Supply - Yukon Energy

Location Pelly Crossing

Service Area 582 Ross River

Date Reported 2016-07-05
 Time Reported 23:45
 Outage Number MWG00251
 Time Interrupted 23:45

Planned Unplanned
 Time Restored 0:15

Sub Number 19S
 Primary Cause 22 YEC Generation/Transmission
 Line Number 5L618
 CEA Coding Loss of Supply - Yukon Energy

Location Ross River

Service Area 573 Watson Lake

Date Reported 2016-07-09
 Time Reported 22:13
 Outage Number CGK00043
 Time Interrupted 22:13

Planned Unplanned
 Time Restored 22:30

Sub Number 31
 Primary Cause 14 Unknown
 Line Number 5L620
 CEA Coding Unknown/Other

Location Watson Lake

of Customers 295
 Avg. Customer Duration :03

Explanations and Comments
 Loss of supply causing brief outage to Village of Carmacks until back up diesel generation came on line.

of Customers 193
 Avg. Customer Duration :02

Explanations and Comments
 Loss of supply, causing a brief outage to Village of Pelly Crossing until backup diesel generation came on line.

of Customers 233
 Avg. Customer Duration :30

Explanations and Comments
 Loss of supply, causing a brief outage to Village of Ross River until backup diesel generation came on line.

of Customers 585
 Avg. Customer Duration :17

Explanations and Comments
 Power out to town, patrolled lines no cause found.

Board Report (>50 Customers)



Service Area 583 Pelly Crossing

Date Reported 2016-07-11 Time Reported 21:00
 Outage Number MWG00255 Time Interrupted 18:45
 Planned Unplanned Time Restored 18:47
 Sub Number 304 Primary Cause 22 YEC Generation/Transmission
 Line Number 3L407 CEA Coding Loss of Supply - Yukon Energy
 Location Pelly Crossing

of Customers 190
 Avg. Customer Duration :02
Explanations and Comments
 Loss of supply, causing a brief outage to Pelly Crossing until back up diesel generation came on line.

Service Area 580 Keno City

Date Reported 2016-07-11 Time Reported 21:00
 Outage Number MWG00253 Time Interrupted 18:45
 Planned Unplanned Time Restored 18:52
 Sub Number S257 Primary Cause 22 YEC Generation/Transmission
 Line Number 3L403 CEA Coding Loss of Supply - Yukon Energy
 Location Keno City

of Customers 54
 Avg. Customer Duration :07
Explanations and Comments
 Loss of supply causing brief outage to Keno City

Service Area 571 Whitehorse

Date Reported 2016-07-14 Time Reported 19:45
 Outage Number SMIB00165 Time Interrupted 19:45
 Planned Unplanned Time Restored 20:28
 Sub Number 17 Primary Cause 22 YEC Generation/Transmission
 Line Number 5L626 CEA Coding Loss of Supply - Yukon Energy
 Location Wh-Porter Creek

of Customers 2422
 Avg. Customer Duration :46
Explanations and Comments
 Loss of supply from YEC. Breaker S6838 opened on under frequency. Outage to the Porter Creek and Takhini areas of Whitehorse.

Service Area 571 Whitehorse

Date Reported 2016-07-14 Time Reported 17:53
 Outage Number SMIB00164 Time Interrupted 17:53
 Planned Unplanned Time Restored 18:26
 Sub Number 17 Primary Cause 1 Lightning
 Line Number 5L626 CEA Coding Lightning
 Location Wh-Porter Creek

of Customers 2422
 Avg. Customer Duration :47
Explanations and Comments
 Lightning hit ABEY lines causing outage to the Porter Creek and Takhini area of Whitehorse.

Board Report (>50 Customers)



Service Area 575 Carmacks

Date Reported 2016-07-15
 Outage Number SMB00167
 Planned Unplanned
 Sub Number
 Line Number L170
 Location Carmacks

Time Reported 18:08
 Time Interrupted 18:08
 Time Restored 18:11

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 314
 Avg. Customer Duration :03
Explanations and Comments
 Loss of supply, causing a brief outage to Village of Carmacks, Ross River and Stewart Crossing

Service Area All Service Areas

Date Reported 2016-07-15
 Outage Number DLM00055
 Planned Unplanned
 Sub Number S150
 Line Number
 Location System Outage

Time Reported 2:00
 Time Interrupted 2:00
 Time Restored 5:45

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 17865
 Avg. Customer Duration 3:45
Explanations and Comments
 Loss of supply, WAF system outage. System returned to normal in stages

Service Area 582 Ross River

Date Reported 2016-07-15
 Outage Number SMB00167A
 Planned Unplanned
 Sub Number L170
 Line Number
 Location Ross River

Time Reported 18:08
 Time Interrupted 18:08
 Time Restored 18:11

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 233
 Avg. Customer Duration :03
Explanations and Comments
 Loss of supply, causing a brief outage to Village of Carmacks, Ross River and Stewart Crossing - See SMB00167

Service Area 583 Pelly Crossing

Date Reported 2016-07-17
 Outage Number RSM00428
 Planned Unplanned
 Sub Number 304
 Line Number 3L408
 Location Pelly Crossing

Time Reported 18:30
 Time Interrupted 23:00
 Time Restored 0:50

Primary Cause 2 Trees
 CEA Coding Trees

of Customers 120
 Avg. Customer Duration 1:50
Explanations and Comments
 Fault occurred when tree made contact on 2 phases (2400v), one phase burned down. Breaker outage was taken to repair.

Board Report (>50 Customers)

Service Area 582 Ross River

Date Reported 2016-07-18 Time Reported 10:38
 Outage Number MWG00261 Time Interrupted 10:06
 Planned Unplanned Time Restored 10:08
 Sub Number 19 Primary Cause 22 YEC Generation/Transmission
 Line Number 5L606 CEA Coding Loss of Supply - Yukon Energy
 Location Ross River

of Customers 230
 Avg. Customer Duration :02

Explanations and Comments
 Loss of supply, causing a brief outage to Ross River.

Service Area 591 Upper Liard

Date Reported 2016-08-08 Time Reported 16:45
 Outage Number CGK00046 Time Interrupted 16:30
 Planned Unplanned Time Restored 17:30
 Sub Number 31 Primary Cause 14 Unknown
 Line Number 5L620 CEA Coding Unknown/Other
 Location Upper Liard

of Customers 106
 Avg. Customer Duration :55

Explanations and Comments
 Loss of supply occurred when Unit #5 failed causing OCR S7238 to open.
 Closed OCR after plant generation was restored.

Service Area 573 Watson Lake

Date Reported 2016-08-08 Time Reported 16:30
 Outage Number TSM00001 Time Interrupted 16:30
 Planned Unplanned Time Restored 16:42
 Sub Number Primary Cause 14 Unknown
 Line Number 5L621 CEA Coding Unknown/Other
 Location Watson lake

of Customers 344
 Avg. Customer Duration :12

Explanations and Comments
 Loss of supply when Unit #5 shutdown, causing S7242 to open. See TSM00002

Service Area 573 Watson Lake

Date Reported 2016-08-08 Time Reported 16:30
 Outage Number TSM00002 Time Interrupted 16:30
 Planned Unplanned Time Restored 17:09
 Sub Number Primary Cause 8 Equipment Failure
 Line Number 5L620 CEA Coding Defective Equipment
 Location Watson lake

of Customers 241
 Avg. Customer Duration :39

Explanations and Comments
 Loss of supply when Unit #5 shutdown, causing breaker S7237 to open.

Board Report (>50 Customers)



Service Area 576 Teslin

Date Reported 2016-08-26
 Outage Number JIS00016
 Planned Unplanned
 Sub Number 27
 Line Number SL614
 Location Teslin

Time Reported 18:15
 Time Interrupted 17:50
 Time Restored 21:35

Primary Cause 2 Trees
 CEA Coding Trees

of Customers 98
 Avg. Customer Duration 3:45

Explanations and Comments
 S7352 opened causing outage to the north end of Village of Teslin. Fault occurred when tree contacted the line.

Service Area 590 Lower Post

Date Reported 2016-08-29
 Outage Number CGK00048
 Planned Unplanned
 Sub Number 31
 Line Number SL619
 Location Lower Post

Time Reported 12:36
 Time Interrupted 12:36
 Time Restored 13:29

Primary Cause 2 Trees
 CEA Coding Trees

of Customers 90
 Avg. Customer Duration :53

Explanations and Comments
 Breaker S7352 opened when a tree fell on the line due to high winds

Service Area 571 Whitehorse

Date Reported 2016-08-30
 Outage Number RSM00037
 Planned Unplanned
 Sub Number 17
 Line Number SL626
 Location Wh-Porter Creek

Time Reported 14:05
 Time Interrupted 14:05
 Time Restored 14:29

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 2422
 Avg. Customer Duration :26

Explanations and Comments
 Loss of supply causing a brief outage to Porter Creek

Service Area 573 Watson Lake

Date Reported 2016-08-31
 Outage Number CGK00049
 Planned Unplanned
 Sub Number 31
 Line Number SL620
 Location Watson lake

Time Reported 20:20
 Time Interrupted 20:20
 Time Restored 20:31

Primary Cause 14 Unknown
 CEA Coding Unknown/Other

of Customers 241
 Avg. Customer Duration :11

Explanations and Comments
 Breaker S7237 opened, parolled line, no cause was found at the time.

Board Report (>50 Customers)

Service Area 576 Teslin

Date Reported 2016-09-06
 Outage Number SMB00175
 Planned Unplanned
 Sub Number 27
 Line Number 5L614
 Location Teslin

Time Reported 7:00
 Time Interrupted 6:45
 Time Restored 9:06

Primary Cause 9 Bird/Animal
 CEA Coding Foreign Interference

of Customers 98
 Avg. Customer Duration 2:21

Explanations and Comments
 Breaker S7352 opened causing outage to the north end of Village of Teslin when a raven contacted the lines.

Service Area 571 Whitehorse

Date Reported 2016-09-09
 Outage Number WPC00063
 Planned Unplanned
 Sub Number 21
 Line Number 5L645
 Location Wh-Alaska Hwy No

Time Reported 23:33
 Time Interrupted 23:00
 Time Restored 0:55

Primary Cause 9 Bird/Animal
 CEA Coding Foreign Interference

of Customers 120
 Avg. Customer Duration 1:55

Explanations and Comments
 Breaker S6841 opened causing outage to Old Alaska Hwy area. no cause found at time of outage. Cause was found Sept. 10h. See AMI00219

Service Area 579 Old Crow

Date Reported 2016-09-09
 Outage Number NC0000104
 Planned Unplanned
 Sub Number
 Line Number
 Location Old Crow

Time Reported 8:45
 Time Interrupted 8:16
 Time Restored 8:20

Primary Cause 14 Unknown
 CEA Coding Unknown/Other

of Customers 200
 Avg. Customer Duration 24:04

Explanations and Comments
 Local plant operator placed town load on OC-UI to replace fuel filters on OC-UI. While supplying the Community OC-UI shutdown. no alarm on SCADA.

Service Area 571 Whitehorse

Date Reported 2016-09-10
 Outage Number AMI00219
 Planned Unplanned
 Sub Number 6841
 Line Number 5L645
 Location Wh Alaska Hwy No

Time Reported 17:50
 Time Interrupted 18:15
 Time Restored 18:35

Primary Cause 9 Bird/Animal
 CEA Coding Foreign Interference

of Customers 120
 Avg. Customer Duration :20

Explanations and Comments
 Fault occurred when bird contacted the line. An emergency outage was taken to repair the damage.

Board Report (>50 Customers)



Service Area 579 Old Crow

Date Reported 2016-09-11
 Outage Number NC000105
 Planned Unplanned
 Sub Number
 Line Number
 Location Old Crow

Time Reported 19:40
 Time Interrupted 19:05
 Time Restored 19:20

Primary Cause 21 YECL Plant Outage
 CEA Coding Loss of Supply - Yukon Electrical

of Customers 193
 Avg. Customer Duration :15
Explanations and Comments
 Air line connector on Unit #4 failed causing brief outage to the Village of Old Crow.

Service Area 575 Carnacks

Date Reported 2016-09-13
 Outage Number WPC0065A
 Planned Unplanned
 Sub Number 18
 Line Number 5L606
 Location Carnacks

Time Reported 19:12
 Time Interrupted 19:05
 Time Restored 19:07

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 311
 Avg. Customer Duration :02
Explanations and Comments
 Loss of supply occurred, causing a brief outage to the Village of Carnacks.

Service Area 582 Ross River

Date Reported 2016-09-13
 Outage Number WPC0065
 Planned Unplanned
 Sub Number 19
 Line Number 5L618
 Location Ross River

Time Reported
 Time Interrupted 19:05
 Time Restored 19:07

Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 230
 Avg. Customer Duration :02
Explanations and Comments
 Loss of supply, causing a brief outage to the Village of Ross River.

Service Area 577 Destruction Bay

Date Reported 2016-09-14
 Outage Number GTW00003
 Planned Unplanned
 Sub Number
 Line Number
 Location Destruction Bay

Time Reported 23:05
 Time Interrupted 23:01
 Time Restored 23:08

Primary Cause 14 Unknown
 CEA Coding Unknown/Other

of Customers 147
 Avg. Customer Duration :07
Explanations and Comments
 Loss of supply when Unit #3 shut down. Cause unknown at the time.

Board Report (>50 Customers)



Service Area 582 Ross River

Date Reported 2016-09-14
 Outage Number WPC00067
 Planned Unplanned
 Sub Number 19
 Line Number 5L618
 Location Ross River

Time Reported 15:50
 Time Interrupted 15:47
 Time Restored 15:49
 Primary Cause 22 YEC Generation/Transmission
 CEA Coding Loss of Supply - Yukon Energy

of Customers 230
 Avg. Customer Duration :02
Explanations and Comments
 Loss of supply, causing a brief outage until backup diesel generation came on line.

Service Area 577 Destruction Bay

Date Reported 2016-09-21
 Outage Number PTM00140
 Planned Unplanned
 Sub Number
 Line Number
 Location Destruction Bay

Time Reported 17:00
 Time Interrupted 17:00
 Time Restored 17:10
 Primary Cause 8 Equipment Failure
 CEA Coding Defective Equipment

of Customers 154
 Avg. Customer Duration 16:38
Explanations and Comments
 Outage to grid occurred affecting Burwash Landing due to a faulty 75KVA transformer.

Service Area 575 Carmacks

Date Reported 2016-09-23
 Outage Number DLM00064
 Planned Unplanned
 Sub Number
 Line Number 5L606
 Location Carmacks

Time Reported 16:00
 Time Interrupted 16:00
 Time Restored 19:05
 Primary Cause 6 Vehicles
 CEA Coding Foreign Interference

of Customers 126
 Avg. Customer Duration 3:05
Explanations and Comments
 Breaker S9656 opened when vehicle contacted pole, pulling down power lines. Area was isolated. Pole and lines were replaced the following day.

Service Area 583 Pelly Crossing

Date Reported 2016-09-28
 Outage Number RSM00445
 Planned Unplanned
 Sub Number 304
 Line Number 5L639
 Location Pelly Crossing

Time Reported 11:18
 Time Interrupted 11:18
 Time Restored 11:22
 Primary Cause 15 Other
 CEA Coding Unknown/Other

of Customers 193
 Avg. Customer Duration :04
Explanations and Comments
 Breaker S2487 opened while operator was placing plant online.

Board Report (>50 Customers)

ATCO Electric

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Service Area 571 Whitehorse

Date Reported 2016-09-28
 Time Reported 16:50
 Outage Number RSM00446
 Time Interrupted 16:50
 Planned Unplanned
 Time Restored 18:10
 Sub Number 303
 Primary Cause 6 Vehicles
 Line Number 4L312
 CEA Coding Foreign Interference
 Location Wh-Downtown

of Customers 170
 Avg. Customer Duration 1:20

Explanations and Comments
 Breaker S1023 opened when truck backed into guywire at 305 Wood St., causing a phase to phase fault.

Service Area 577 Destruction Bay

Date Reported 2016-09-28
 Time Reported 11:30
 Outage Number GTW00005
 Time Interrupted 11:15
 Planned Unplanned
 Time Restored 11:22
 Sub Number
 Primary Cause 8 Equipment Failure
 Line Number
 CEA Coding Defective Equipment
 Location Destruction Bay

of Customers 147
 Avg. Customer Duration :07

Explanations and Comments
 Brief outage to Destruction Bay when mobile unit shut down on a hot water alarm.