Thomas & Elizabeth Bierkamp v. Metropolitan Edison Company	Docket No.'s: C-2019-3015097
Jeffrey & Gretchen Moyer v. Metropolitan Edison Company	C-2019-3015098; C-2019-3015099
Clarence D. Geist, Jr. v. Metropolitan Edison Company	C-2019-3015100
Telephonic Hearing	

Pages 22 - 119

Judge's Chambers
Keystone Building
400 North Street
Harrisburg, PA

September 14, 2022
Commencing at 10:17 a.m.

INDEX TO EXHIBITS

Docket No.'s C-2019-3015097; C-2019-50198;
C-2019-3015099; C-2019-3015100

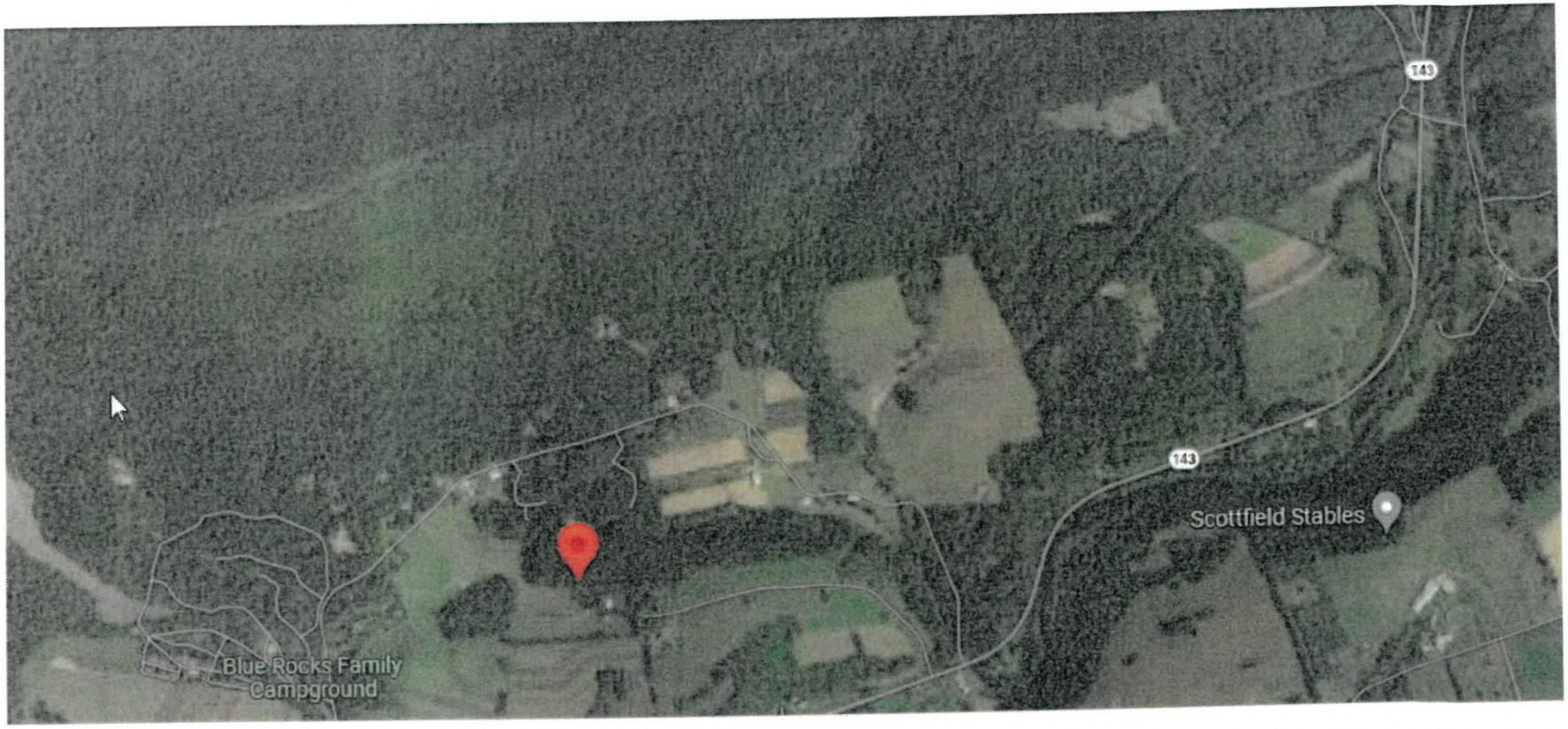
Hearing Date: September 14, 2022

NUMBER	FOR IDENTIFICATION	IN EVIDENCE
Met-Ed Exhibit 1:		
Aerial Map	62	91
Met-Ed Exhibit 2:		
Map with Highlights	62	91
Met-Ed Exhibit 3:		
Sustained Outage History		
1/13/18 through 09/11/22	70	91

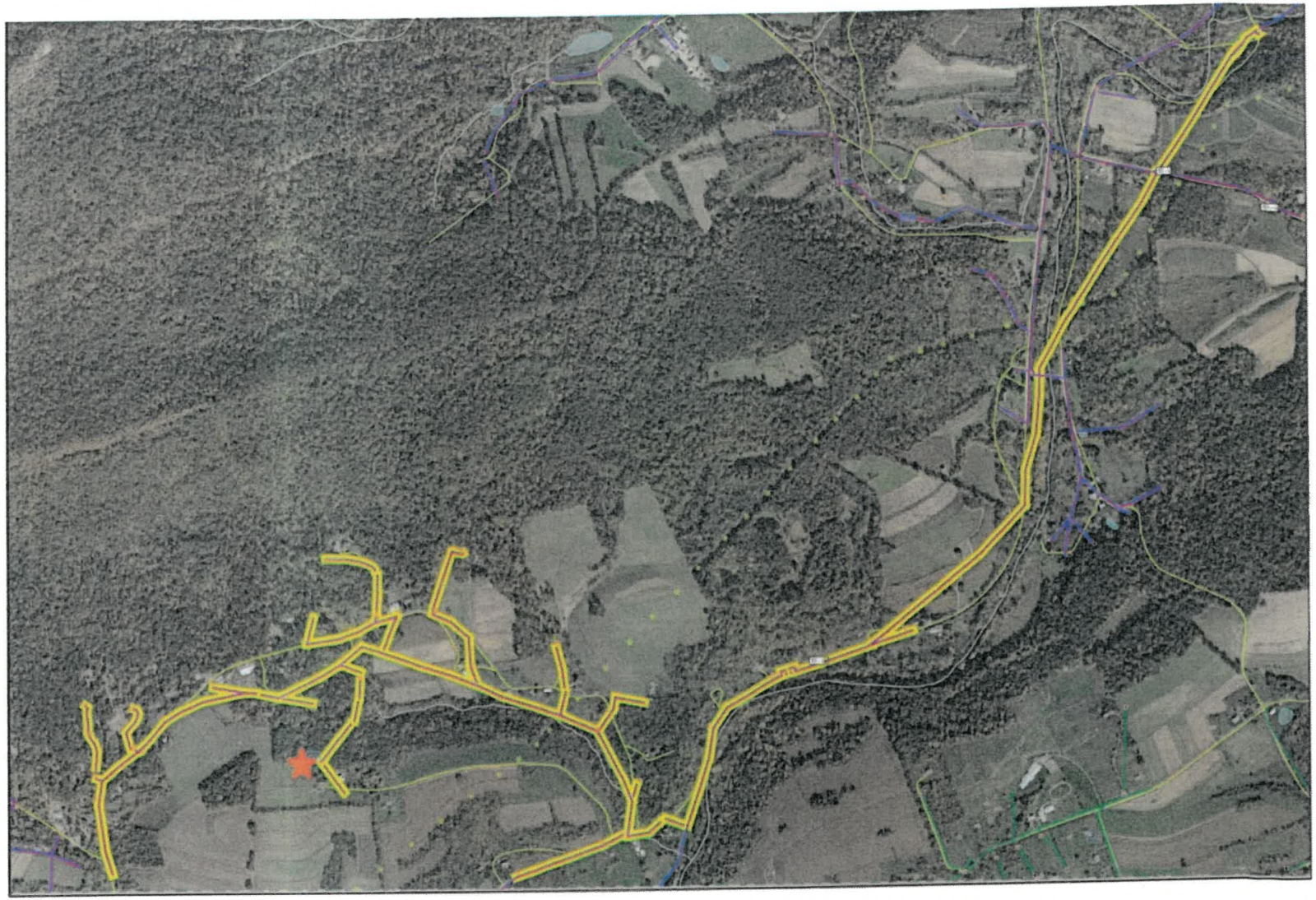
INDEX TO EXHIBITS (cont.)

INDEX TO EXHIBITS (cont.)

9/14/22 IW
RESPONDENT
Exhibit-1



3 miles of Facilities servicing customer highlighted in yellow, the water denoted in blue, and the Moyer residence denoted by the red s



9/14/22 IW
RESPONDENT
Exhibit-3

Account: 100016395673

Sustained Outage History (1/13/18 through 09/11/22):

Date	Weather	Duration (Hours)	Cause	PowerOn #
9-11-22	Raining	11.8	Tree	37655
9-6-22	Raining	4.3	Tree	27851
7-13-22	Fair	3.0	Equipment Failure	12088145
5-16-22	Rain w-Lightning	1.8	Tree	12018495
3-25-22	Fair	9.4	Tree	11967304
3-7-22	Rain w-High Winds	15.7	Tree	11946600
2-18-22	Rain w-High Winds	5.5	Tree	11924858
1-17-22	Snow/Ice High Winds	8.7	Tree	11892574
12-31-21	Fair	1.8	Tree	11878771
12-11-21	Rain w-High Winds	2.4	Tree	11861577
12-6-21	Rain w-High Winds	17.2	Tree	11855282
10-30-21	Rain w-High Winds	9.3	Tree	11816838
9-23-21	Rain w-High Winds	13.6	Tree	11776622
9-15-21	Rain w-Lightning	3.0	Patrolled Line – No Permanent Condition Identified	11768254
9-1-21	Rain	15.4	Tree	11742984
8-23-21	Rain	11.8	Tree	11726446
8-21-21			Tree	11723954
8-18-21	Rain w-High Winds	19.1	Tree	11721112
8-7-21	Fair	1.6	Tree	11703718
7-8-21	Rain	5.9	Tree	11657061
5-31-21	Fair	8.8	Tree	11584136
5-3-21	Rain	3.5	Tree	11555091
4-30-21	High Winds	6.5	Patrolled Line-No Permanent Condition Identified	11549175
2-27-21	Fair	10.3	Tree	11487769
11-15-20	Rain w-High Winds	4.2	Tree	11388905
11-11-20	Raining	1.9	Tree	11382284
8-4-20	Rain w-High Winds	31.7	Tree	11225491
8-2-20	Rain w-High Winds	4.1	Tree	11173501
7-13-20	Fair	4.1	Forced - Sub transmission Equipment Failure	11146954
6-23-20	Lightning	1.5	Lightning	11110444
6-19-20	Rain w-High Winds	17.1	Tree	11105105
4-30-20	Rain w-High Winds	3	Patrolled Line-No Permanent Condition Identified	11041136
11-12-19	Fair	4.2	Patrolled Line-No Permanent Condition	

			Identified	10857779
10-17-19	Rain w-High Winds	10.1	Tree	10819380
10-16-19	Rain w-High Winds	7.3	Line Failure	10818130
8-7-19	Fair	4.9	Tree	10748236
7-9-19	Fair	7.6	Tree	10689626
5-30-19	Rain w-Lightning	4.4	Tree	10641490
2-15-19	Fair	22.3	Tree	10520155
10-21-18	Fair	3.4	Patrolled Line-No Permanent Condition Identified	10409890
7-24-18	Rain w-High Winds	7.2	Tree	10304057
7-23-18	Fair	5.6	Tree	10300294
7-22-18	Raining	1.2	Equipment Failure	10298403
7-13-18	Fair	6.9	Tree	10286553
3-2-18	Major Event – Snow w-High Winds	91.6	Tree	10057279
1-13-18	Rain w-High Winds	9.5	Tree	9997523

**** based on my interpretation of the 737-1 Line sustained outage data.**

NOTE: 11-28-19, 5-29-20, and 8-29-20 we utilized SCADA switching to minimize outages to a momentary of 4 minutes.

Contact:
11-12-20: Called and left a message for the Moyers to let them know the cause of the outage (tree branch on line) on 11-11-20.
8-5-20: Spoke to Gretchen Moyer during the storm and gave her an ETR of that Friday 8-6-20. They were restored 8-5-20 at 21:20. This outage was in the middle of the storm and restoration process causing the extended outage period.

Reliability Improvement Updates:
Routine Tree Trimming: To Be Completed in 2022.

3-2-2022: Installed remote operated switch to allow for remote sectionalizing, and installed Tripsaver on tap to Sousley Road.

Two Post storm sweeps were completed on all the 3Ph on the 737 line and down-stream of the 50T fuse that protects the tap the Moyer residence is on.

Completed 8-13-2020

COC	District	SUB	CIRCUIT(S)	SECTION	Date Post Storm Sweep Complete	Notes
Reading	Hamburg	Lynnville	737-1	All 3ph and down stream od 50T's @ 51742-46360	8/13/2020	Charlie

Completed 11-18-2020

COC	District	Sub	Circuit	Area recommended for patrol	Completion D	inspector
Reading	Hamburg	Lynville	00737-1	All 3PH, plus area down stream of 50T's @ 51742-46360	11/18/2020	Charlie

9/14/22 IW
RESPONDENT
Exhibit-4

Order #	Type	Status	Priority	Special
9997523-2	Outage	Archived	5	

Order Details for Order 9997523-2

Time Off	Order Created	Assigned	Dispatch
01/13/2018 03:12	01/13/2018 06:55	01/13/2018 10:08	01/13/2018 10:08
En Route	**Arrived**	**Last Restoration**	**Field Complete**
01/13/2018 10:36	01/13/2018 11:03	01/13/2018 12:42	01/13/2018 12:44
Closed	**ETR**	**Calls**	**Custs Affected**
01/13/2018 15:51	01/13/2018 16:00	23	37

Crew	Crew Area
Hasenauer, T - 154020	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	570	21090

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51665-46390 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51304-46483
Failed Comp	**Facility Location**
Conductor. - Bare	Primary Transformer (51665-46390)

Action Taken	Outage Type	Weather
Repaired Trim/Removed Tree(s)	Distribution	
Related Events	**Follow Ups Sent**	
9997523-1		

Follow Up

Comments

MDT Comments - HASENAUER-01/13/18 : 50T blown at Iso. ....will patrol c what we can find... HASENAUER-01/13/18 : Tree trimmers needed to remove tree mid span...top phase down between 51304-46483 and 51338-46507..can get to location with bucket trk... ...need tree crew and crew/svm to restore...Tree work done. Need crew to fix primary that came down. [MDT Comments - HASENAUER-01/13/18 : Bothe phases down...install a pcs of #2 ACSR approx. 25`... HASENAUER-01/13/18 : Wire replaced...job completed..]

Order Instructions

En Route time changed from 13/01/2018 10:36:13 to 13/01/2018 10:36:00.

Order #	Type	Status	Priority	Special
10057279-1	Outage	Archived	4	

APPROVED

Order Details for Order 10057279-1

Time Off	Order Created	Assigned	Dispatch
03/02/2018 20:26	03/02/2018 21:43	03/06/2018 10:25	03/06/2018 10:25

En Route	Arrived	Last Restoration	Field Complete
03/06/2018 16:02	03/06/2018 16:02	03/06/2018 16:02	03/06/2018 16:03

Closed	ETR	Calls	Custs Affected
03/06/2018 16:07	03/06/2018 17:14	3	4

Crew	Crew Area
MET-ED EHV WEBSTER	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	5496	21984

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51372-46502 BC

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Primary Conductor BC 4 CU 703780295 B

Failed Comp	Facility Location
Conductor Covered	Primary Transformer (51372-46502)

Action Taken	Outage Type	Weather
Repaired	Distribution	Snow-ice with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

(1) Customer remains out- Jeff Moyer 1678 - Need line patrolled back washed out driveway.

Order Instructions

Order #	Type	Status	Priority	Special
10286553-2	Outage	Archived	5	

APPROVED

Order Details for Order 10286553-2

Time Off	Order Created	Assigned	Dispatch
07/13/2018 12:34	07/13/2018 13:58	07/13/2018 01:58	07/13/2018 14:02

En Route	Arrived	Last Restoration	Field Complete
07/13/2018 15:01	07/13/2018 15:01	07/13/2018 19:30	07/13/2018 14:07

Closed	ETR	Calls	Custs Affected
07/13/2018 22:21	07/13/2018 23:15	4	4

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights - Wire Down Pole to Pole	416	1664

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Wheeler, Eric	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51372-46502 BC

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51372-46502

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51372-46502)

Action Taken	Outage Type	Weather
Repaired Trim/Removed Tree(s)	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
10286553-1	

Follow Up

Comments

MDT Comments - BENNER-07/13/18 Tree came down and broke both wires on the 7.6 side of the pole where the iso bank Need 3 man crew to put copper wire back up BENNER-07/13/18 I also tested 4800 with a tester on a 8 foot stick which is still hot and tested the iso with a tester on a 8 foot stick to make sure it is ok and it is i also removed the HLC on 7.6 side with a 8 foot shotgun before i tested all fuses are now open which i did with a 8 foot stick) ... -2 for crew and tree work. Bob Geigle tree crew en route 610-751-9122 = 1402..Tree work complete 1551 [MDT Comments - NAUMAN-07/13/18 put up primary energize]

Order Instructions

Order #	Type	Status	Priority	Special
10298403-2	Outage	Archived	5	

APPROVED

Order Details for Order 10298403-2

Time Off	Order Created	Assigned	Dispatch
07/22/2018 08:27	07/22/2018 11:33	07/22/2018 17:38	07/23/2018 08:39

En Route	Arrived	Last Restoration	Field Complete
07/23/2018 08:39	07/23/2018 12:13	07/23/2018 15:25	07/23/2018 16:34

Closed	ETR	Calls	Custs Affected
07/23/2018 16:34	07/23/2018 17:00	38	2

Crew	Crew Area
Phil Henry - (610) 781-4564	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	1858	3716

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mathias, Michael R	00737-1	Reading Oper Area

Device Info

ID

Temporary Open (Primary) (15445)

Type	Voltage
Temporary Open (Primary)	Unknown KV

Event Details

Cause	Cause Pole
Equipment Failure	

Failed Comp	Facility Location
Conductor. - Bare	

Action Taken	Outage Type	Weather
	Distribution	

Related Events	Follow Ups Sent
10298403-1	

Follow Up

Comments

MDT Comments - ROTHERMEL-07/22/18 pole top burned off at neutral position O/S to de-energize , opened taps #52101-46827 & switch 73726 to Isolate line section closed recloser 73732 & T1737 pole #52103-46765 needs to be replaced or possible poletop. phases hung up in guy wires neutral is down.. access may be challenging (track machine) PA ONE CALL # 20182030335. SAPFU.

Order Instructions

Order #	Type	Status	Priority	Special
10300294-1	Outage	Archived	4	

APPROVED

Order Details for Order 10300294-1

Time Off	Order Created	Assigned	Dispatch
07/22/2018 22:52	07/22/2018 22:53	07/22/2018 23:01	07/22/2018 23:01
En Route	**Arrived**	**Last Restoration**	**Field Complete**
07/23/2018 00:27	07/23/2018 01:03	07/23/2018 04:30	07/23/2018 00:27
Closed	**ETR**	**Calls**	**Custs Affected**
07/23/2018 04:52	07/23/2018 16:00	22	33

Crew	Crew Area
George, Cornelius A - 154101	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	337	9849

Organization

Current Org	Substation	Disp Center
Dispatch	S HAMB SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Mathias, Michael R	00740-1	Reading Oper Area

Device Info

ID

Many: Temporary Open (Primary) (15458), Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51669-46343
Failed Comp	**Facility Location**
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Isolated Trim/Removed Tree(s)	Distribution	Raining

Related Events	Follow Ups Sent
10300294-2	LineSAP Followup Sent

Follow Up

[MDT Comments - GEORGE-07/23/18 pole 51304-46483 dirt lane off sousley rd. busted off 3/4 of way up. need 2 cutouts , l brackets , 3 way pole 2 guy wires put cone at end of drive way. dishes cut in at pole 51352-46517 banner on pole.]..-2 for crew and tree crew. Auto generate of SAP followup due to capital item

Comments

[MDT Comments - GEORGE-07/23/18 pole 51304-46483 dirt lane off sousley rd. busted off 3/4 of way up. need 2 cutouts , l brackets , 3 way pole 2 guy wires put cone at end of drive way. dishes cut in at pole 51352-46517 banner on pole.]. Opened ISO @ 51665-46390, closed fuse @ 0205. Cut in dishes @ 51352-46517, closed ISO @ 0430. See 10301173-2 for final restoration. // MRM

Order Instructions

Order #	Type	Status	Priority	Special
10304057-1	Outage	Archived	5	

APPROVED

Order Details for Order 10304057-1

Time Off	Order Created	Assigned	Dispatch
07/24/2018 18:08	07/24/2018 18:09	07/24/2018 20:42	07/24/2018 20:42
En Route	**Arrived**	**Last Restoration**	**Field Complete**
07/24/2018 22:31	07/24/2018 23:48	07/25/2018 01:20	07/25/2018 00:38
Closed	**ETR**	**Calls**	**Custs Affected**
07/25/2018 02:04	07/25/2018 02:00	10	37

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	432	15984

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Thompson II, Joseph	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51665-46390 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51280-46490
Failed Comp	**Facility Location**
Conductor. - Bare	Primary Transformer (51665-46390)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - NAUMAN-07/25/18 remove tree energize]

Order Instructions

En Route time changed from 24/07/2018 22:31:11 to 24/07/2018 22:31:00.

Order #	Type	Status	Priority	Special
10409890-1	Outage	Archived	5	

APPROVED

Order Details for Order 10409890-1

Time Off	Order Created	Assigned	Dispatch
10/21/2018 13:39	10/21/2018 13:40	10/21/2018 13:51	10/21/2018 14:11
En Route	**Arrived**	**Last Restoration**	**Field Complete**
10/21/2018 14:32	10/21/2018 15:40	10/21/2018 17:01	10/21/2018 17:11
Closed	**ETR**	**Calls**	**Custs Affected**
10/21/2018 18:13	10/21/2018 19:00	52	104

Crew	Crew Area
Benner, Kyle R - 154033	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	202	21008

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Wheeler, Eric	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Unknown	Unknown
Failed Comp	**Facility Location**
Unknown	252328C47179

Action Taken	Outage Type	Weather
Restored	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - BENNER-10/21/18 Patrolled line didnt find any problems threw in reclosure and it held everyones back in power]

Order Instructions

Order #	Type	Status	Priority	Special
10520155-3	Outage	Archived	5	

APPROVED

Order Details for Order 10520155-3

Time Off	Order Created	Assigned	Dispatch
02/15/2019 21:30	02/16/2019 02:12	02/16/2019 17:00	02/16/2019 17:00
En Route	**Arrived**	**Last Restoration**	**Field Complete**
02/16/2019 17:30	02/16/2019 17:30	02/16/2019 19:48	02/16/2019 20:40
Closed	**ETR**	**Calls**	**Custs Affected**
02/16/2019 20:41	02/16/2019 22:00	27	48
Crew		**Crew Area**	
Nauman, Lindsey A - 154040		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
No Lights		1338	64224

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Mathias, Michael R	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51665-46390
Failed Comp	**Facility Location**
Conductor. - Bare	1697 PA-143
Action Taken	**Outage Type** / **Weather**
Replaced	Distribution
Related Events	**Follow Ups Sent**
10520155-1	SAP Followup Sent

Follow Up

SVC man reported large pine tree took pole and ISO down 51665-46390..area on an embankment with water near pole and pond 15ft away very soft ground..2 manual tree crews needed..need track machine.. MDT Comments - SHAFFER-02/16/19 ISO pole is broken and on the ground. Need tree crew to create a path to pole and remove tree, Cannot get a line truck to pole, Will need a track digger. 50T line fuse is open and pole is bannered = 51724-46371 ..-2 for FORESTRY..-3 for crew.. PA1 2019 047 0007..tree work complete..crew has moved ISO to pole 51643-46407..energized BPs at 1948.. Auto generate of SAP followup due to capital item

Comments

SVC man reported large pine tree took pole and ISO down 51665-46390..area on an embankment with water near pole and pond 15ft away very soft ground..2 manual tree crews needed..need track machine.. MDT Comments - SHAFFER-02/16/19 ISO pole is broken and on the ground. Need tree crew to create a path to pole and remove tree, Cannot get a line truck to pole, Will need a track digger. 50T line fuse is open and pole is bannered = 51724-46371 ..-2 for FORESTRY..-3 for crew.. PA1 2019 047 0007..tree work complete..crew has moved ISO to pole 51643-46407..energized BPs at 1948..

Order Instructions

Order #	Type	Status	Priority	Special
10641490-1	Outage	Archived	4	

APPROVED

Order Details for Order 10641490-1

Time Off	Order Created	Assigned	Dispatch
05/30/2019 15:45	05/30/2019 15:47	05/30/2019 15:56	05/30/2019 15:58

En Route	Arrived	Last Restoration	Field Complete
05/30/2019 16:57	05/30/2019 17:11	05/30/2019 18:08	05/30/2019 18:38

Closed	ETR	Calls	Custs Affected
05/30/2019 18:38	05/30/2019 21:00	60	57

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	144	8151

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Many: Recloser Installation 252328C47179 ABC 630, Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	252328C47179

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed Repaired	Distribution	Rain with lightning

Related Events	Follow Ups Sent
10641490-2	LineSAP Followup Sent

Follow Up

MDT Comments - None...-2 for crew..[MDT Comments - SHAFFER-05/30/19 Lifted tap at pole 51742-46360 and closed 73732,, Crew is onsite to remove tree and make repairs.]

Comments

MDT Comments - None...-2 for crew..[MDT Comments - SHAFFER-05/30/19 Lifted tap at pole 51742-46360 and closed 73732,, Crew is onsite to remove tree and make repairs.]

Order Instructions

Order #	Type	Status	Priority	Special
10641490-2	Outage	Archived	2	

APPROVED

Order Details for Order 10641490-2

Time Off	Order Created	Assigned	Dispatch
05/30/2019 15:45	05/30/2019 18:37		

En Route	Arrived	Last Restoration	Field Complete
		05/30/2019 20:11	05/31/2019 00:39

Closed	ETR	Calls	Custs Affected
05/31/2019 00:40	05/30/2019 21:00	60	48

Crew	Crew Area
	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	267	12768

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Many: Recloser Installation 252328C47179 ABC 630, Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	Unknown

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
	Distribution	Rain with lightning

Related Events	Follow Ups Sent
10641490-1	

Follow Up

Comments

MDT Comments - None. MDT Comments - SHAFFER-05/30/19 Lifted tap at pole 51742-46360 and closed 73732,, Crew is onsite to remove tree and make repairs. ..-2 for crew.. 1955 restore in rna put primary back up

Order Instructions

Order #	Type	Status	Priority	Special
10689626-1	Outage	Archived	5	

Order Details for Order 10689626-1

Time Off	Order Created	Assigned	Dispatch
07/09/2019 20:45	07/09/2019 20:46	07/09/2019 20:58	07/09/2019 21:01

En Route	Arrived	Last Restoration	Field Complete
07/09/2019 21:12	07/09/2019 21:59		07/09/2019 22:53

Closed	ETR	Calls	Custs Affected
07/09/2019 22:53	07/10/2019 05:00	25	0

Crew	Crew Area
Peters, Brian J - 154132	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	131	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51742-46360

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Additional Work Needed	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
10689626-2	

Follow Up

Comments

[MDT Comments - PETERS-07/09/19 tree PETERS-07/09/19 Tree down on road, wire under tree, manual tree crew needed. Tree is between poles(51724-46371) and (51742-46360) Cut out on this pole.. Road is closed. pole 51724-46371 looks like it should come back when wire is put back up, might want some polly set just in case. 4 man crew. 2ACSR primary bring 50ft wire looks a little messed up and pickels, neutral also down looks like #2 bring 50ft as well span is 243ft, 737 line 7.62 out of Lynnville PETERS-07/09/19 3 phase on pole 51742-46360 is still hot!!!! PETERS-07/09/19 cone placed at open point51742-46360 for tree trimmers]..-2 for crew..

Order Instructions

Order #	Type	Status	Priority	Special
10689626-2	Outage	Archived	2	

APPROVED

Order Details for Order 10689626-2

Time Off	Order Created	Assigned	Dispatch
07/09/2019 20:45	07/09/2019 22:53	07/09/2019 23:10	07/09/2019 23:43

En Route	Arrived	Last Restoration	Field Complete
07/09/2019 23:46	07/10/2019 02:30	07/10/2019 04:19	07/10/2019 04:46

Closed	ETR	Calls	Custs Affected
07/10/2019 04:47	07/10/2019 05:00	25	48

Crew	Crew Area
Roehm, Steven L - 154104	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	454	21792

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51724-46371

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Spliced Trim/Removed Tree(s)	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
10689626-1	

Follow Up

Comments

MDT Comments - PETERS-07/09/19 tree PETERS-07/09/19 Tree down on road, wire under tree, manual tree crew needed. Tree is between poles(51724-46371) and (51742-46360) Cut out on this pole.. Road is closed. pole 51724-46371 looks like it should come back when wire is put back up, might want some polly set just in case. 4 man crew. 2ACSR primary bring 50ft wire looks a little messed up and pickels, neutral also down looks like #2 bring 50ft as well span is 243ft, 737 line 7.62 out of Lynnville PETERS-07/09/19 3 phase on pole 51742-46360 is still hot!!!! PETERS-07/09/19 cone placed at open point51742-46360 for tree trimmers ..-2 for crew..Tree crew LTS (Vincente) 484 949 4725..Crew took RAD at 0230.. [MDT Comments - ROEHM-07/10/19 spliced wires together]

Order Instructions

Order #	Type	Status	Priority	Special
10748236-1	Outage	Archived	4	

Order Details for Order 10748236-1

Time Off	Order Created	Assigned	Dispatch
08/07/2019 14:49	08/07/2019 14:50	08/07/2019 15:22	08/07/2019 16:00

En Route	Arrived	Last Restoration	Field Complete
08/07/2019 16:18	08/07/2019 17:55		08/07/2019 18:24

Closed	ETR	Calls	Custs Affected
08/07/2019 18:24	08/08/2019 01:00	26	0

Crew	Crew Area
Rothermel, Jeffrey - 154540	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	219	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees On ROW	51671-46379

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Additional Work Needed	No Outage	Rain with lightning

Related Events	Follow Ups Sent
10748236-2	

Follow Up

Comments

[MDT Comments - ROTHERMEL-08/07/19 large tree tore primary down #51669-46343 to #51671-46379].. -2 for crew and -3 for tree crew.

Order Instructions

Order #	Type	Status	Priority	Special
10748236-2	Outage	Archived	4	

APPROVED

Order Details for Order 10748236-2

Time Off	Order Created	Assigned	Dispatch
08/07/2019 14:49	08/07/2019 18:20	08/07/2019 19:08	08/07/2019 19:08

En Route	Arrived	Last Restoration	Field Complete
08/07/2019 19:42	08/07/2019 19:42	08/07/2019 19:44	08/07/2019 20:02

Closed	ETR	Calls	Custs Affected
08/07/2019 20:09	08/08/2019 01:00	26	48

Crew	Crew Area
Rothermel, Jeffrey - 154540	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights - Wire Down Pole to Pole	295	14160

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51671-46379

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Repaired Replaced	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
10748236-1	

Follow Up

Comments

MDT Comments - ROTHERMEL-08/07/19 large tree tore primary down #51669-46343 to #51671-46379 .. -2 for crew and -3 for tree crew. [MDT Comments - ROTHERMEL-08/07/19 repaired primary]

Order Instructions

Arrived time changed from 07/08/2019 19:42:12 to 07/08/2019 19:42:00.

Order #	Type	Status	Priority	Special
10748236-3	Trouble	Archived	2	

Order Details for Order 10748236-3

Time Off	Order Created	Assigned	Dispatch
08/07/2019 18:24	08/07/2019 18:24	08/07/2019 18:24	08/07/2019 18:28

En Route	Arrived	Last Restoration	Field Complete
08/07/2019 18:28	08/07/2019 19:59		08/07/2019 20:10

Closed	ETR	Calls	Custs Affected
08/07/2019 20:10		0	0

Crew	Crew Area
Bob NTS 610-751-9122	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees On ROW	Pole 51671-46379

Failed Comp	Facility Location
	1697 PA-143

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

MDT Comments - ROTHERMEL-08/07/19 large tree tore primary down #51669-46343 to #51671-46379 .. -2 for crew and -3 for tree crew...treee work complete.

Order Instructions

Order #	Type	Status	Priority	Special
10818130-1	Outage	Archived	3	

APPROVED

Order Details for Order 10818130-1

Time Off	Order Created	Assigned	Dispatch
10/16/2019 20:45	10/16/2019 22:22	10/16/2019 23:44	10/16/2019 23:44

En Route	Arrived	Last Restoration	Field Complete
10/17/2019 00:15	10/17/2019 01:10	10/17/2019 04:01	10/17/2019 05:20

Closed	ETR	Calls	Custs Affected
10/17/2019 05:26	10/17/2019 06:00	16	48

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	436	20928

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Equipment Failure	Pole 51698-46350

Failed Comp	Facility Location
Conductor. - Bare	1697 PA-143

Action Taken	Outage Type	Weather
Repaired Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

radial section..upstream 50T on pole 51724-46371..911 - Situation: Wire down along road Location: Pole3 51698-46350 [MDT Comments - NAUMAN-10/17/19 repair structure put up primary

Order Instructions

Order #	Type	Status	Priority	Special
10819380-1	Outage	Archived	3	

Order Details for Order 10819380-1

Time Off	Order Created	Assigned	Dispatch
10/17/2019 08:21	10/17/2019 08:24	10/17/2019 08:34	10/17/2019 08:34

En Route	Arrived	Last Restoration	Field Complete
10/17/2019 10:22	10/17/2019 11:10		10/17/2019 11:26

Closed	ETR	Calls	Custs Affected
10/17/2019 11:26	10/17/2019 21:01	61	0

Crew	Crew Area
Engle, Wesley B - 154069	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	188	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Sensenig, Scott	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52097-46689

Failed Comp	Facility Location
Unknown	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed Spliced	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
10819380-2	LineSAP Followup Sent

Follow Up

3 phase wire down = p 52097-46689 [MDT Comments - ENGLE-10/17/19 all wires down from pole 52097-46689 to pole 52058-46657 large tree down on side of hill road is closed from fire police ENGLE-10/17/19 .]

Comments

3 phase wire down = p 52097-46689 [MDT Comments - ENGLE-10/17/19 all wires down from pole 52097-46689 to pole 52058-46657 large tree down on side of hill road is closed from fire police ENGLE-10/17/19 .]

Order Instructions

Order #	Type	Status	Priority	Special
10819380-2	Outage	Archived	4	

APPROVED

Order Details for Order 10819380-2

Time Off	Order Created	Assigned	Dispatch
10/17/2019 08:21	10/17/2019 11:23	10/17/2019 11:23	10/17/2019 11:32

En Route	Arrived	Last Restoration	Field Complete
10/17/2019 11:32	10/17/2019 12:34	10/17/2019 18:28	10/17/2019 19:01

Closed	ETR	Calls	Custs Affected
10/17/2019 19:01	10/17/2019 21:01	61	104

Crew	Crew Area
rick williams 610-331-2343	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	607	63128

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
	Distribution	Rain with high winds

Related Events	Follow Ups Sent
10819380-1	

Follow Up

Comments

3 phase wire down = p 52097-46689 MDT Comments - ENGLE-10/17/19 all wires down from pole 52097-46689 to pole 52058-46657 large tree down on side of hill road is closed from fire police ENGLE-10/17/19 . repairs made by robert haire restore 1828

Order Instructions

Order #	Type	Status	Priority	Special
10857779-1	Outage	Archived	5	

APPROVED

Order Details for Order 10857779-1

Time Off	Order Created	Assigned	Dispatch
11/12/2019 06:39	11/12/2019 06:48	11/12/2019 07:30	11/12/2019 07:56

En Route	Arrived	Last Restoration	Field Complete
11/12/2019 09:32	11/12/2019 10:01	11/12/2019 10:50	11/12/2019 11:00

Closed	ETR	Calls	Custs Affected
11/12/2019 11:27	11/12/2019 12:00	22	48

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	251	12048

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51724-46371 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Unknown	Unknown

Failed Comp	Facility Location
Fuse Link	1697 PA-143

Action Taken	Outage Type	Weather
Restored Replaced	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - NAUMAN-11/12/19 patrol and close fuse]

Order Instructions

En Route time changed from 12/11/2019 09:32:45 to 12/11/2019 09:32:00.

Order #	Type	Status	Priority	Special
11041136-1	Outage	Archived	5	Critical Customers

APPROVED

Order Details for Order 11041136-1

Time Off	Order Created	Assigned	Dispatch
04/30/2020 13:16	04/30/2020 13:19	04/30/2020 13:27	04/30/2020 13:40
En Route	**Arrived**	**Last Restoration**	**Field Complete**
04/30/2020 13:40		04/30/2020 16:14	05/01/2020 06:05
Closed	**ETR**	**Calls**	**Custs Affected**
05/01/2020 06:05	05/01/2020 14:00	204	1073

Crew	Crew Area
Galanos, Ted-JWD 484-824-4389	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	178	86918

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Antolic, Jeffrey S	00737-1	Reading Oper Area

Device Info

ID

Switch Installation 73769 ABC

Type	Voltage
Primary Fault	7.62/13.2 KV

Event Details

Cause	Cause Pole
Unknown	Unknown
Failed Comp	**Facility Location**
Unknown	QUAKER CITY RD, 13, KEMPTON, PA

Action Taken	Outage Type	Weather
Restored	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

ja-rvw. closed in moab all bp restored found no cause and no damage

Order Instructions

Order #	Type	Status	Priority	Special
11105105-1	Outage	Archived	4	

Order Details for Order 11105105-1

Time Off	Order Created	Assigned	Dispatch
06/19/2020 18:58	06/19/2020 18:59	06/19/2020 19:05	06/19/2020 19:05
En Route	**Arrived**	**Last Restoration**	**Field Complete**
06/19/2020 19:33	06/19/2020 20:44		06/19/2020 22:01
Closed	**ETR**	**Calls**	**Custs Affected**
06/19/2020 22:02	06/20/2020 15:00	32	0

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	185	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51352-46517
Failed Comp	**Facility Location**
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Additional Work Needed Replaced	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11105105-2	LineSAP Followup Sent

Follow Up

MDT Comments - SHAFFER-06/19/20 Wire down = 51352-46517, Crew will need to replace structure with 10KV trans., ISO fuses are open at 51643-46407 ..-2 for crew..crew got to site and said they need a bucket tree crew and pole 51352-46517 needs replaced..Dennis LTS 585 362 7218..PA 1 # 2020 172 0002..tree work complete.. [MDT Comments - KENNEDY-06/20/20 Replaced 10Kva With 15Kva transformer, replaced two cutouts, replaced ridge pin and insulator, repaired two spans of downed primary. all material picked from Hamburg shop. Customers restored.] SAPFU.

Comments

[MDT Comments - SHAFFER-06/19/20 Wire down = 51352-46517, Crew will need to replace 10KV trans., ISO fuses are open = 51643-46407]..-2 for crew..

Order Instructions

Order #	Type	Status	Priority	Special
11105105-2	Outage	Archived	4	

APPROVED

Order Details for Order 11105105-2

Time Off	Order Created	Assigned	Dispatch
06/19/2020 18:58	06/19/2020 22:01	06/20/2020 08:02	06/20/2020 08:03

En Route	Arrived	Last Restoration	Field Complete
06/20/2020 09:51	06/20/2020 11:48	06/20/2020 12:04	06/20/2020 16:09

Closed	ETR	Calls	Custs Affected
06/20/2020 16:09	06/20/2020 15:00	32	39

Crew	Crew Area
Kennedy, Robert L - 154104	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Wire Down Pole to Pole - No Lights	1026	40014

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Holland, Joshua	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51352-46517

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Repaired	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11105105-1	SAP Followup Sent

Follow Up

MDT Comments - SHAFFER-06/19/20 Wire down = 51352-46517, Crew will need to replace structure with 10KV trans., ISO fuses are open at 51643-46407 ..-2 for crew..crew got to site and said they need a bucket tree crew and pole 51352-46517 needs replaced..Dennis LTS 585 362 7218..PA 1 # 2020 172 0002..tree work complete.. [MDT Comments - KENNEDY-06/20/20 Replaced 10Kva With 15Kva transformer, replaced two cutouts, replaced ridge pin and insulator, repaired two spans of downed primary. all material picked from Hamburg shop. Customers restored.] SAPFU. Auto generate of SAP followup due to capital item

Comments

MDT Comments - SHAFFER-06/19/20 Wire down = 51352-46517, Crew will need to replace structure with 10KV trans., ISO fuses are open at 51643-46407 ..-2 for crew..crew got to site and said they need a bucket tree crew and pole 51352-46517 needs replaced..Dennis LTS 585 362 7218..PA 1 # 2020 172 0002..tree work complete.. [MDT Comments - KENNEDY-06/20/20 Replaced 10Kva With 15Kva transformer, replaced two cutouts, replaced ridge pin and insulator, repaired two spans of downed primary. all material picked from Hamburg shop. Customers restored.] SAPFU.

Order Instructions

Order #	Type	Status	Priority	Special
11110444-1	Outage	Archived	5	

APPROVED

Order Details for Order 11110444-1

Time Off	Order Created	Assigned	Dispatch
06/23/2020 23:36	06/23/2020 23:37	06/23/2020 23:42	06/23/2020 23:42

En Route	Arrived	Last Restoration	Field Complete
06/23/2020 23:49	06/24/2020 00:08	06/24/2020 01:08	06/24/2020 01:17

Closed	ETR	Calls	Custs Affected
06/24/2020 01:57	06/24/2020 02:37	15	48

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	92	4416

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Lightning	51742-46360

Failed Comp	Facility Location
Fuse Link	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Replaced	Distribution	Rain with lightning

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - SHAFFER-06/24/20 Replaced 50T line fuse = 51742-46360 due to lightning.]

Order Instructions

Arrived time changed from 24/06/2020 00:08:15 to 24/06/2020 00:08:00.

Order #	Type	Status	Priority	Special
11146954-1	Outage	Archived	5	

APPROVED

Order Details for Order 11146954-1

Time Off	Order Created	Assigned	Dispatch
07/13/2020 13:15	07/13/2020 13:15	07/13/2020 13:15	07/13/2020 13:23

En Route	Arrived	Last Restoration	Field Complete
07/13/2020 13:23	07/13/2020 13:23	07/13/2020 17:22	07/13/2020 19:24

Closed	ETR	Calls	Custs Affected
07/13/2020 19:24	07/13/2020 17:45	28	52

Crew	Crew Area
FORCED OUTAGE	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	247	12844

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Circuit LYNNVILLE SUB-00737-1 (703780295)

Type	Voltage
Circuit Lockout	7.62/13.2 KV

Event Details

Cause	Cause Pole
Equipment Failure	Fuse Installation 55123-48516 65T

Failed Comp	Facility Location
Crossarm	LYNNVILLE SUB

Action Taken	Outage Type	Weather
Replaced	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

Received close from scada 17:22 07/13/2020, repairing 13,2/69 kv crossarm yatsko me-20-18232-cc.. Auto generate of SAP followup due to capital item

Comments

Received close from scada 17:22 07/13/2020, repairing 13,2/69 kv crossarm yatsko me-20-18232-cc..

Order Instructions

Order #	Type	Status	Priority	Special
11173501-1	Outage	Archived	5	

APPROVED

Order Details for Order 11173501-1

Time Off	Order Created	Assigned	Dispatch
08/02/2020 12:19	08/02/2020 12:20	08/02/2020 12:28	08/02/2020 12:28

En Route	Arrived	Last Restoration	Field Complete
08/02/2020 15:10	08/02/2020 16:02	08/02/2020 16:24	08/02/2020 16:28

Closed	ETR	Calls	Custs Affected
08/02/2020 16:42	08/02/2020 14:50	22	48

Crew	Crew Area
Cerra, Kyle P - 154020	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	245	11760

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51671-46379

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s) Replaced	Distribution	Rain with lightning

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

[MDT Comments - CERRA-08/02/20 tree limb bounced across phase and cleared . replaced fuse. customers restored] Auto generate of SAP followup due to capital item

Comments

[MDT Comments - CERRA-08/02/20 tree limb bounced across phase and cleared . replaced fuse. customers restored]

Order Instructions

Order #	Type	Status	Priority	Special
11225491-1	Outage	Archived	4	

APPROVED

Order Details for Order 11225491-1

Time Off	Order Created	Assigned	Dispatch
08/04/2020 13:39	08/05/2020 08:18	08/05/2020 17:18	08/05/2020 17:18

En Route	Arrived	Last Restoration	Field Complete
08/05/2020 17:38	08/05/2020 17:38	08/05/2020 21:04	08/05/2020 21:22

Closed	ETR	Calls	Custs Affected
08/07/2020 05:49	08/05/2020 22:00	25	39

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Outage Order	1885	73515

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Antolic, Jeffrey S	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51352-46517

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Repaired	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

Need a tree crew. 30T fuse open at step 51643-46407. Tree on #2 ACSR wires at 51372-46534, wires down at 51304-46483 and 51338-46507, limb on wires at poles 51114-46342 and 51341-46539, wires need to be re-sagged at 51260-46495. Broken guy wire at 51377-46554.... also will need a crew at 51335-46410 to lift the primary up only 8 ft off ground. [MDT Comments - NAUMAN-08/05/20 put up wire]

Order Instructions

Arrived time changed from 05/08/2020 17:38:52 to 05/08/2020 17:38:00.

Order #	Type	Status	Priority	Special
11225491-2	Trouble	Archived	2	

Order Details for Order 11225491-2

Time Off	Order Created	Assigned	Dispatch
08/05/2020 14:49	08/05/2020 14:49	08/05/2020 15:50	08/05/2020 15:50

En Route	Arrived	Last Restoration	Field Complete
08/05/2020 15:50	08/05/2020 18:18		08/05/2020 20:51

Closed	ETR	Calls	Custs Affected
08/05/2020 20:51		0	0

Crew	Crew Area
ASPLUNDHtree-3019882234(jimmieGF	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Forestry	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Combs, Christopher S	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

Treework Completed 9pm CC..Need a tree crew. 30T fuse open at step 51643-46407. Tree on #2 ACSR wires at 51372-46534, wires down at 51304-46483 and 51338-46507, limb on wires at poles 51114-46342 and 51341-46539.

Order Instructions

Order #	Type	Status	Priority	Special
11382284-1	Outage	Archived	5	

APPROVED

Order Details for Order 11382284-1

Time Off	Order Created	Assigned	Dispatch
11/11/2020 18:51	11/11/2020 18:53	11/11/2020 18:54	11/11/2020 18:54

En Route	Arrived	Last Restoration	Field Complete
11/11/2020 19:47	11/11/2020 20:04	11/11/2020 20:39	11/11/2020 20:47

Closed	ETR	Calls	Custs Affected
11/11/2020 20:49	11/11/2020 21:52	27	48

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	108	5184

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Logue, Jerrod	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51671-46379

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Replaced Trim/Removed Tree(s)	Distribution	Raining

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - SHAFFER-11/11/20 A tree branch broke off and hit primary wire and cleared itself, Closed 50T line fuse = 51742-46360]

Order Instructions

En Route time changed from 11/11/2020 19:47:23 to 11/11/2020 19:47:00.

Order #	Type	Status	Priority	Special
11388905-1	Outage	Archived	4	

APPROVED

Order Details for Order 11388905-1

Time Off	Order Created	Assigned	Dispatch
11/15/2020 19:04	11/15/2020 19:18	11/15/2020 19:23	11/15/2020 19:56

En Route	Arrived	Last Restoration	Field Complete
11/15/2020 19:59	11/15/2020 20:10	11/15/2020 23:18	11/15/2020 23:29

Closed	ETR	Calls	Custs Affected
11/15/2020 23:36	11/16/2020 01:00	59	105

Crew	Crew Area
Daniel, Brent N - 154069	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	254	26670

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
HOERNER, BENJAMIN	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52103-46765

Failed Comp	Facility Location
Crossarm	252328C47179

Action Taken	Outage Type	Weather
Replaced	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - DANIEL-11/15/20 replaced broken crossarm]

Order Instructions

Order #	Type	Status	Priority	Special
11487769-2	Outage	Archived	5	

APPROVED

Order Details for Order 11487769-2

Time Off	Order Created	Assigned	Dispatch
02/27/2021 05:37	02/27/2021 07:29	02/27/2021 10:45	02/27/2021 11:51
En Route	**Arrived**	**Last Restoration**	**Field Complete**
02/27/2021 11:51	02/27/2021 11:51	02/27/2021 15:55	02/27/2021 16:50
Closed	**ETR**	**Calls**	**Custs Affected**
02/27/2021 16:50	02/27/2021 16:30	28	48

Crew	Crew Area
Rick W. Miller Bro 610 331 2343	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	618	29664

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Zerbe, Phillip	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51665-46390
Failed Comp	**Facility Location**
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11487769-1	

Follow Up

Comments

MDT Comments - SHAFFER-02/27/21 A tree brought 2 spans of wire down between poles 51671-46379 and 51643-46407, Crew will need to climb pole 51665-46390 to make repairs. Crew on Rad CC 12:25-PPZ, All repairs made

Order Instructions

Order #	Type	Status	Priority	Special
11549175-1	Outage	Archived	5	

APPROVED

Order Details for Order 11549175-1

Time Off	Order Created	Assigned	Dispatch
04/30/2021 16:02	04/30/2021 16:03	04/30/2021 17:53	04/30/2021 17:53

En Route	Arrived	Last Restoration	Field Complete
04/30/2021 20:42	04/30/2021 20:42	04/30/2021 22:29	04/30/2021 22:31

Closed	ETR	Calls	Custs Affected
05/01/2021 05:29	05/01/2021 20:00	31	48

Crew	Crew Area
Daniel, Brent N - 154069	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	387	18576

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Somerville, Delbert	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Unknown	51742-46360

Failed Comp	Facility Location
Unknown	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Restored	Distribution	High Winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - DANIEL-04/30/21 patroled refused]

Order Instructions

Arrived time changed from 30/04/2021 20:42:06 to 30/04/2021 20:42:00.

Order #	Type	Status	Priority	Special
11555091-1	Outage	Archived	5	

APPROVED

Order Details for Order 11555091-1

Time Off	Order Created	Assigned	Dispatch
05/03/2021 20:47	05/03/2021 20:49	05/03/2021 20:54	05/03/2021 20:54

En Route	Arrived	Last Restoration	Field Complete
05/03/2021 20:56	05/03/2021 21:49	05/04/2021 00:16	05/04/2021 00:50

Closed	ETR	Calls	Custs Affected
05/04/2021 02:32	05/04/2021 02:00	55	108

Crew	Crew Area
Little, JohnM - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	209	22572

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
CARROLL, JASON	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52100-46726

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Raining

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

page sent at 2059.. [MDT Comments - LITTLE-05/04/21 branch on phases btween 52097-46689 and said pole could use follow up with line to resag]

Comments

[MDT Comments - LITTLE-05/04/21 branch on phases btween 52097-46689 and said pole could use follow up with line to resag]

Order Instructions

Order #	Type	Status	Priority	Special
11584136-1	Outage	Archived	5	Acknowledged From MDT

APPROVED

Order Details for Order 11584136-1

Time Off	Order Created	Assigned	Dispatch
05/31/2021 04:00	05/31/2021 04:01	05/31/2021 06:23	05/31/2021 06:23

En Route	Arrived	Last Restoration	Field Complete
05/31/2021 07:47	05/31/2021 07:47	05/31/2021 12:45	05/31/2021 13:22

Closed	ETR	Calls	Custs Affected
05/31/2021 13:22	05/31/2021 14:01	45	108

Crew	Crew Area
Miller, David D - 154137	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	525	26565

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Sensenig, Scott	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	Unknown KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 52097-46689

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent

Follow Up

Comments

tree work complete///Page sent at 0413..///crew found tree on primary 52097-46689. crew open 73726 and dcc close t1-737 0758. crew also open taps 52108-46831 for visual open point from r/c. taps closed 73726 close. line returned to normal

Order Instructions

Order #	Type	Status	Priority	Special
11584136-2	Trouble	Archived	4	

Order Details for Order 11584136-2

Time Off	Order Created	Assigned	Dispatch
05/31/2021 08:07	05/31/2021 08:07	05/31/2021 09:08	05/31/2021 09:08

En Route	Arrived	Last Restoration	Field Complete
05/31/2021 09:08	05/31/2021 11:28		05/31/2021 11:28

Closed	ETR	Calls	Custs Affected
05/31/2021 11:28		0	0

Crew	Crew Area
LTS-Dennis (484) 824-0501	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Sensenig, Scott	00737-1	Reading Oper Area

Device Info

ID

Switch Installation 73726V ABC

Type	Voltage
Primary Fault	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
	Unknown

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

tree work complete///Page sent at 0413..///crew found tree on primary 52097-46689. crew open 73726 and dcc close t1-737 0758. crew also open taps 52108-46831 for visual open point from r/c

Order Instructions

Order #	Type	Status	Priority	Special
11657061-1	Outage	Archived	5	

APPROVED

Order Details for Order 11657061-1

Time Off	Order Created	Assigned	Dispatch
07/08/2021 18:20	07/08/2021 18:37	07/08/2021 18:38	07/08/2021 21:32

En Route	Arrived	Last Restoration	Field Complete
07/08/2021 21:32	07/08/2021 21:32	07/09/2021 00:15	07/09/2021 00:15

Closed	ETR	Calls	Custs Affected
07/09/2021 01:12	07/09/2021 12:01	26	108

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	356	28155

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52058-46657

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Raining

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

[MDT Comments - HOSTETTER-07/09/21 Dispatched to 252328C47179 (recloser pole) for a report of a 54 cust outage. Upon arrival verified from recloser control box that all 3 primary phases were open, (manually opened all 3 yellow rings and belly banded pole). Began patrolling line, found down neutral wire and wing primary phases (center phase still up) between poles 52058-46657 & 52032-46636. Under operational switching opened 600 amp underslung disconnects = pole 51833-46515 to isolate.]

Comments

[MDT Comments - HOSTETTER-07/09/21 Dispatched to 252328C47179 (recloser pole) for a report of a 54 cust outage. Upon arrival verified from recloser control box that all 3 primary phases were open, (manually opened all 3 yellow rings and belly banded pole). Began patrolling line, found down neutral wire and wing primary phases (center phase still up) between poles 52058-46657 %2526 52032-46636. Under operational switching opened 600 amp underslung disconnects = pole 51833-46515 to isolate.] -2 for tree crew -3 for crew 3 bp remain out outage was at rc 73732 not line fuse

Order Instructions

Order #	Type	Status	Priority	Special
11703718-1	Outage	Archived	5	

APPROVED

Order Details for Order 11703718-1

Time Off	Order Created	Assigned	Dispatch
08/07/2021 14:54	08/07/2021 14:55	08/07/2021 14:58	08/07/2021 14:59
En Route	**Arrived**	**Last Restoration**	**Field Complete**
08/07/2021 15:13	08/07/2021 15:13	08/07/2021 16:30	08/07/2021 17:14
Closed	**ETR**	**Calls**	**Custs Affected**
08/07/2021 17:35	08/07/2021 23:46	46	105

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	95	10080

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51928-46548
Failed Comp	**Facility Location**
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

ff = 51812-46507, 52137-46881, 51702-46237 opened 73726 closed t1-737 = 1630 tree broke x arm = 51947-46568 need crew to climb and fix replace arm [MDT Comments - HOSTETTER-08/07/21 Dispatched to the area of pole 51928-46548 in regards to a report of no lights. Upon arrival in the area I observed a tree on the OH wires between poles 51928-46548 & 51947-46568 whcih broke crossarm on pole 51947-46568. Tree was safely removed but pole 51947-46568 will need to be climbed to replace crossarm, as I could not see a way for bucket access. Old construction was horizontal straight through with all 3 phases on arm. 2 phases are still tied into arm and on pole, one phase is layin in overgrowth. None of the phases are severed. Neutral is still intact on pole. HOSTETTER-08/07/21 Opened 73726 (600 amp disc) and belly banded. Verified recloser 252328c47179 (single phase enabled) was showing ABC OPEN = control box, and belly banded. Cone was also placed = location of problem.]

Comments

ff = 51812-46507, 52137-46881, 51702-46237 opened 73726 closed t1-737 = 1630 tree broke x arm = 51947-46568 need crew to climb and fix replace arm [MDT Comments - HOSTETTER-08/07/21 Dispatched to the area of pole 51928-46548 in regards to a report of no lights. Upon arrival in the area I observed a tree on the OH wires between poles 51928-46548 & 51947-46568 whcih broke crossarm on pole 51947-46568. Tree was safely removed but pole 51947-46568 will need to be climbed to replace crossarm, as I could not see a way for bucket access. Old construction was horizontal straight through with all 3 phases on arm. 2 phases are still tied into arm and on pole, one phase is layin in overgrowth. None of the phases are severed. Neutral is still intact on pole. HOSTETTER-08/07/21 Opened 73726 (600 amp disc) and belly banded. Verified recloser 252328c47179 (single phase enabled) was showing ABC OPEN = control box, and belly banded. Cone was also placed = location of problem.]

Order Instructions

Order #	Type	Status	Priority	Special
11721112-1	Outage	Archived	5	

Order Details for Order 11721112-1

Time Off	Order Created	Assigned	Dispatch
08/18/2021 21:28	08/19/2021 04:33	08/19/2021 04:55	08/19/2021 04:55

En Route	Arrived	Last Restoration	Field Complete
08/19/2021 08:28	08/19/2021 08:28		08/19/2021 09:29

Closed	ETR	Calls	Custs Affected
08/19/2021 09:29	08/19/2021 18:15	24	0

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	724	0

Organization

Current Org	Substation	Disp Center
Dispatch	S HAMB SUB	Hamburg District

Owner	Circuit	Disp Area
CARROLL, JASON	00740-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51669-46343

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Additional Work Needed Trim/Removed Tree(s)	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11721112-2	LineSAP Followup Sent

Follow Up

[MDT Comments - NAUMAN-08/19/21 primary down from pole 51669-46343 to pole 51671-46379 need crew to put primary and neutral up. need tree crew to open up between poles to get wire up. 50t open at pole51742-46360]

Comments

[MDT Comments - NAUMAN-08/19/21 primary down from pole 51669-46343 to pole 51671-46379 need crew to put primary and neutral up. need tree crew to open up between poles to get wire up. 50t open at pole51742-46360] needs trimming from 51671-46379 to wires (about 150 ft). -2 for crew, -3 for tree crew (bucket)

Order Instructions

Order #	Type	Status	Priority	Special
11721112-2	Outage	Archived	2	

APPROVED

Order Details for Order 11721112-2

Time Off	Order Created	Assigned	Dispatch
08/18/2021 21:28	08/19/2021 09:29	08/19/2021 10:19	08/19/2021 10:19

En Route	Arrived	Last Restoration	Field Complete
08/19/2021 11:56	08/19/2021 14:40	08/19/2021 16:38	08/19/2021 16:42

Closed	ETR	Calls	Custs Affected
08/19/2021 19:37	08/19/2021 18:15	24	48

Crew	Crew Area
Parzanese, Vincent I - 154057	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	1150	55200

Organization

Current Org	Substation	Disp Center
Dispatch	S HAMB SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00740-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51671-46379

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Spliced	Distribution	Rain with high winds

Related Events	Follow Ups Sent
11721112-1	

Follow Up

Comments

needs trimming from 51671-46379 to wires (about 150 ft). -2 for crew, -3 for tree crew (bucket) [MDT Comments - NAUMAN-08/19/21 primary down from pole 51669-46343 to pole 51671-46379 need crew to put primary and neutral up. need tree crew to open up between poles to get wire up. 50t open at pole51742-46360 PARZANESE-08/19/21 1638 customers restored]

Order Instructions

En Route time changed from 19/08/2021 11:56:28 to 19/08/2021 11:56:00.

Order #	Type	Status	Priority	Special
11721112-3	Trouble	Archived	2	

Order Details for Order 11721112-3

Time Off	Order Created	Assigned	Dispatch
08/19/2021 09:29	08/19/2021 09:29	08/19/2021 09:39	08/19/2021 09:39

En Route	Arrived	Last Restoration	Field Complete
08/19/2021 09:39	08/19/2021 13:09		08/19/2021 13:09

Closed	ETR	Calls	Custs Affected
08/19/2021 13:11		0	0

Crew	Crew Area
NTS-GEIGLE-610-751-9122	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Forestry	S HAMB SUB	Hamburg District

Owner	Circuit	Disp Area
Lamoreaux, Richard	00740-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

tree work complete, ready for line work..1:09pm...8/19/2021...rcl... MDT Comments - NAUMAN-08/19/21 primary down from pole 51669-46343 to pole 51671-46379 need crew to put primary and neutral up. need tree crew to open up between poles to get wire up. 50t open at pole51742-46360 needs trimming from 51671-46379 to wires (about 150 ft). -2 for crew, -3 for tree crew (bucket)

Order Instructions

Order #	Type	Status	Priority	Special
11726446-1	Outage	Archived	3	

Order Details for Order 11726446-1

Time Off	Order Created	Assigned	Dispatch
08/23/2021 00:56	08/23/2021 01:00	08/23/2021 01:04	08/23/2021 01:04

En Route	Arrived	Last Restoration	Field Complete
08/23/2021 01:12	08/23/2021 01:12		08/23/2021 03:05

Closed	ETR	Calls	Custs Affected
08/23/2021 03:05	08/23/2021 16:01	31	0

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	131	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees On ROW	51724-46371

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Additional Work Needed Trim/Removed Tree(s)	No Outage	Rain with high winds

Related Events	Follow Ups Sent
11726446-2	LineSAP Followup Sent

Follow Up

[MDT Comments - HOSTETTER-08/23/21 Dispatched to the area of line fuse pole 51742-46360 for a report of no lights. Upon arrival, I observed line fuse cutout lid open = aforementioned pole. I found primary and neutral wire down between poles 51724-46371 & 51698-46350. problem areas were coned and fuse pole was coned and marked with bellyband. HOSTETTER-08/23/21 Will need a coil of #2 wire and a handful of automatic pickles.]

Comments

[MDT Comments - HOSTETTER-08/23/21 Dispatched to the area of line fuse pole 51742-46360 for a report of no lights. Upon arrival, I observed line fuse cutout lid open = aforementioned pole. I found primary and neutral wire down between poles 51724-46371 & 51698-46350. problem areas were coned and fuse pole was coned and marked with bellyband. HOSTETTER-08/23/21 Will need a coil of #2 wire and a handful of automatic pickles.]LEADER LINEMAN APPRENTICE FLAGGERS -2 FOR CREW

Order Instructions

Order #	Type	Status	Priority	Special
11726446-2	Outage	Archived	2	

APPROVED

Order Details for Order 11726446-2

Time Off	Order Created	Assigned	Dispatch
08/23/2021 00:56	08/23/2021 02:59	08/23/2021 08:25	08/23/2021 08:25

En Route	Arrived	Last Restoration	Field Complete
08/23/2021 08:25	08/23/2021 11:02	08/23/2021 12:45	08/23/2021 13:37

Closed	ETR	Calls	Custs Affected
08/23/2021 13:38	08/23/2021 16:01	31	48

Crew	Crew Area
NGG- John Rouleau- 610-6074636	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	709	34032

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51724-46371

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s) Repaired	Distribution	Rain with high winds

Related Events	Follow Ups Sent
11726446-1	

Follow Up

Comments

MDT Comments - HOSTETTER-08/23/21 Dispatched to the area of line fuse pole 51742-46360 for a report of no lights. Upon arrival, I observed line fuse cutout lid open = aforementioned pole. I found primary and neutral wire down between poles 51724-46371 & 51698-46350. problem areas were coned and fuse pole was coned and marked with bellyband. HOSTETTER-08/23/21 Will need a coil of #2 wire and a handful of automatic pickles. LEADER LINEMAN APPRENTICE FLAGGERS. Rad granted 0950

Order Instructions

Order #	Type	Status	Priority	Special
11742984-1	Outage	Archived	5	

APPROVED

Order Details for Order 11742984-1

Time Off	Order Created	Assigned	Dispatch
09/01/2021 18:59	09/01/2021 21:03	09/02/2021 06:30	09/02/2021 06:30

En Route	Arrived	Last Restoration	Field Complete
09/02/2021 08:36	09/02/2021 08:36	09/02/2021 14:10	09/02/2021 14:10

Closed	ETR	Calls	Custs Affected
09/02/2021 19:09	09/04/2021 23:00	53	108

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	1151	100116

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Somerville, Delbert	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52100-46726

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

[MDT Comments - HOSTETTER-09/02/21 Dispatched to the area of recloser 73732 (252328C47179) in regards to no lights. Upon arrival I confirmed via control box that recloser ABC phases were open. Patrolled downstream and found a tree that had all 3 phases pinned down to ground. Because of flooding this location was submersed in water and inaccessible until flood waters recede. Lifted taps on feed side of downed tree = 52101-46827 and belly banded. As per dispatch, under switching order I closed recloser 73732 (252328C47179) to re-energize 3 phase line to recently opened taps. As per dispatch I also lifted taps on downstream side of downed tree = 51917-46545 and belly banded. Dispatch was able to backfeed up to this open point via SCADA with no customers out. HOSTETTER-09/02/21 Tree on wire between pole 52097-46689 & 52100-46726.]

Comments

Patrolled and found a tree that had all 3 phases pinned down to ground. Because of flooding this location was inaccessible until flood waters recede. Lifted taps on feed side of downed tree = 52101-46827 and belly banded. As per dispatch, under switching order I closed recloser 73732 (252328C47179) to re-energize 3 phase line to recently opened taps. As per dispatch I also lifted taps on downstream side of downed tree = 51917-46545 and belly banded. Dispatch was able to backfeed up to this open point via SCADA with no customers out. HOSTETTER-09/02/21 Tree on wire between pole 52097-46689 & 52100-46726.] Hostetter removed original tree that was on line after water receeded 09/02/2021 1851... while patrolling ROW found phase on arm at pole 52100-46726, needs tied back in, climber or 550 bucket...

Order Instructions

Order #	Type	Status	Priority	Special
11742984-2	Trouble	Archived	4	

Order Details for Order 11742984-2

Time Off	Order Created	Assigned	Dispatch
09/02/2021 19:09	09/02/2021 19:09	09/05/2021 10:42	09/05/2021 10:42

En Route	Arrived	Last Restoration	Field Complete
09/05/2021 12:57	09/05/2021 16:53		09/05/2021 18:05

Closed	ETR	Calls	Custs Affected
09/05/2021 18:05		0	0

Crew	Crew Area
Duquesne-R Swarmer-412-459-3412	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Line	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Beck, Jessica L	00737-1	Reading Oper Area

Device Info

ID

Pole 52100-46726

Type	Voltage
Unknown	Unknown

Event Details

Cause	Cause Pole
Trees On ROW	

Failed Comp	Facility Location
	52100-46726

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

Patrolled and found a tree that had all 3 phases pinned down to ground. Because of flooding this location was inaccessible until flood waters recede. Lifted taps on feed side of downed tree = 52101-46827 and belly banded. As per dispatch, under switching order I closed recloser 73732 (252328C47179) to re-energize 3 phase line to recently opened taps. As per dispatch I also lifted taps on downstream side of downed tree = 51917-46545 and belly banded. Dispatch was able to backfeed up to this open point via SCADA with no customers out. HOSTETTER-09/02/21 Tree on wire between pole 52097-46689 & 52100-46726. Hostetter removed original tree that was on line after water receeded 09/02/2021 1851... while patrolling ROW found phase on arm at pole 52100-46726, needs tied back in, climber or 550 bucket...

Order Instructions

Order #	Type	Status	Priority	Special
11768254-1	Outage	Archived	5	

APPROVED

Order Details for Order 11768254-1

Time Off	Order Created	Assigned	Dispatch
09/15/2021 22:17	09/15/2021 22:20	09/15/2021 22:30	09/15/2021 22:33

En Route	Arrived	Last Restoration	Field Complete
09/15/2021 23:36	09/15/2021 23:36	09/16/2021 01:14	09/16/2021 01:24

Closed	ETR	Calls	Custs Affected
09/16/2021 02:51	09/16/2021 01:18	43	108

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	177	19116

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
McGovern, Kevin M	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Lightning	Unknown

Failed Comp	Facility Location
Recloser	252328C47179

Action Taken	Outage Type	Weather
Perform Switching	Distribution	Rain with lightning

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - NAUMAN-09/16/21 patrolled line closed recloser]

Order Instructions

Order #	Type	Status	Priority	Special
11776622-1	Outage	Archived	5	

Order Details for Order 11776622-1

Time Off	Order Created	Assigned	Dispatch
09/23/2021 15:08	09/23/2021 19:09	09/23/2021 19:20	09/23/2021 19:20

En Route	Arrived	Last Restoration	Field Complete
09/23/2021 19:30	09/23/2021 19:47		09/23/2021 20:49

Closed	ETR	Calls	Custs Affected
09/23/2021 20:49	09/24/2021 06:45	15	0

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	344	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51397-46527

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Additional Work Needed Trim/Removed Tree(s)	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11776622-2	LineSAP Followup Sent

Follow Up

MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open. [MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open. STAMM-09/24/21 ROW was cut open.....spliced both phases and restored power at ISO]

Comments

[MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open.]

Order Instructions

Order #	Type	Status	Priority	Special
11776622-2	Outage	Archived	4	

APPROVED

Order Details for Order 11776622-2

Time Off	Order Created	Assigned	Dispatch
09/23/2021 15:08	09/23/2021 20:49	09/23/2021 20:49	09/23/2021 20:49

En Route	Arrived	Last Restoration	Field Complete
09/23/2021 21:05	09/23/2021 22:00	09/24/2021 04:41	09/24/2021 04:51

Closed	ETR	Calls	Custs Affected
09/24/2021 05:28	09/24/2021 06:45	15	39

Crew	Crew Area
Stamm, Jason I - 154069	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	813	31707

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Zerbe, Phillip	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51397-46527

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent
11776622-1	

Follow Up

Comments

MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open. [MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open. STAMM-09/24/21 ROW was cut open.....spliced both phases and restored power at ISO]

Order Instructions

En Route time changed from 23/09/2021 21:05:53 to 23/09/2021 21:05:00.

Order #	Type	Status	Priority	Special
11776622-3	Trouble	Archived	4	

Order Details for Order 11776622-3

Time Off	Order Created	Assigned	Dispatch
09/23/2021 20:49	09/23/2021 20:49	09/23/2021 23:40	09/23/2021 23:40

En Route	Arrived	Last Restoration	Field Complete
09/23/2021 23:40	09/24/2021 03:34		09/24/2021 03:34

Closed	ETR	Calls	Custs Affected
09/24/2021 03:34		0	0

Crew	Crew Area
Tree Crew Dennis 484-824-0501	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Zerbe, Phillip	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51397-46527

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent

Follow Up

Comments

CREW TIMED OUT, GIVE TO OVERNIGHT CREW WHEN THEY CHECK IN - LH MDT Comments - SHAFFER-09/23/21 Wire down between poles 51397-46527 and 51372-46534, Will need a manual tree crew to remove tree and clear area between poles,,Cannot not easily get a truck to either pole,, When tree is removed and area cleared will need a line crew to make repairs. All fuses at the ISO pole 51643-46407 are open. Tree Work Completed

Order Instructions

Order #	Type	Status	Priority	Special
11816838-1	Outage	Archived	5	

APPROVED

Order Details for Order 11816838-1

Time Off	Order Created	Assigned	Dispatch
10/30/2021 06:21	10/30/2021 06:22	10/30/2021 12:26	10/30/2021 12:26

En Route	Arrived	Last Restoration	Field Complete
10/30/2021 14:11	10/30/2021 14:11	10/30/2021 15:41	10/30/2021 15:51

Closed	ETR	Calls	Custs Affected
10/30/2021 18:49	10/31/2021 18:00	3	4

Crew	Crew Area
Nauman, Lindsey A - 154040	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	560	2240

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
McGovern, Kevin M	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51372-46502 BC

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51372-46502

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51372-46502)

Action Taken	Outage Type	Weather
Replaced Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - NAUMAN-10/30/21 remove tree close fuse]

Order Instructions

Arrived time changed from 30/10/2021 14:11:35 to 30/10/2021 14:11:00.

Order #	Type	Status	Priority	Special
11855282-1	Outage	Archived	5	

Order Details for Order 11855282-1

Time Off	Order Created	Assigned	Dispatch
12/06/2021 18:38	12/06/2021 18:46	12/06/2021 20:11	12/06/2021 20:11

En Route	Arrived	Last Restoration	Field Complete
12/06/2021 20:14	12/06/2021 20:22		12/07/2021 02:36

Closed	ETR	Calls	Custs Affected
12/07/2021 02:36	12/07/2021 22:00	28	0

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	473	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Halter, Brian	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51665-46390

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Additional Work Needed	No Outage	Rain with high winds

Related Events	Follow Ups Sent
11855282-2	LineSAP Followup Sent

Follow Up

[MDT Comments - SHAFFER-12/06/21 Tree branch fell and hit primary near pole 51665-46390 and knocked wire off of ridge pin, Will need a crew to climb pole and tie in wire, When completed close 50T line fuse = 51742-46360]

Comments

[MDT Comments - SHAFFER-12/06/21 Tree branch fell and hit primary near pole 51665-46390 and knocked wire off of ridge pin, Will need a crew to climb pole and tie in wire, When completed close 50T line fuse = 51742-46360]..-2 for crew..

Order Instructions

Order #	Type	Status	Priority	Special
11855282-2	Outage	Archived	5	

APPROVED

Order Details for Order 11855282-2

Time Off	Order Created	Assigned	Dispatch
12/06/2021 18:38	12/07/2021 02:36	12/07/2021 07:46	12/07/2021 07:47

En Route	Arrived	Last Restoration	Field Complete
12/07/2021 07:47	12/07/2021 12:00	12/07/2021 11:51	12/07/2021 12:01

Closed	ETR	Calls	Custs Affected
12/07/2021 12:22	12/07/2021 22:00	28	48

Crew	Crew Area
Valiant - Adams 610-587-7432	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	1033	49584

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Kilby, Miles	00737-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Repaired Repaired	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11855282-1	

Follow Up

Comments

MDT Comments - SHAFFER-12/06/21 Tree branch fell and hit primary near pole 51665-46390 and knocked wire off of ridge pin, Will need a crew to climb pole and tie in wire, When completed close 50T line fuse = 51742-46360 ..-2 for crew..

Order Instructions

Order #	Type	Status	Priority	Special
11861577-1	Outage	Archived	3	

APPROVED

Order Details for Order 11861577-1

Time Off	Order Created	Assigned	Dispatch
12/11/2021 07:56	12/11/2021 08:20	12/11/2021 08:22	12/11/2021 08:27

En Route	Arrived	Last Restoration	Field Complete
12/11/2021 08:28	12/11/2021 08:28	12/11/2021 10:21	12/11/2021 11:05

Closed	ETR	Calls	Custs Affected
12/11/2021 11:08	12/11/2021 19:15	136	514

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Outage Order	145	74530

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Switch Installation 73769 ABC

Type	Voltage
Primary Fault	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52599-47483

Failed Comp	Facility Location
Conductor. - Bare	

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent
11861577-2	LineSAP Followup Sent

Follow Up

center phase primary and neutral down between poles 52599-47483 to 52564-47444 [MDT Comments - HOSTETTER-12/11/21 Located 1 phase (center) of 3 phase OH primary and neutral down 2 spans between poles 52599-47483 & 52564-47444. Dispatched opened 73769 MOAB = pole 252655c47499 via SCADA to de-energize feed. Dispatch instructed me to then open 73746 GOAB = pole 52447-47297 to isolate section of downed wire. Pole 52578-47459 is straight through primary OH 3 phase + neutral construction with an OH transformer and service. Pole willl either need to be climbed or track machine. Need to replace transformer cutout and arrestor = this location as well. Cone placed = best truck access point end of driveway 3120 Rt. 737.]

Comments

center phase primary and neutral down between poles 52599-47483 to 52564-47444 [MDT Comments - HOSTETTER-12/11/21 Located 1 phase (center) of 3 phase OH primary and neutral down 2 spans between poles 52599-47483 & 52564-47444. Dispatched opened 73769 MOAB = pole 252655c47499 via SCADA to de-energize feed. Dispatch instructed me to then open 73746 GOAB = pole 52447-47297 to isolate section of downed wire. Pole 52578-47459 is straight through primary OH 3 phase + neutral construction with an OH transformer and service. Pole willl either need to be climbed or track machine. Need to replace transformer cutout and arrestor = this location as well. Cone placed = best truck access point end of driveway 3120 Rt. 737.]

Order Instructions

Order #	Type	Status	Priority	Special
11861577-2	Outage	Archived	3	

APPROVED

Order Details for Order 11861577-2

Time Off	Order Created	Assigned	Dispatch
12/11/2021 07:56	12/11/2021 10:33	12/11/2021 10:33	12/11/2021 10:33

En Route	Arrived	Last Restoration	Field Complete
12/11/2021 11:52	12/11/2021 12:34	12/11/2021 17:10	12/11/2021 18:10

Closed	ETR	Calls	Custs Affected
12/11/2021 18:37	12/11/2021 19:15	136	4

Crew	Crew Area
Daniel, Brent N - 154069	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
Safety Forces On Site	554	2216

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Switch Installation 73746 ABC

Type	Voltage
Primary Fault	Unknown KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52599-47483

Failed Comp	Facility Location
Conductor. - Bare	Unknown

Action Taken	Outage Type	Weather
Repaired	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11861577-1	

Follow Up

Comments

center phase primary and neutral down between poles 52599-47483 to 52564-47444/// [MDT Comments - DANIEL-12/11/21 put up primary and neutral]

Order Instructions

Order #	Type	Status	Priority	Special
11861577-3	Trouble	Archived	4	

Order Details for Order 11861577-3

Time Off	Order Created	Assigned	Dispatch
12/11/2021 13:03	12/11/2021 13:03	12/11/2021 13:04	12/11/2021 13:04

En Route	Arrived	Last Restoration	Field Complete
12/11/2021 13:04	12/11/2021 16:13		12/11/2021 16:13

Closed	ETR	Calls	Custs Affected
12/11/2021 16:13		0	0

Crew	Crew Area
Nts Bob Geigle 610-751-9122	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
On Miscellaneous	0	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Sensenig, Scott	00737-1	Reading Oper Area

Device Info

ID

Switch Installation 73746 ABC

Type	Voltage
Primary Fault	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	

Failed Comp	Facility Location
	STONEY RUN VALLEY RD

Action Taken	Outage Type	Weather

Related Events	Follow Ups Sent

Follow Up

Comments

center phase primary and neutral down between poles 52599-47483 to 52564-47444/// MDT Comments - HOSTETTER-12/11/21 Located 1 phase (center) of 3 phase OH primary and neutral down 2 spans between poles 52599-47483 & 52564-47444. Dispatched opened 73769 MOAB = pole 252655c47499 via SCADA to de-energize feed. Dispatch instructed me to then open 73746 GOAB = pole 52447-47297 to isolate section of downed wire. Pole 52578-47459 is straight through primary OH 3 phase + neutral construction with an OH transformer and service. Pole willl either need to be climbed or track machine. Need to replace transformer cutout and arrestor = this location as well. Cone placed = best truck access point end of driveway 3120 Rt. 737....tree work complete

Order Instructions

Order #	Type	Status	Priority	Special
11878771-1	Outage	Archived	5	

APPROVED

Order Details for Order 11878771-1

Time Off	Order Created	Assigned	Dispatch
12/31/2021 11:35	12/31/2021 11:37	12/31/2021 11:38	12/31/2021 11:39

En Route	Arrived	Last Restoration	Field Complete
12/31/2021 11:51	12/31/2021 12:17	12/31/2021 13:20	12/31/2021 13:27

Closed	ETR	Calls	Custs Affected
12/31/2021 13:41	12/31/2021 14:07	48	105

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	104	11025

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52058-46657

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
	LineSAP Followup Sent

Follow Up

[MDT Comments - SHAFFER-12/31/21 Wire down between poles 52058-46657 and 52032-46636, Will need a crew to make repairs, Opened under slung switch 73726 = pole 51833-46515 and closed Tie switch at Old Lenhartsville sub.]

Comments

[MDT Comments - SHAFFER-12/31/21 Wire down between poles 52058-46657 and 52032-46636, Will need a crew to make repairs, Opened under slung switch 73726 = pole 51833-46515 and closed Tie switch at Old Lenhartsville sub.] ticket restored in error new confirmed outage with org time for 2 remaing bp that are out remove 2 bp restore in rna

Order Instructions

Order #	Type	Status	Priority	Special
11892574-1	Outage	Archived	5	

APPROVED

Order Details for Order 11892574-1

Time Off	Order Created	Assigned	Dispatch
01/17/2022 02:43	01/17/2022 02:49	01/17/2022 06:09	01/17/2022 06:09

En Route	Arrived	Last Restoration	Field Complete
01/17/2022 08:23	01/17/2022 08:23	01/17/2022 11:27	01/17/2022 12:41

Closed	ETR	Calls	Custs Affected
01/17/2022 13:03	01/17/2022 11:45	56	107

Crew	Crew Area
Hostetter, Duane E - 154129	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	524	56068

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52097-46689

Failed Comp	Facility Location
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Trim/Removed Tree(s)	Distribution	Snow-ice with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - HOSTETTER-01/17/22 DIspatched to the area of recloser 252328C47179 (73732) in regards to no lights. Upon arrival I verified ABC phases of recloser were all open. Patrolled downstream and found branch accross all 3 phases between poles 52097-46689 & 52058-46657. Safely removed branch, finished patrol and found no more abnormalities. Received order from dispatch to close recloser, recloser held.]

Order Instructions

Order #	Type	Status	Priority	Special
11924858-1	Outage	Archived	5	

APPROVED

Order Details for Order 11924858-1

Time Off	Order Created	Assigned	Dispatch
02/18/2022 06:35	02/18/2022 12:40		

En Route	Arrived	Last Restoration	Field Complete
		02/18/2022 12:07	02/18/2022 13:09

Closed	ETR	Calls	Custs Affected
02/18/2022 13:09	02/18/2022 15:10	1	1

Crew	Crew Area
	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	332	332

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Antolic, Jeffrey S	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51372-46502 BC

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	OH Transformer 51335-46410 B

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51372-46502)

Action Taken	Outage Type	Weather
Isolated	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

[MDT Comments - CERRA-02/18/22 tree on wire at pole 51335-46410, need tree crew. Line is de-energized, crew opened solid at pole 51374-46480 to isolate underground feeding overhead. Restored this customer at approx 12pm

Order Instructions

Order #	Type	Status	Priority	Special
11946600-1	Outage	Archived	5	

APPROVED

Order Details for Order 11946600-1

Time Off	Order Created	Assigned	Dispatch
03/07/2022 20:52	03/08/2022 04:25	03/08/2022 07:07	03/08/2022 07:07

En Route	Arrived	Last Restoration	Field Complete
03/08/2022 07:07		03/08/2022 12:35	03/08/2022 13:32

Closed	ETR	Calls	Custs Affected
03/08/2022 13:32	03/08/2022 16:00	21	48

Crew	Crew Area
NGG - Brownfield 740-624-1968	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	943	45264

Organization

Current Org	Substation	Disp Center
Dispatch	S HAMB SUB	Hamburg District

Owner	Circuit	Disp Area
Mancias, Mark	00740-1	Reading Oper Area

Device Info

ID

Fuse Installation 51742-46360 50T

Type	Voltage
Fuse	Unknown

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51669-46343

Failed Comp	Facility Location
Conductor. - Bare	Fuse Installation (51742-46360)

Action Taken	Outage Type	Weather
Perform Switching Trim/Removed Tree(s)	Distribution	Rain with high winds

Related Events	Follow Ups Sent

Follow Up

Comments

Rad granted at 1001 primary down at 51669-46343. 2 spans of primary down, tree accross primary, worked 3 poles, repairs complete, put up wire...

Order Instructions

Order #	Type	Status	Priority	Special
11967304-1	Outage	Archived	4	

Order Details for Order 11967304-1

Time Off	Order Created	Assigned	Dispatch
03/25/2022 18:09	03/25/2022 18:10	03/25/2022 18:12	03/25/2022 18:12

En Route	Arrived	Last Restoration	Field Complete
03/25/2022 18:16	03/25/2022 18:44		03/25/2022 19:22

Closed	ETR	Calls	Custs Affected
03/25/2022 19:22	03/26/2022 04:01	26	0

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	76	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51352-46517

Failed Comp	Facility Location
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Additional Work Needed	No Outage	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11967304-2	

Follow Up

Comments

[MDT Comments - SHAFFER-03/25/22 2 spans of wire are down between poles 51338-46507 and 51372-46534,, The center pole 51352-46517 will need a new 15 KVA dual trans. and ridge pin, The trans. is knocked off of pole and only hanging by the #4 copper in bushing,, Crew will need a handcoil of =3 acsr,, All fuses are open at ISO 51643-46407.]-2 for crew

Order Instructions

Order #	Type	Status	Priority	Special
11967304-2	Outage	Archived	4	

APPROVED

Order Details for Order 11967304-2

Time Off	Order Created	Assigned	Dispatch
03/25/2022 18:09	03/25/2022 19:22	03/25/2022 20:06	03/25/2022 20:13
En Route	**Arrived**	**Last Restoration**	**Field Complete**
03/25/2022 20:13		03/26/2022 03:33	03/26/2022 05:25
Closed	**ETR**	**Calls**	**Custs Affected**
03/26/2022 05:25	03/26/2022 04:01	26	39

Crew	Crew Area
NGG R Mccormik 215-828-6974	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights - Wire Down Pole to Pole	564	21996

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
McGovern, Kevin M	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51643-46407 B

Type	Voltage
Primary Transformer	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Pole 51352-46517
Failed Comp	**Facility Location**
Conductor. - Bare	Primary Transformer (51643-46407)

Action Taken	Outage Type	Weather
Trim/Removed Tree(s) Spliced	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
11967304-1	

Follow Up

Comments

MDT Comments - SHAFFER-03/25/22 2 spans of wire are down between poles 51338-46507 and 51372-46534,, The center pole 51352-46517 will need a new 15 KVA dual trans. and ridge pin, The trans. is knocked off of pole and only hanging by the #4 copper in bushing,, Crew will need a handcoil of =2 acsr,, All fuses are open at ISO 51643-46407. -2 for crew... crew completed repairs, put spans of downed primary back up, and replaced OH transformer... restored at 0333 03/26/22

Order Instructions

Order #	Type	Status	Priority	Special
12018495-1	Outage	Archived	5	

APPROVED

Order Details for Order 12018495-1

Time Off	Order Created	Assigned	Dispatch
05/16/2022 20:00	05/16/2022 20:02	05/16/2022 20:09	05/16/2022 20:10
En Route	**Arrived**	**Last Restoration**	**Field Complete**
05/16/2022 20:12	05/16/2022 20:49	05/16/2022 21:46	05/16/2022 22:30
Closed	**ETR**	**Calls**	**Custs Affected**
05/16/2022 23:08	05/16/2022 23:02	45	107

Crew	Crew Area
Shaffer, Douglas D - 154035	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
No Lights	106	11342

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Yeager, Dustin	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252328C47179 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	52137-46881
Failed Comp	**Facility Location**
Conductor. - Bare	252328C47179

Action Taken	Outage Type	Weather
Additional Work Needed	Distribution	Rain with lightning
Related Events	**Follow Ups Sent**	
	LineSAP Followup Sent	

Follow Up

MDT Comments - SHAFFER-05/16/22 Opened dishes at pole 52101-46827,, Closed Tie switch = Lenhartsville sub,, Lifted the loadside leads of 73732 to create visual open,, Wire down near pole 52137-46881,, Will need a manual tree crew to remove tree and clear area around pole and in right-away,, Will need a line crew to make repairs when tree work is completed,, Cannot get truck to pole. Crew will need a handcoil of 2/0 acsr. -2 for tree crew -3 for crew..tree work is complete.. MDT Comments - GEORGE - crew could not complete job need 100ft bucket EHV truck will come tomorrow to complete..

Comments

Fault Finder Locations // 52137-46881 // Recloser at 51833-46515 (73742)// 51702-46237.... Found tree that took down lines at 52137-46881... Taps cut at 52101-46827 [MDT Comments - SHAFFER-05/16/22 Opened dishes at pole 52101-46827,, Closed Tie switch = Lenhartsville sub,, Lifted the loadside leads of 73732 to create visual open,, Wire down near pole 52137-46881,, Will need a manual tree crew to remove tree and clear area around pole and in right-away,, Will need a line crew to make repairs when tree work is completed,, Cannot get truck to pole. Crew will need a handcoil of 2/0 acsr.] -2 for tree crew -3 for crew

Order Instructions

9/14/22 IW
RESPONDENT
Exhibit-5

FirstEnergy

Tori L. Giesler
(610) 921-6658
tgiesler@firstenergycorp.com

610-929-3601

October 1, 2015

RECEIVED

OCT 1 2015

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

VIA UNITED PARCEL SERVICE

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

Re: Biennial Inspection, Maintenance, Repair and Replacement Plan – Metropolitan Edison Company for the period January 1, 2017 – December 31, 2018
Docket No. M-2009-2094773

Dear Secretary Chiavetta:

In accordance with 52 Pa. Code § 57.198, enclosed for filing on behalf of Metropolitan Edison Company ("Met-Ed") is an original and one copy of the Biennial Inspection, Maintenance, Repair and Replacement Plan (the "Plan") for the period January 1, 2017 through December 31, 2018. Please date stamp the extra copy and return it in the postage-prepaid envelope provided.

This Plan is designed consistent with the guidelines established by the National Electric Safety Code, the Codes and Practices of the Institute of Electrical and Electronic Engineers, Federal Energy Regulatory Commission Regulations, and the American National Standards Institute, Inc. The Plan also has been designed to reduce the risk of outages on Met-Ed's system and form the basis of its inspection and maintenance goals and objectives as outlined in Met-Ed's annual and quarterly reliability reports filed with the Pennsylvania Public Utility Commission ("Commission").

Met-Ed respectfully requests that the Commission accept its Biennial Inspection, Maintenance, Repair and Replacement Plan. If you have any questions, please contact me or Tiffanne Cowan at (330) 761-4474.

Sincerely,

Tori L. Giesler

Tori L. Giesler
dlm
Enclosure

c: D. Searfoorce

Met-Ed
A FirstEnergy Company

M-2009-2094773

Biennial Inspection, Maintenance, Repair and Replacement Plan of Metropolitan Edison Company ("Met-Ed")

For the period of January 1, 2017 – December 31, 2018

Submitted by:
Linda L. Moss
President, Pennsylvania Operations
800 Cabin Hill Drive
Greensburg, PA 15601
Email: lmoss@firstenergycorp.com

Met-Ed
A FirstEnergy Company

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Met-Ed
A FirstEnergy Company

Revisions to Approved Plan

The Commission accepted Metropolitan Edison Company's ("Met-Ed") current Biennial Inspection, Maintenance, Repair and Replacement Plan ("I&M Plan") for 2015 and 2016 on December 30, 2013. The table below illustrates, in summary fashion, the proposed additions to the 2017 and 2018 plan that differ were not in the 2015-2016 I&M Plan.

Met-Ed *Proposed Program (effective January 1, 2017)*
Distribution Overhead Line Inspections – page 7
The Company has included switches and sectionalizers to the list of items to be inspected in the Distribution Inspection & Maintenance Practice – Overhead Circuits and Equipment.

Section 57.198(n)(1). Vegetation Management. *The statewide minimum inspection and treatment cycle for vegetation management is between 4-8 years for distribution facilities. An EDC shall submit a condition-based plan for vegetation management for its distribution system facilities explaining its treatment cycle.*

Program Description

Met-Ed performs vegetation management to promote the continued safe and reliable operation of the distribution system. Vegetation management may be performed utilizing one of three methods: Standard Specification, Inspect/Maintain or Enhanced techniques. The Standard Specification for vegetation management is designed to support line reliability, maintain access, make repairs, or restore service and to support safe and reliable service. The Standard vegetation specification provides vegetation to be pruned to achieve five years of clearance, removal of selected incompatible trees within the clearing zone corridor, removal of certain defective limbs that are overhanging primary conductors, controlling selected incompatible brush mechanically and/or using herbicide, and removal of off-corridor priority trees that are dead, dying, diseased, and leaning or significantly encroaching the corridor.

Portions of a circuit that experience high customer interruption minutes due to vegetation-caused outages may be targeted to receive the Standard Specification as well as enhanced vegetation removal techniques, which includes removal of certain healthy limbs, based on tree species and condition, which overhang primary conductors.

For portions of a circuit that have not experienced significant reliability issues due to vegetation-caused outages, a proactive Inspect/Maintain process will target selective vegetation removal for continued reliable system operation. This may include the extension of a cycle which will not exceed eight years. This process involves inspection of the vegetation to evaluate the extent of potential for vegetation to interfere with energized conductors. Factors to consider in the evaluation are the voltage and height of the conductor, the type of tree, its growth rate, and branching habit. Trees that will impact safety or reliability will be maintained to the Standard Specification.

Methods used to manage and control vegetation include manual control methods using hand-operated tools, mechanical control using equipment mounted saws, mowers or other devices, and various herbicide application techniques such as, selective basal herbicide applications, stem foliage applications and cut stubble applications.

Further detailed information regarding Met-Ed's vegetation management program may be found in the Vegetation Management Distribution Specifications.

Inspection Plan[1]

	Area	Inspections and Treatments Planned *Total Circuit Miles*	
		2017	2018
Met-Ed *11,489 total circuit miles*	Easton *1,441 total circuit miles*	288	288
	Hanover *1,965 total circuit miles*	393	393
	Lebanon *1,502 total circuit miles*	300	300
	Reading *3,155 total circuit miles*	631	631
	Stroudsburg *1,074 total circuit miles*	215	215
	York *2,352 total circuit miles*	470	470

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Distribution vegetation management activities are performed in accordance with the following:

- Generally accepted industry practices
- ANSI Z133.1 and A-300 Standards and according to the requirements given by OSHA and the National Electric Safety Code (NESC)

The standard specification seeks to control all vegetation in the space defined as the "distribution clearing zone". The distribution clearing zone is a corridor measured at a horizontal distance of fifteen feet on either side of the pole line or the established large tree edge, whichever is greater in width. The corridor is measured vertically to fifteen feet above the highest conductor attached to the pole or structure. In addition to the standard specification, Met-Ed may apply a practice described as "enhanced maintenance" to select line sections. This practice involves removing overhanging limbs beyond the prescribed fifteen feet as well as aggressive hazard tree mitigation.

[1] Subject to change

As part of Met-Ed's approach to improved tree related reliability, the Company continues to analyze the circuit electrical protection schemes and gives added attention to those line sections that serve high numbers of customers. While following the existing protection schemes, three distinct line sections have been identified and defined. Zone 1 is defined as the three-phase circuitry from the circuit breaker to the first protective device which serves the entire circuit customer load. Zone 2 is defined as the three-phase circuitry beyond the first protective device which typically serves a large percentage of the circuit customer load. Zone 3 is defined as all single phase and two-phase circuitry which serves smaller percentages of the circuit customer load.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(2). Pole Inspections. *Distribution poles shall be inspected at least as often as every 10 – 12 years except for the new southern yellow pine creosoted utility poles which shall be initially inspected within 25 years, then within 12 years annually after the initial inspection. Pole inspections must include:*

i. Drill tests at and below ground level
ii. A shell test
iii. Visual inspection for holes or evidence of insect infestation
iv. Visual inspection for evidence of unauthorized backfilling or excavation near the pole
v. Visual inspection for signs of lightning strikes
vi. A load calculation

Program Description

Met-Ed shall visually inspect distribution wood poles on a twelve-year cycle. The purpose for inspecting distribution wood poles is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the state regulatory agencies and the National Electrical Safety Code.

This preventative maintenance inspection for wood poles will include a visual inspection as well as hammer-sounding as needed. The inspection consists of the recording of abnormal conditions from the groundline to the top of the pole including but not limited to the following:

- Damage – broken or leaning
- Equipment – crossarms, insulators, conductors, oil leaking
- Testing for decayed internal wood

In addition to the visual inspection, poles showing incipient decay or poles that are thirty-five years old or older will be bored to further assess the condition of the pole. This inspection consists of the recording of tests performed and abnormal conditions detected including but not limited to the following:

- Boring – testing for internal decay
- Verification of shell thickness

Further detailed information regarding Met-Ed's inspection of wood poles may be found in the Distribution Inspection & Maintenance Practice – Wood Pole Groundline.

Inspection Plan[2]

	Area	Pole Inspections Planned *Number of Poles to Inspect* 2017	2018
Met-Ed *354,193 total poles*	Boyertown *17,454 total poles*	1,454	1,454
	Dillsburg *17,521 total poles*	1,460	1,460
	Easton *47,045 total poles*	3,920	3,920
	Gettysburg *16,957 total poles*	1,413	1,413
	Hamburg *21,076 total poles*	1,756	1,756
	Hanover *22,995 total poles*	1,916	1,916
	Lebanon *46,644 total poles*	3,887	3,887
	Reading *49,597 total poles*	4,133	4,133
	Stroudsburg *36,686 total poles*	3,057	3,057
	York *78,218 total poles*	6,518	6,518

Section 57.198(n)(3). Inspection Failure. *If a pole fails the groundline inspection and shows dangerous conditions that are an immediate risk to public or employee safety or conditions affecting the integrity of the circuit, then the pole shall be replaced within 30 days of the date of inspection.*

Corrective Maintenance

Wood poles and supporting structures with recorded defects that Met-Ed could expect to create an immediate risk to public or employee safety or affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

[2] Subject to change based on the addition or removal of equipment.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards set forth in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

The practice of performing wood pole inspections on a twelve year cycle is based on accepted electric utility practices. National Electrical Safety Code (NESC) Rule 12.121.A states "*lines and equipment shall be inspected at such intervals as experience has shown to be necessary.*" A periodicity of twelve years between inspections allows enough time for proper planning and remediation prior to any emergent problems having a negative impact on personal safety, equipment integrity or service reliability.

Regarding load calculations, Met-Ed's design personnel base line designs on FirstEnergy's Distribution Line Construction Standards and Distribution Engineering Practices. The Company's Construction Standards are based and updated each time an updated NESC Heavy Loading standard is issued. The majority of FirstEnergy's service territory lies within this zone and these standards provide basic guidance for most designs encountered by distribution line design personnel. All new facilities are in line with NESC Heavy Loading standard NESC C2-2012, Section 250. The Engineering Practices provide detailed guidance for both guying and pole loading to be used when designers encounter more complex design needs, again based on NESC Heavy Loading. Per the NESC, both of these resources include safety factors such that the deterioration of poles in service shall not reduce the strength capability of the pole below the required strength. Further, as the Company receives requests from other entities to attach their facilities to Met-Ed poles, an assessment of the pole's ability to accommodate the new strength requirement is performed.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(4). Distribution overhead line inspections. *Distribution lines shall be inspected by ground patrol a minimum of once every 1 – 2 years. A visual inspection must include checking for:*

i. Broken insulators
ii. Conditions that may adversely affect operation of the overhead distribution line
iii. Other conditions that may adversely affect operation of the overhead distribution line

Program Description

Met-Ed shall visually inspect overhead lines and equipment on a five-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code. This program shall be limited to overhead facilities.

Approximately one-fifth of all circuits will be inspected annually to levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage
- Switches
- Sectionalizers

Further detailed information regarding Met-Ed's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice – Overhead Circuits and Equipment.

Inspection Plan[3]

	Area	Overhead Line Inspections Planned *Number of Circuits to Inspect* 2017	2018
Met-Ed *766 total circuits*	Boyertown *33 total circuits*	8	4
	Dillsburg *19 total circuits*	0	4
	Easton *111 total circuits*	23	20
	Gettysburg *32 total circuits*	7	4
	Hamburg *24 total circuits*	8	10
	Hanover *60 total circuits*	12	16
	Lebanon *100 total circuits*	19	16
	Reading *154 total circuits*	57	15
	Stroudsburg *33 total circuits*	14	2
	York *200 total circuits*	38	36

Section 57.198(n)(5). Inspection Failure. *If critical maintenance problems are found that affect the integrity of the circuits, they shall be repaired or replaced no later than 30 days from discovery.*

Corrective Maintenance

Supporting structures with recorded defects that Met-Ed could reasonably expect to affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

[3] Subject to change based on the addition or removal of equipment.

Justification
The practice of performing overhead line inspections on a five-year cycle is based on accepted electric utility practices. National Electrical Safety Code (NESC) Rule 12.121.A states "*lines and equipment shall be inspected at such intervals as experience has shown to be necessary.*" A periodicity of five years between inspections has historically been utilized by Met-Ed and has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability.

In addition to an inspection every five years, there are several opportunities that allow Company personnel to view the overhead line facilities and identify any potential issues. Met-Ed's overhead line inspection program coincides with other equipment inspections, such as the annual recloser inspections. In order to address specific reliability concerns and to assess some worst performing circuit performance, additional circuit assessments are performed in addition to Met-Ed's five-year inspection program. Any emergent priority overhead line problems identified during these other inspections are similarly addressed in a timely manner.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(6). Distribution transformer inspections. *Overhead distribution transformers shall be visually inspected as part of the distribution line inspection every 1 – 2 years. Above-ground pad-mounted transformers shall be inspected at least as often as every 5 years and below-ground transformers shall be inspected at least as often as every 8 years. An inspection must include checking for:*

i. Rust, dents or other evidence of contact
ii. Leaking oil
iii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
iv. Unauthorized excavation or changes in grade near the transformer

Program Description

Met-Ed visually inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a five-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code.

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured
- Equipment condition – visually inspect baffle

Further detailed information regarding Met-Ed's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Inspection Plan[4]

	Area	Type (Total Number of Transformers)	Transformer Inspections Planned Total transformers to inspect 2017	2018
Met-Ed *182,673 total transformers*	Boyertown *15,190 total transformers*	Overhead Transformers *11,083 total transformers*	1,039	1,325
		Above-Ground Pad-mounted *4,008 total transformers*	801	801
		Below-Ground Transformers *99 total transformers*	19	19
	Dillsburg *11,599 total transformers*	Overhead Transformers *8,810 total transformers*	0	1,093
		Above-Ground Pad-mounted *2,727 total transformers*	545	545
		Below-Ground Transformers *62 total transformers*	12	12
	Easton *17,933 total transformers*	Overhead Transformers *13,762 total transformers*	2,806	2,400
		Above-Ground Pad-mounted *3,915 total transformers*	783	783
		Below-Ground Transformers *256 total transformers*	51	51
	Gettysburg *7,612 total transformers*	Overhead Transformers *6,255 total transformers*	338	1,234
		Above-Ground Pad-mounted *1,324 total transformers*	264	264
		Below-Ground Transformers *33 total transformers*	6	6
	Hamburg *10,883 total transformers*	Overhead Transformers *8,494 total transformers*	2,333	3,167
		Above-Ground Pad-mounted *2,289 total transformers*	457	457
		Below-Ground Transformers *100 total transformers*	20	20
	Hanover *15,694 total transformers*	Overhead Transformers *11,178 total transformers*	893	4,364
		Above-Ground Pad-mounted *4,420 total transformers*	884	884
		Below-Ground Transformers *96 total transformers*	19	19
	Lebanon *22,497 total transformers*	Overhead Transformers *16,602 total transformers*	2,557	4,364
		Above-Ground Pad-mounted *5,507 total transformers*	1,101	1,101
		Below-Ground Transformers *388 total transformers*	77	77

[4] Subject to change based on the addition or removal of equipment.

	Area	Type (Total Number of Transformers)	Transformer Inspections Planned Total transformers to inspect 2017	2018
	Reading 23,613 total transformers	Overhead Transformers 17,597 total transformers	3,478	2,359
		Above-Ground Pad-mounted 5,726 total transformers	1,145	1,145
		Below-Ground Transformers 290 total transformers	58	58
	Stroudsburg 13,942 total transformers	Overhead Transformers 11,861 total transformers	4,376	119
		Above-Ground Pad-mounted 2,013 total transformers	402	402
		Below-Ground Transformers 68 total transformers	13	13
	York 43,710 total transformers	Overhead Transformers 30,695 total transformers	4,773	7,113
		Above-Ground Pad-mounted 12,618 total transformers	2,523	2,523
		Below-Ground Transformers 397 total transformers	79	79

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

The practice of performing distribution overhead transformer and above-ground transformers on a five-year cycle and below-ground transformers on an eight-year cycle is based on accepted electric utility practices and the experience of Met-Ed. National Electrical Safety Code (NESC) Rule 12.121.A states *"lines and equipment shall be inspected at such intervals as experience has shown to be necessary."*

The above periodicities between inspections have proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(7). Recloser inspections. *Three-phase reclosers shall be inspected on a cycle of 8 years or less. Single-phase reclosers shall be inspected as part of the EDC's individual distribution line inspection plan.*

Program Description

Met-Ed visually inspects distribution line reclosers annually. The purpose for inspecting distribution line reclosers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code.

The annual preventative maintenance consists of counter readings and field inspection. The counter readings are obtained to assess system performance based on the number of operations. The field inspection includes but is not limited to the following:

- Type of recloser and current rating
- Counter reading
- Condition – rust, dents, physical damage, leaks, lightning damage
- Equipment – surge arresters, tank-ground connections, by-pass switches, control battery, pole
- Grounds – damage, condition

Further detailed information regarding Met-Ed's inspection of reclosers may be found in the Distribution Inspection & Maintenance Practice – Line Reclosers.

Inspection Plan[5]

	Area	Type	Recloser Inspections Planned *Total Number of Reclosers to Inspect* 2017	2018
Met-Ed *1,102 total reclosers*	Boyertown *58 total reclosers*	Single Phase *22 total reclosers*	22	22
		Three Phase *36 total reclosers*	36	36
	Dillsburg *76 total reclosers*	Single Phase *31 total reclosers*	31	31
		Three Phase *45 total reclosers*	45	45
	Easton *102 total reclosers*	Single Phase *10 total reclosers*	10	10
		Three Phase *92 total reclosers*	92	92
	Gettysburg *54 total reclosers*	Single Phase *16 total reclosers*	16	16
		Three Phase *38 total reclosers*	38	38
	Hamburg *66 total reclosers*	Single Phase *32 total reclosers*	32	32
		Three Phase *34 total reclosers*	34	34
	Hanover *97 total reclosers*	Single Phase *39 total reclosers*	39	39
		Three Phase *58 total reclosers*	58	58
	Lebanon *186 total reclosers*	Single Phase *80 total reclosers*	80	80
		Three Phase *106 total reclosers*	106	106
	Reading *125 total reclosers*	Single Phase *48 total reclosers*	48	48
		Three Phase *77 total reclosers*	77	77
	Stroudsburg *81 total reclosers*	Single Phase *9 total reclosers*	9	9
		Three Phase *72 total reclosers*	72	72
	York *257 total reclosers*	Single Phase *70 total reclosers*	70	70
		Three Phase *187 total reclosers*	187	187

[5] Subject to change based on the addition or removal of equipment.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

The practice of performing annual recloser inspections is based on accepted electric utility practices and the experience of Met-Ed. National Electrical Safety Code (NESC) Rule 12.121.A states *"lines and equipment shall be inspected at such intervals as experience has shown to be necessary."* A periodicity of one year between inspections has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(8). Substation inspections. *Substation equipment, structures and hardware shall be inspected on a cycle of 5 weeks or less.*

Program Description

Met-Ed inspects its distribution substations twelve times annually. The purpose of these monthly inspections of the distribution substations is to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

There are three types of the preventative maintenance inspections that are performed at Met-Ed substations during a twelve-month period. The chart below illustrates the type of inspection performed each month[6]:

Inspection Type	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Safety and Security of Facilities/Visual Equipment Inspection/Reporting and Recording of Deficiencies and Relay Operations (Class C)	X	X	X	X	X	X	X	X	X	X	X	X
Safety/Security, Visual Equipment Inspection and Record Readings (Class B)			X			X			X			X
Seasonal Maintenance (Class A)			X						X			

The following is a summary of each type of inspection that is conducted at Met-Ed substations:

1. *Safety and Security of Facilities and Visual Equipment Inspection of Electrical Equipment and Reporting/Recording Identified Deficiencies and Relay Operations (Class C).* Monthly visual inspection of substation equipment, structures and hardware that also includes the recording of abnormal conditions or deficiencies. This inspection may include but is not limited to the following:
   - General condition – read and record ambient temperature
   - Perimeter fence inspection (gate locks, fence and gate grounds, warning signs
   - Yard and facility inspection (equipment grounds, vegetation condition, general yard condition, equipment condition, oil levels and leaks, structure/hardware condition, hotspots, conductors/switches/connections)
   - Building inspection (security, integrity, indication lights)
   - Visual inspection of major equipment (power transformers, circuit breakers, instrument transformers, etc.)
   - Relays, electronic controls, and panel meters for alarms and targets
   - Batteries and chargers

2. *Safety and Security, Visual Equipment Inspection and Record Readings (Class B).* In addition to the safety and security and visual equipment inspection that is performed monthly, every three months an additional visual inspection that

[6] For illustrative purposes only.

includes the recording of readings is performed. This inspection may include but is not limited to all items listed under the Class C inspection as well as the following types of substation equipment:

- *Recording of amps and load readings*
- Recording of counter and gauge readings
- Inspection/test of carrier communication equipment
- Inspection of microwave/radio sites and engine generators – generator alarms and battery

3. *Seasonal Maintenance - Summer and Winter Readiness (Class A).* In addition to the monthly and three-month inspections, every six months a more comprehensive inspection of the substation and substation equipment is performed. This inspection may include but is not limited to all items listed under the Class C and B inspections as well as the following types of substation equipment:
   - Servicing fire protection equipment
   - Servicing eye wash stations
   - Yard lighting
   - Servicing filters and HVAC systems
   - Servicing of equipment cabinet heaters
   - Servicing engine generators

Further detailed information regarding Met-Ed's inspection of substations may be in found Section 20P – Substation Patrol Inspection of the Substation Maintenance Practice and Methods.

Inspection Plan[7]

	Area	Substation Inspections Planned 2017	2018
Met-Ed *211 total substations*	Easton *45 substations*	540	540
	Lebanon *29 substations*	348	348
	Reading *61 substations*	732	732
	York *76 substations*	912	912

[7] Subject to change based on the addition or removal of equipment.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Providing a trained, physical presence within the substation on a regular, periodic basis has proven very successful in detecting the degradation of facilities not always captured by existing local and remote surveillance and monitoring tools. A periodicity of one month between inspections has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on person safety, equipment integrity or service reliability.

As a result of advancement in today's technologies, substation equipment inspections have been refined to leverage these advancements in order to ensure the highest levels of safety and reliability of substations and substation equipment in a more efficient manner. With today's technology, equipment inspections along with patrol inspection results can now be captured by field personnel on site and integrated and tracked electronically in the maintenance database. Enhanced software programs allow condition-based maintenance to target specific equipment and trigger maintenance based on equipment condition. The counter readings that are obtained during the three-month inspection (Class B) are then utilized to trigger this condition-based maintenance. Predictive and condition-based programs not only extend the operating life of the equipment, they also optimize the necessary maintenance interval, improve service reliability, and reduce down time that is typically experienced when equipment is taken off line which reduces exposure of the grid, all with consistency and efficiency.

As part of this program, monthly patrol inspections of distribution substations will continue to be performed in order to focus on safety and security as well as in identifying equipment deficiencies that could have a negative impact on reliability. Load and counter readings will be recorded every three months in order to allow local engineering to conduct planning and load study activities. A seasonal inspection occurs during the spring and fall.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

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9/14/22 IW
RESPONDENT
Exhibit-6

FirstEnergy

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September 29, 2017

RECEIVED

SEP 29 2017

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

VIA UNITED PARCEL SERVICE

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

Re: ***Biennial Inspection, Maintenance, Repair and Replacement Plan – Metropolitan Edison Company for the period January 1, 2019 – December 31, 2020***
Docket No. M-2009-2094773

Dear Secretary Chiavetta:

In accordance with 52 Pa. Code § 57.198, enclosed for filing on behalf of Metropolitan Edison Company ("Met-Ed") is an original and one copy of the Biennial Inspection, Maintenance, Repair and Replacement Plan (the "Plan") for the period January 1, 2019 through December 31, 2020. Please date stamp the extra copy and return it in the postage-prepaid envelope provided.

This Plan is designed consistent with the guidelines established by the National Electric Safety Code, the Codes and Practices of the Institute of Electrical and Electronic Engineers, Federal Energy Regulatory Commission Regulations, and the American National Standards Institute, Inc. The Plan also has been designed to reduce the risk of outages on Met-Ed's system and form the basis of its inspection and maintenance goals and objectives as outlined in Met-Ed's annual and quarterly reliability reports filed with the Pennsylvania Public Utility Commission ("Commission").

Met-Ed respectfully requests that the Commission accept its Biennial Inspection, Maintenance, Repair and Replacement Plan. If you have any questions, please contact me or Tiffanne Cowan at (330) 761-4474.

Sincerely,

Tori L. Giesler

dlm
Enclosure

c: D. Searfoorce

Met-Ed
A FirstEnergy Company

Biennial Inspection, Maintenance, Repair and Replacement Plan of Metropolitan Edison Company ("Met-Ed")

For the period of January 1, 2019 – December 31, 2020

Submitted by:
Linda L. Moss
President, Pennsylvania Operations
800 Cabin Hill Drive
Greensburg, PA 15601
Email: lmoss@firstenergycorp.com

Met-Ed
A FirstEnergy Company

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Met-Ed
A FirstEnergy Company

Revisions to Approved Plan

The Commission accepted Metropolitan Edison Company's ("Met-Ed" or "Company") current Biennial Inspection, Maintenance, Repair and Replacement Plan ("I&M Plan") for 2017 and 2018 on December 15, 2015. Met-Ed's proposed I&M Plan for 2019 and 2020 is consistent with its previously approved plan for 2017 and 2018 and proposes no substantive changes to its inspection cycles or plan components.

Section 57.198(n)(1). Vegetation Management. *The statewide minimum inspection and treatment cycle for vegetation management is between 4-8 years for distribution facilities. An EDC shall submit a condition-based plan for vegetation management for its distribution system facilities explaining its treatment cycle.*

Program Description

Met-Ed performs vegetation management on its distribution circuits to promote the continued safe and reliable operation of its distribution system. Vegetation management may be performed utilizing one of three methods: standard specification, inspect and maintain, or enhanced specification. The standard specification for vegetation management is designed to support line reliability, maintain access, make repairs, or restore service and to support safe and reliable service. The standard specification prunes vegetation to achieve five years of clearance and includes the removal of selected incompatible trees within the clearing zone corridor, removal of certain defective limbs that are overhanging primary conductors, controlling selected incompatible brush mechanically and/or using herbicide, and removal of off-corridor priority trees that are dead, dying, diseased, and leaning or significantly encroaching the corridor.

Portions of a circuit that experience high customer interruption minutes due to vegetation-caused outages may be targeted to receive enhanced specification vegetation removal techniques. This includes the removal of certain healthy limbs which overhang primary conductors based on tree species and condition.

For portions of a circuit that have not experienced significant reliability issues due to vegetation-caused outages, a proactive inspect and maintain process will target selective vegetation removal for continued reliable system operation. This may include the extension of a cycle, not to exceed a total of eight years. This process involves inspection of the vegetation to evaluate the extent of potential for vegetation to interfere with energized conductors. Factors to consider in the evaluation are the voltage and height of the conductor, the type of tree, its growth rate, and branching habit. Trees that will impact safety or reliability will be maintained to the standard specification.

Methods used to manage and control vegetation include manual control methods using hand-operated tools, mechanical control using equipment-mounted saws, mowers or other devices, and various herbicide application techniques such as, selective basal herbicide applications, stem foliage applications and cut stubble applications.

Further detailed information regarding Met-Ed's vegetation management program may be found in the Vegetation Management Distribution Specifications.

Inspection Plan[1]

Area		Inspections and Treatments Planned *(Total Circuit Miles)*	
		2019	2020
Met-Ed *11,456 total circuit miles*	Easton *1,415 total circuit miles*	283	283
	Hanover *1,972 total circuit miles*	394	394
	Lebanon *1,500 total circuit miles*	300	300
	Reading *3,153 total circuit miles*	631	631
	Stroudsburg *1,067 total circuit miles*	213	213
	York *2,349 total circuit miles*	470	470

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Distribution vegetation management activities are performed in accordance with the following:

- Accepted industry practices
- ANSI Z133.1 and A-300 Standards and according to the requirements given by the Occupational Safety and Health Administration ("OSHA") and the National Electrical Safety Code ("NESC")

All vegetation management activities are designed to achieve cycle length clearances, regardless of method employed. The standard specification seeks to control all vegetation in the space defined as the distribution clearing zone. The distribution clearing zone is the right-of-way corridor measured at a horizontal distance of fifteen feet on either side of the pole line or the established large tree edge, whichever is greater in width. The corridor is measured vertically to fifteen feet above the highest conductor attached to the pole or structure. Enhanced specification techniques may be applied to select line sections. This

[1] The total number of circuit miles to be trimmed in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

practice involves the removal of overhanging limbs outside the right-of-way as well as aggressive mitigation of hazard trees.

As part of Met-Ed's approach to improving tree related reliability, the Company continues to analyze circuit electrical protection schemes and gives added attention to select line sections, such as those that serve high numbers of customers. Three distinct line sections have been identified and defined under existing protection schemes, as shown in the table below.

Zone 1	Zone 2	Zone 3
Three-phase circuitry from the circuit breaker to the first protective device	Three-phase circuitry beyond the first protective device	Single-phase and two-phase circuitry
Serves entire customer load	Serves a large percentage of customer load	Serves smallest percentage of customer load

In addition to Met-Ed's Distribution Vegetation Management Program, there are other distribution equipment inspection programs (e.g., Distribution Pole Inspections, Distribution Overhead Line Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include vegetation management situations that warrant further investigation.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(2). Pole Inspections. *Distribution poles shall be inspected at least as often as every 10 – 12 years except for the new southern yellow pine creosoted utility poles which shall be initially inspected within 25 years, then within 12 years annually after the initial inspection. Pole inspections must include:*

i. Drill tests at and below ground level
ii. A shell test
iii. Visual inspection for holes or evidence of insect infestation
iv. Visual inspection for evidence of unauthorized backfilling or excavation near the pole
v. Visual inspection for signs of lightning strikes
vi. A load calculation

Program Description

Met-Ed shall visually inspect distribution wood poles on a twelve-year cycle. The purpose for inspecting distribution wood poles is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the state regulatory agencies and the National Electrical Safety Code ("NESC").

This preventative maintenance inspection for wood poles will include a visual inspection as well as hammer-sounding as needed. The inspection consists of the recording of abnormal conditions from the groundline to the top of the pole including but not limited to the following:

- Damage – broken or leaning
- Equipment – crossarms, insulators, conductors, oil leaking
- Testing for decayed internal wood

In addition to the visual inspection, poles showing incipient decay or poles that are thirty-five years old or older will be bored to further assess the condition of the pole. This inspection consists of the recording of tests performed and abnormal conditions detected including but not limited to the following:

- Boring – testing for internal decay
- Verification of shell thickness

Further detailed information regarding Met-Ed's inspection of wood poles may be found in the Distribution Inspection & Maintenance Practice – Wood Pole Groundline.

Inspection Plan[2]

Area		Pole Inspections Planned *(Number of Poles)*	
		2019	2020
Met-Ed *337,064 total poles*	Boyertown *17,691 total poles*	1,276	0
	Dillsburg *16,450 total poles*	0	0
	Easton *46,127 total poles*	3,533	3,195
	Gettysburg *16,266 total poles*	0	297
	Hamburg *19,897 total poles*	5,551	4,020
	Hanover *21,470 total poles*	5,389	5,353
	Lebanon *43,140 total poles*	5,572	6,442
	Reading *46,429 total poles*	2,966	8,810
	Stroudsburg *35,903 total poles*	4,654	0
	York *73,691 total poles*	5,393	2,464

Section 57.198(n)(3). Inspection Failure. *If a pole fails the groundline inspection and shows dangerous conditions that are an immediate risk to public or employee safety or conditions affecting the integrity of the circuit, then the pole shall be replaced within 30 days of the date of inspection.*

Corrective Maintenance

Wood poles and supporting structures with recorded defects that Met-Ed could expect to create an immediate risk to public or employee safety or affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

[2] The total number of poles to be inspected in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards set forth in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Met-Ed's twelve-year inspection cycle for wood poles is based on accepted electric utility practices. The NESC Rule 12.121.A states "*Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary.*" Twelve years between inspections allows enough time for proper planning and remediation prior to any problems negatively impacting personal safety, equipment integrity or service reliability.

Rather than conducting load calculations as part of each pole inspection, Met-Ed follows the practice of creating base line designs using FirstEnergy's Distribution Line Construction Standards and Distribution Engineering Practices. FirstEnergy's Construction Standards are based on and updated each time a revised NESC Heavy Loading Standard is issued. The majority of FirstEnergy's service territory lies within the heavy loading zone and these standards provide basic guidance for most designs encountered by distribution line design personnel. All new facilities are designed consistent with NESC Heavy Loading Standard NESC C2-2012, Section 250. The Engineering Practices provide detailed guidance for both guying and pole loading, and additional engineering support is available to designers when more complex calculations are needed. Per the NESC, both of these resources include safety factors such that the deterioration of poles in service shall not reduce the strength capability of the pole below the required strength. Further, as the Company receives requests from other entities to attach their facilities to Met-Ed poles, an assessment, ranging from a visual inspection to a full strength analysis, is performed based on pole attachment guidelines, experience and the situation encountered.

In addition to Met-Ed's Distribution Pole Inspection Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Overhead Line Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include distribution pole situations that warrant further investigation.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(4). Distribution overhead line inspections. *Distribution lines shall be inspected by ground patrol a minimum of once every 1 – 2 years. A visual inspection must include checking for:*

i. Broken insulators
ii. Conditions that may adversely affect operation of the overhead distribution line
iii. Other conditions that may adversely affect operation of the overhead distribution line

Program Description

Met-Ed shall visually inspect distribution overhead lines and equipment on a five-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code ("NESC"). This program shall be limited to overhead facilities.

Circuits will be inspected on a five-year cycle to help levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage
- Switches
- Sectionalizers

Further detailed information regarding Met-Ed's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice – Overhead Circuits and Equipment.

Inspection Plan[3]

Area		Overhead Line Inspections Planned *(Number of Circuits)*	
		2019	2020
Met-Ed *779 Total Circuits*	Boyertown *40 total circuits*	11	8
	Dillsburg *19 total circuits*	0	6
	Easton *115 total circuits*	26	33
	Gettysburg *32 total circuits*	7	14
	Hamburg *25 total circuits*	5	2
	Hanover *60 total circuits*	18	7
	Lebanon *100 total circuits*	20	26
	Reading *151 total circuits*	34	28
	Stroudsburg *34 total circuits*	8	6
	York *203 total circuits*	44	47

Section 57.198(n)(5). Inspection Failure. *If critical maintenance problems are found that affect the integrity of the circuits, they shall be repaired or replaced no later than 30 days from discovery.*

Corrective Maintenance

Supporting structures with recorded defects that Met-Ed could reasonably expect to affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n).*

[3] The total number of circuits to be inspected in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.

Justification

Met-Ed's five-year inspection cycle for overhead lines is based on accepted electric utility practices. The NESC Rule 12.121.A states "*Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary.*" Met-Ed's experience has shown the five-year inspection cycle to be successful in addressing problems in a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Distribution Overhead Line Inspection Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Pole Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. Further, field personnel perform circuit assessments to address specific reliability concerns and to assess worst performing circuit performance. Lastly, Met-Ed may use infrared thermography on an as-needed basis on certain worst performing circuits or while performing circuit rehabilitation.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(6). Distribution transformer inspections. *Overhead distribution transformers shall be visually inspected as part of the distribution line inspection every 1 – 2 years. Above-ground pad-mounted transformers shall be inspected at least as often as every 5 years and below-ground transformers shall be inspected at least as often as every 8 years. An inspection must include checking for:*

i. Rust, dents or other evidence of contact
ii. Leaking oil
iii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
iv. Unauthorized excavation or changes in grade near the transformer

Program Description

Met-Ed visually inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a five-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code ("NESC").

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured
- Equipment condition – visually inspect baffle

Further detailed information regarding Met-Ed's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Inspection Plan[4]

	Area	Type (Total Number of Transformers)	Transformer Inspections Planned (Total transformers) 2019	2020
Met-Ed *183,826 total transformers*	Boyertown *15,309 total transformers*	Overhead Transformers *11,156 total transformers*	2,029	3,855
		Above-Ground Pad-mounted *4,057 total transformers*	1,324	1,409
		Below-Ground Transformers *96 total transformers*	35	31
	Dillsburg *11,710 total transformers*	Overhead Transformers *8,885 total transformers*	134	3,444
		Above-Ground Pad-mounted *2,777 total transformers*	18	1,033
		Below-Ground Transformers *48 total transformers*	1	14
	Easton *18,043 total transformers*	Overhead Transformers *13,821 total transformers*	3,000	3,364
		Above-Ground Pad-mounted *3,979 total transformers*	803	1,576
		Below-Ground Transformers *243 total transformers*	97	75
	Gettysburg *7,678 total transformers*	Overhead Transformers *6,317 total transformers*	1,503	2,924
		Above-Ground Pad-mounted *1,330 total transformers*	504	519
		Below-Ground Transformers *31 total transformers*	16	8
	Hamburg *10,947 total transformers*	Overhead Transformers *8,566 total transformers*	2,049	466
		Above-Ground Pad-mounted *2,292 total transformers*	607	256
		Below-Ground Transformers *89 total transformers*	28	1
	Hanover *15,800 total transformers*	Overhead Transformers *11,240 total transformers*	3,094	1,966
		Above-Ground Pad-mounted *4,473 total transformers*	1,083	1,338
		Below-Ground Transformers *87 total transformers*	11	22

[4] The total number of distribution transformers to be inspected in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

	Area	Type (Total Number of Transformers)	Transformer Inspections Planned (Total transformers) 2019	2020
Met-Ed *183,826 total transformers*	Lebanon *22,764 total transformers*	Overhead Transformers *16,796 total transformers*	3,337	3,889
		Above-Ground Pad-mounted *5,593 total transformers*	1,257	943
		Below-Ground Transformers *375 total transformers*	56	67
	Reading *23,693 total transformers*	Overhead Transformers *17,647 total transformers*	3,179	4,072
		Above-Ground Pad-mounted *5,754 total transformers*	879	1,659
		Below-Ground Transformers *292 total transformers*	67	61
	Stroudsburg *13,996 total transformers*	Overhead Transformers *11,910 total transformers*	4,173	914
		Above-Ground Pad-mounted *2,018 total transformers*	595	134
		Below-Ground Transformers *68 total transformers*	1	10
	York *43,886 total transformers*	Overhead Transformers *30,845 total transformers*	6,823	6,522
		Above-Ground Pad-mounted *12,670 total transformers*	3,241	3,327
		Below-Ground Transformers *371 total transformers*	171	46

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Met-Ed's five- and eight-year inspection cycles for distribution transformers are based on accepted electric utility practices and the experience of Met-Ed. The NESC Rule 12.121.A states *"Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary."*

Met-Ed's experience has proven the inspection cycles above to be successful in addressing problems in a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Distribution Transformer Inspections Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management,

Distribution Pole Inspections, and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include distribution transformer situations that warrant further investigation.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(7). Recloser inspections. *Three-phase reclosers shall be inspected on a cycle of 8 years or less. Single-phase reclosers shall be inspected as part of the EDC's individual distribution line inspection plan.*

Program Description

Met-Ed visually inspects distribution line reclosers annually. The purpose for inspecting distribution line reclosers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the requirements of state regulatory agencies and the National Electrical Safety Code ("NESC").

The annual preventative maintenance consists of counter readings and field inspection. The counter readings are obtained to assess system performance based on the number of operations. The field inspection includes but is not limited to the following:

- Type of recloser and current rating
- Counter reading
- Condition – rust, dents, physical damage, leaks, lightning damage
- Equipment – surge arresters, tank-ground connections, by-pass switches, control battery, pole
- Grounds – damage, condition

Further detailed information regarding Met-Ed's inspection of reclosers may be found in the Distribution Inspection & Maintenance Practice – Line Reclosers.

Inspection Plan[5]

	Area	Type	Recloser Inspections Planned (Total Number of Reclosers) 2019	2020
Met-Ed *1,108 total reclosers*	Boyertown *62 total reclosers*	Single Phase *22 total reclosers*	22	22
		Three Phase *40 total reclosers*	40	40
	Dillsburg *79 total reclosers*	Single Phase *32 total reclosers*	32	32
		Three Phase *47 total reclosers*	47	47
	Easton *108 total reclosers*	Single Phase *22 total reclosers*	22	22
		Three Phase *86 total reclosers*	87	87
	Gettysburg *55 total reclosers*	Single Phase *16 total reclosers*	16	16
		Three Phase *39 total reclosers*	39	39
	Hamburg *67 total reclosers*	Single Phase *37 total reclosers*	37	37
		Three Phase *30 total reclosers*	30	30
	Hanover *88 total reclosers*	Single Phase *33 total reclosers*	33	33
		Three Phase *55 total reclosers*	55	55
	Lebanon *184 total reclosers*	Single Phase *84 total reclosers*	84	84
		Three Phase *100 total reclosers*	100	100
	Reading *131 total reclosers*	Single Phase *55 total reclosers*	55	55
		Three Phase *76 total reclosers*	76	76
	Stroudsburg *83 total reclosers*	Single Phase *12 total reclosers*	12	12
		Three Phase *71 total reclosers*	71	71
	York *251 total reclosers*	Single Phase *72 total reclosers*	72	72
		Three Phase *179 total reclosers*	179	179

[5] The total number of recloser units to be inspected in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Met-Ed's annual inspection cycle for reclosers is based on accepted electric utility practices and the experience of Met-Ed. The NESC Rule 12.121.A states *"Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary."* One year between inspection cycles has proven to be successful in addressing problems in a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Recloser Inspections Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Pole Inspections, Distribution Overhead Line Inspections, and Distribution Transformer Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include recloser equipment situations that warrant further investigation.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Section 57.198(n)(8). Substation inspections. *Substation equipment, structures and hardware shall be inspected on a cycle of 5 weeks or less.*

Program Description

Met-Ed inspects its distribution substations twelve times annually. The purpose of these monthly inspections of the distribution substations is to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

There are three types of the preventative maintenance inspections that are performed at Met-Ed substations during a twelve-month period. The chart below illustrates the type of inspection performed each month[6]:

Inspection Type	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Safety and Security of Facilities/Visual Equipment Inspection/Reporting and Recording of Deficiencies and Relay Operations (Class C)	X	X	X	X	X	X	X	X	X	X	X	X
Safety/Security, Visual Equipment Inspection and Record Readings (Class B)			X			X			X			X
Seasonal Maintenance (Class A)			X						X			

The following is a summary of each type of inspection that is conducted at Met-Ed substations:

1. *Safety and Security of Facilities and Visual Equipment Inspection of Electrical Equipment and Reporting/Recording Identified Deficiencies and Relay Operations (Class C).* Monthly visual inspection of substation equipment, structures and hardware that also includes the recording of abnormal conditions or deficiencies. This inspection may include but is not limited to the following:
   - General condition – read and record ambient temperature
   - Perimeter fence inspection (gate locks, fence and gate grounds, warning signs
   - Yard and facility inspection (equipment grounds, vegetation condition, general yard condition, equipment condition, oil levels and leaks, structure/hardware condition, hotspots, conductors/switches/connections)
   - Building inspection (security, integrity, indication lights)
   - Visual inspection of major equipment (power transformers, circuit breakers, instrument transformers, etc.)
   - Relays, electronic controls, and panel meters for alarms and targets
   - Batteries and chargers

2. *Safety and Security, Visual Equipment Inspection and Record Readings (Class B).* In addition to the safety and security and visual equipment inspection that is performed monthly, every three months an additional visual inspection that

[6] For illustrative purposes only.

includes the recording of readings is performed. This inspection may include but is not limited to all items listed under the Class C inspection as well as the following types of substation equipment:

- Recording of amps and load readings
- Recording of counter and gauge readings
- Inspection/test of carrier communication equipment
- Inspection of microwave/radio sites and engine generators – generator alarms and battery

3. *Seasonal Maintenance - Summer and Winter Readiness (Class A).* In addition to the monthly and three-month inspections, every six months a more comprehensive inspection of the substation and substation equipment is performed. This inspection may include but is not limited to all items listed under the Class C and B inspections as well as the following types of substation equipment:
   - Servicing fire protection equipment
   - Servicing eye wash stations
   - Yard lighting
   - Servicing filters and HVAC systems
   - Servicing of equipment cabinet heaters
   - Servicing engine generators

Further detailed information regarding Met-Ed's inspection of substations may be in found Section 20P – Substation Patrol Inspection of the Substation Maintenance Practice and Methods.

Inspection Plan[7]

Area		Substation Inspections Planned *(Number of Substations)* 2019	2020
Met-Ed *211 total substations*	Easton *45 substations*	540	540
	Lebanon *29 substations*	348	348
	Reading *61 substations*	732	732
	York *76 substations*	912	912

[7] The total number of substations to be inspected in 2019 and 2020 was based on the current system configuration (as of 2017) and thus is subject to change by the time the 2019 and 2020 plans commence.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Patrol inspections of distribution substations are performed on a monthly, quarterly and semi-annual basis, with a tiered approach to preventative maintenance. This tiered approach has proven effective in addressing emerging problems and allows for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

Monthly inspections ensure a trained, physical presence within the substation. Frequent, in-person inspections have been effective in detecting the degradation of facilities not always captured by existing local and remote surveillance and monitoring tools. In addition to visual inspections, load and counter readings are recorded every three months to allow local engineering to conduct planning and load studies. Finally, an intensive inspection is conducted two times a year, in spring and fall.

Advancements in technology have refined how substation equipment inspections are performed, and those advancements have been leveraged to ensure the highest levels of safety and reliability of the substations and substation equipment. For example, results from equipment and patrol inspections are captured by field personnel on site and entered directly into the maintenance database where they can be tracked. Through the use of historical inspection data and enhanced software, Met-Ed is able to target specific equipment and trigger maintenance based on equipment condition. For example, counter readings that are obtained during the three-month inspection cycle are used to trigger condition-based maintenance. Both predictive and condition-based programs extend the operating life of the equipment. They also optimize the necessary maintenance interval, improve service reliability, and reduce downtime that is typically experienced when equipment is taken off line which reduces exposure of the grid, all with consistency and efficiency.

Section 57.198(m). Record Keeping. *Maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

9/14/22 IW
RESPONDENT
Exhibit-7

FirstEnergy

Teresa K. Harrold, Esq.
(610) 921-6783
(330) 315-9263 (Fax)

M-2009-2094773

October 1, 2019

VIA UPS OVERNIGHT DELIVERY

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

Re: Biennial Inspection, Maintenance, Repair and Replacement Plan – Metropolitan Edison Company for the period January 1, 2021 – December 31, 2022
Docket No.

Dear Secretary Chiavetta:

In accordance with 52 Pa. Code § 57.198, enclosed for filing on behalf of Metropolitan Edison Company ("Met-Ed") is an original and one copy of the Biennial Inspection, Maintenance, Repair and Replacement Plan (the "Plan") for the period January 1, 2021 through December 31, 2022. Please date stamp the extra copy and return it in the postage-prepaid envelope provided.

This Plan is designed consistent with the guidelines established by the National Electric Safety Code, the Codes and Practices of the Institute of Electrical and Electronic Engineers, Federal Energy Regulatory Commission Regulations, and the American National Standards Institute, Inc. The Plan also has been designed to reduce the risk of outages on Met-Ed's system and form the basis of its inspection and maintenance goals and objectives as outlined in Met-Ed's annual and quarterly reliability reports filed with the Pennsylvania Public Utility Commission ("Commission").

Met-Ed respectfully requests that the Commission accept its Biennial Inspection, Maintenance, Repair and Replacement Plan. If you have any questions, please contact me or Laurel Klingensmith at (330) 374-6672.

Very truly yours,

Teresa K. Harrold

kbw
Enclosure

c: D. Searforce

Met-Ed
A FirstEnergy Company

Biennial Inspection, Maintenance, Repair and Replacement Plan for Metropolitan Edison Company

For the period of January 1, 2021 – December 31, 2022

RECEIVED
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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Submitted by:
Scott R. Wyman
President, Pennsylvania Operations
800 Cabin Hill Drive
Greensburg, PA 15601
Email: wymans@firstenergycorp.com

Met-Ed
A FirstEnergy Company

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Met-Ed
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Introduction

Pursuant to 52 Pa. Code § 57.198(a), every two years an electric distribution company shall file with the Pennsylvania Public Utility Commission ("Commission") a biennial plan for the periodic inspection, maintenance, repair and replacement of its facilities. Metropolitan Edison Company ("Met-Ed" or "Company") hereby submits its Biennial Inspection, Maintenance, Repair and Replacement Plan ("I&M Plan") for the period January 1, 2021 through December 31, 2022 in accordance with the relevant parts of 52 Pa. Code § 57.198.

System Assessment

Met-Ed serves more than 565,000 Pennsylvania customers and the service territory covers more than 3,000 square miles. From the physical field employees up to and including top management, Met-Ed is committed to providing customers with safe and reliable electric service. Methods to improve the efficiency, adequacy and reliability of the distribution system are a continual focus and every employee has an investment in each of the Company's respective reliability metrics. In addition to the I&M Plan, Met-Ed utilizes core programs to support cost-effective and reliable service. These programs include, but are not limited to:

- Vegetation Management
  - In response to damage caused by the Emerald Ash Borer, a program to proactively remove Ash Trees off right-of-way was implemented.
  - Post-storm vegetation circuit patrols target the areas with high tree-related outages. These patrols identify trees damaged in a storm that may eventually lead to a future outage. Once identified, the tree is removed. In addition, damaged equipment identified as a part of the patrol is repaired or replaced.
- Customers Experiencing Multiple Interruptions ("CEMI")
  - The CEMI program is aimed to reduce frequent or repeated outages for affected clusters of customers or frequently operated devices.
- Load Forecasting and Distribution Planning
  - The load forecasting application is used to estimate future substation and circuit loading based upon historical load data and the planning criteria guidelines are then used to provide a consistent approach for planning the safe, reliable, orderly, and economic expansion of the distribution system.
- Circuit Protection
  - The circuit protection practices are aimed at achieving safety and security for the public and employees, maximizing service reliability to customers, minimizing damage to distribution equipment, and establishing a consistent process and set of application standards for distribution circuit protection.
- Long-Term Infrastructure Improvement Plans ("LTIIP")

- Met-Ed first began to execute its LTIIP programs in 2016. These plans include expenditures and programs designed to adequately maintain and improve the efficiency, safety, adequacy and reliability of the distribution system. Most recently, the Company filed its second LTIIP covering the period 2020 through 2024.

Plan Revisions

Met-Ed submitted its I&M Plan for the period January 1, 2019 through December 31, 2020 on September 29, 2017, which was deemed approved pursuant to 52 Pa. Code § 57.198(i).

Met-Ed's proposed I&M Plan for 2021 and 2022 is consistent with its previously approved plan for 2019 and 2020 and proposes no substantive changes to its inspection cycles or plan components.

Plan Consistency

Section 57.198(b). Plan Consistency. *The plan must be consistent with the National Electrical Safety Code, Codes and Practices of the Institute of Electrical and Electronic Engineers, Federal Energy Regulatory Commission Regulations and the provisions of the American National Standards Institute, Inc.*

Met-Ed's I&M Plan and associated inspection activities are performed in accordance with the Occupational Safety and Health Administration, National Electrical Safety Code ("NESC"), Codes and Practices of the Institute of Electrical and Electronic Engineers, Federal Energy Regulatory Commission Regulations and the provisions of the American National Standards Institute, Inc., as applicable.

Record Keeping

Section 57.198(m). Record Keeping. *An electric distribution company ("EDC") must maintain records of inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs.*

In order to demonstrate compliance with its distribution facilities inspection, maintenance, repair and replacement programs, Met-Ed will maintain inspection and maintenance records either electronically or in hard copy as required by state law.

Vegetation Management

Section 57.198(n)(1). Vegetation Management. *The statewide minimum inspection and treatment cycle for vegetation management is between 4 – 8 years for distribution facilities. An EDC shall submit a condition-based plan for vegetation management for its distribution system facilities explaining its treatment cycle.*

Program Description

Met-Ed performs vegetation management on its distribution circuits in order to promote the continued safe and reliable operation of its distribution system. The vegetation management program specification is designed to support line reliability, maintain access, make repairs, or restore service and to support safe and reliable service. The vegetation management program specification prunes vegetation to achieve five years of clearance and includes removal of selected incompatible trees within the clearing zone corridor, removal of certain defective limbs that are overhanging primary conductors, controlling selected incompatible brush mechanically and/or using herbicide, relieving limbs causing mechanical strain on secondary/service lines and removal of off-corridor priority trees that are dead, dying, diseased, and leaning or significantly encroaching the corridor.

Portions of a circuit that experience high customer interruption minutes due to vegetation-caused outages may be targeted to include the removal of certain healthy limbs which overhang primary conductors based on tree species and condition.

For portions of a circuit that have not experienced significant reliability issues due to vegetation-caused outages, a proactive inspection process will target selective vegetation removal for continued reliable system operation. This may include the extension of a cycle not to exceed a total of eight years. This process involves inspection of the vegetation to evaluate the extent of potential for vegetation to interfere with energized conductors. Factors to consider in the evaluation are the voltage and height of the conductor, the type of tree, its growth rate and branching habit. Trees that will impact safety or reliability will be maintained to the vegetation management program specification.

Methods used to manage and control vegetation include manual control methods using hand-operated tools, mechanical control using equipment-mounted saws, mowers or other devices. Removing incompatible vegetation may also include various herbicide application techniques such as, high volume foliage application, low volume foliage application, basal herbicide applications, stump applications, frill application, aerial application, bare soil treatment application and cut stubble applications. All herbicides shall be applied in accordance with all state, local and federal laws governing the use of herbicides.

Further detailed information regarding Met-Ed's vegetation management program may be found in the Vegetation Management Distribution Specifications.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

In addition to complying with the provisions in Section 57.198(b), distribution vegetation management activities are performed in accordance with the Pennsylvania Pesticide Control Act, the Pennsylvania Administrative Code, and the Utility Arborist Association's Field Guide to Closed Chain of Custody for Herbicides in the Utility Vegetation Management Industry. All vegetation management activities are designed to achieve cycle length clearances, regardless of method employed. The vegetation management program specification seeks to maintain and control all vegetation in the space defined as the distribution clearing zone. The distribution clearing zone is the right-of-way corridor measured at a horizontal distance of fifteen feet on either side of the pole line or the established large tree edge, whichever is greater in width. The corridor is measured vertically to fifteen feet above the highest conductor attached to the pole or structure. Met-Ed has also applied a specific vegetation management approach to select line sections. This practice involves the removal of overhanging limbs outside the right-of-way as well as aggressive mitigation of hazard trees, with the intent of improving tree related reliability on the selected line sections.

Met-Ed's professional vegetation management staff performs inspections and approves all work conducted by vegetation management contractors. The Forestry personnel maintain an understanding of current and emerging techniques by attending industry trade conferences and maintaining memberships in industry trade organizations, such as Utility Arborist Association and the International Society of Arboriculture. The goal of the vegetation management department is to manage distribution corridors in a way that provides safe and reliable electricity while simultaneously working to make a sustainable habitat system on Met-Ed's rights-of-way.

As part of Met-Ed's approach to improving tree related reliability, the Company continues to analyze circuit electrical protection schemes and gives added attention to select line sections, such as those that serve high numbers of customers. Three distinct line sections have been identified and defined under existing protection schemes, as shown in the table below.

Zone 1	Zone 2	Zone 3
Three-phase circuitry from the circuit breaker to the first protective device	Three-phase circuitry beyond the first protective device	Single-phase and two-phase circuitry
Serves entire customer load	Serves a large percentage of customer load	Serves smallest percentage of customer load

In addition to Met-Ed's Distribution Vegetation Management Program, there are other distribution equipment inspection programs (e.g., Distribution Pole Inspections, Distribution Overhead Line Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include vegetation management situations that warrant further investigation.

Inspection Plan

The total number of circuit miles to be trimmed in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

Area		Inspections and Treatments Planned *Total Circuit Miles*	
		2021	2022
Met-Ed *11,456 total circuit miles*	Easton *1,415 total circuit miles*	283	283
	Hanover *1,972 total circuit miles*	394	394
	Lebanon *1,500 total circuit miles*	300	300
	Reading *3,153 total circuit miles*	631	631
	Stroudsburg *1,067 total circuit miles*	213	213
	York *2,349 total circuit miles*	470	470

Distribution Pole Inspections

Section 57.198(n)(2). Pole Inspections. *Distribution poles shall be inspected at least as often as every 10 – 12 years except for the new southern yellow pine creosoted utility poles which shall be initially inspected within 25 years, then within 12 years annually after the initial inspection. Pole inspections must include:*

i. Drill tests at and below ground level
ii. A shell test
iii. Visual inspection for holes or evidence of insect infestation
iv. Visual inspection for evidence of unauthorized backfilling or excavation near the pole
v. Visual inspection for signs of lightning strikes
vi. A load calculation

Program Description

Met-Ed shall visually inspect distribution wood poles on a twelve-year cycle. The purpose for inspecting distribution wood poles is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the state regulatory agencies and the NESC.

This preventative maintenance inspection for wood poles will include a visual inspection as well as hammer-sounding as needed. The inspection consists of the recording of abnormal conditions from the groundline to the top of the pole including but not limited to the following:

- Damage – broken or leaning
- Equipment – crossarms, insulators, conductors, oil leaking
- Testing for decayed internal wood

In addition to the visual inspection, poles showing incipient decay or poles that are thirty-five years old or older will be bored to further assess the condition of the pole. This inspection consists of the recording of tests performed and abnormal conditions detected including but not limited to the following:

- Boring – testing for internal decay
- Verification of shell thickness

Further detailed information regarding Met-Ed's inspection of wood poles may be found in the Distribution Inspection & Maintenance Practice – Wood Pole Groundline.

Section 57.198(n)(3). Inspection Failure. *If a pole fails the groundline inspection and shows dangerous conditions that are an immediate risk to public or employee safety or conditions affecting the integrity of the circuit, then the pole shall be replaced within 30 days of the date of inspection.*

Corrective Maintenance

Wood poles and supporting structures with recorded defects that Met-Ed could expect to create an immediate risk to public or employee safety or affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards set forth in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

Met-Ed's twelve-year inspection cycle for wood poles is based on accepted electric utility practices. The NESC Rule 12.121.A states "*Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary.*" Twelve years between inspections allows enough time for proper planning and remediation prior to any problems negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Distribution Pole Inspection Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Overhead Line Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include distribution pole situations that warrant further investigation.

Pole Loading Calculation

As a part of the I&M Plan for the period January 1, 2019 through December 31, 2020, the Commission previously exempted Met-Ed from conducting pole loading calculations as a part of its pole inspections. Met-Ed requests a continuation of the exemption for the currently proposed period.

Rather than conducting load calculations as part of each pole inspection, Met-Ed follows the practice of creating base line designs using FirstEnergy's Distribution Line

Construction Standards and Distribution Engineering Practices. FirstEnergy's Construction Standards are based on and updated each time a revised NESC Heavy Loading Standard is issued. The majority of the Company's service territory lies within the heavy loading zone and these standards provide basic guidance for most designs encountered by distribution line design personnel. All new facilities are designed consistent with NESC Heavy Loading Standard NESC C2-2012, Section 250. The Engineering Practices provide detailed guidance for both guying and pole loading, and additional engineering support is available to designers when more complex calculations are needed. Per the NESC, both of these resources include safety factors such that the deterioration of poles in service shall not reduce the strength capability of the pole below the required strength. Further, as the Company receives requests from other entities to attach their facilities to Met-Ed poles, an assessment, ranging from a visual inspection to a full-strength analysis, is performed based on pole attachment guidelines, experience and the situation encountered.

Inspection Plan

The total number of poles to be inspected in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

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Area		Pole Inspections Planned *Number of Poles*	
		2021	2022
Met-Ed *340,283 total poles*	Boyertown *22,171 total poles*	1,917	2,038
	Dillsburg *19,853 total poles*	1,654	1,276
	Easton *41,532 total poles*	4,100	4,502
	Gettysburg *14,392 total poles*	1,611	2,316
	Hamburg *21,866 total poles*	1,593	1,940
	Hanover *25,787 total poles*	2,661	2,223
	Lebanon *44,833 total poles*	4,499	3,841
	Reading *41,255 total poles*	2,983	2,702
	Stroudsburg *37,964 total poles*	3,739	3,372
	York *70,630 total poles*	3,244	3,771

Distribution Overhead Line Inspections

Section 57.198(n)(4). Distribution overhead line inspections. *Distribution lines shall be inspected by ground patrol a minimum of once every 1 – 2 years. A visual inspection must include checking for:*

i. Broken insulators
ii. Conditions that may adversely affect operation of the overhead distribution line
iii. Other conditions that may adversely affect operation of the overhead distribution line

Program Description

Met-Ed shall visually inspect distribution overhead lines and equipment on a five-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the NESC. This program shall be limited to overhead facilities.

Circuits will be inspected on a five-year cycle to levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage
- Switches
- Sectionalizers

Further detailed information regarding Met-Ed's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice – Overhead Circuits and Equipment.

Section 57.198(n)(5). Inspection Failure. *If critical maintenance problems are found that affect the integrity of the circuits, they shall be repaired or replaced no later than 30 days from discovery.*

Corrective Maintenance

Supporting structures with recorded defects that Met-Ed could reasonably expect to affect the integrity of the circuit shall be repaired or replaced within thirty days. All remaining deficiencies will be evaluated and prioritized on a case-by-case basis.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

As a part of the I&M Plan for the period January 1, 2019 through December 31, 2020, the Commission previously granted a waiver for overhead circuit inspection periodicity. Met-Ed requests a continuation of the waiver for the currently proposed period.

Met-Ed's five-year inspection cycle for overhead lines is based on accepted electric utility practices. The NESC Rule 12.121.A states "*Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary.*" Met-Ed's experience has shown the five-year inspection cycle to be successful in addressing problems in a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Distribution Overhead Line Inspection Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Pole Inspections, Distribution Transformer Inspections and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. Further, field personnel perform circuit assessments to address specific reliability concerns and to assess worst performing circuit performance. Lastly, Met-Ed may use infrared thermography on an as-needed basis on certain worst performing circuits or while performing circuit rehabilitation.

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Inspection Plan

The total number of circuits to be inspected in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

	Area	Overhead Line Inspections Planned *Number of Circuits*	
		2021	2022
Met-Ed *793 Total Circuits*	Boyertown *33 total circuits*	9	7
	Dillsburg 19 *total circuits*	7	4
	Easton 115 *total circuits*	17	22
	Gettysburg 31 *total circuits*	7	6
	Hamburg 23 *total circuits*	5	7
	Hanover 60 *total circuits*	7	12
	Lebanon 102 *total circuits*	19	19
	Reading 170 *total circuits*	40	29
	Stroudsburg 33 *total circuits*	7	9
	York 207 *total circuits*	37	54

Distribution Transformer Inspections

Section 57.198(n)(6). Distribution transformer inspections. *Overhead distribution transformers shall be visually inspected as part of the distribution line inspection every 1 – 2 years. Above-ground pad-mounted transformers shall be inspected at least as often as every 5 years and below-ground transformers shall be inspected at least as often as every 8 years. An inspection must include checking for:*

i. Rust, dents or other evidence of contact
ii. Leaking oil
iii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
iv. Unauthorized excavation or changes in grade near the transformer

Program Description

Met-Ed inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a five-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the requirements of state regulatory agencies and the NESC.

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including the installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured

- Equipment condition – visually inspect baffle

Further detailed information regarding Met-Ed's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

As a part of the I&M Plan for the period January 1, 2019 through December 31, 2020, the Commission previously granted a waiver for distribution transformer inspection periodicity. Met-Ed requests a continuation of the waiver for the currently proposed period.

Met-Ed's five- and eight-year inspection cycles for distribution transformers are based on accepted electric utility practices and the experience of Met-Ed. The NESC Rule 12.121.A states *"Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary."*

Met-Ed's experience has proven the inspection cycles above to be successful in addressing problems in a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Distribution Transformer Inspections Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Pole Inspections, and Recloser Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include distribution transformer situations that warrant further investigation.

Inspection Plan

The total number of distribution transformers to be inspected in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

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	Area	Type *(Total Number of Transformers)*	Transformer Inspections Planned *Total transformers* 2021	2022
Met-Ed *185,337 total transformers*	Boyertown *15,539 total transformers*	Overhead Transformers *11,203 total transformers*	2,817	1,037
		Above-Ground Pad-mounted *4,251 total transformers*	830	191
		Below-Ground Transformers *85 total transformers*	15	0
	Dillsburg *11,762 total transformers*	Overhead Transformers *8,881 total transformers*	3,876	1,140
		Above-Ground Pad-mounted *2,839 total transformers*	1,467	277
		Below-Ground Transformers *42 total transformers*	28	1
	Easton *18,224 total transformers*	Overhead Transformers *13,880 total transformers*	3,520	2,498
		Above-Ground Pad-mounted *4,107 total transformers*	514	787
		Below-Ground Transformers *237 total transformers*	12	24
	Gettysburg 7,705 *total transformers*	Overhead Transformers *6,290 total transformers*	1,739	321
		Above-Ground Pad-mounted *1,384 total transformers*	552	17
		Below-Ground Transformers *31 total transformers*	16	6
	Hamburg *11,102 total transformers*	Overhead Transformers *8,641 total transformers*	811	2,556
		Above-Ground Pad-mounted *2,380 total transformers*	138	630
		Below-Ground Transformers *81 total transformers*	12	26
	Hanover *15,963 total transformers*	Overhead Transformers *11,248 total transformers*	1,000	926
		Above-Ground Pad-mounted *4,633 total transformers*	381	70

		Below-Ground Transformers *82 total transformers*	3	0
	Lebanon *23,045 total transformers*	Overhead Transformers *16,857 total transformers*	2,307	2,655
		Above-Ground Pad-mounted 5,833 total transformers	1,076	639
		Below-Ground Transformers *355 total transformers*	71	62
	Reading *23,797 total transformers*	Overhead Transformers *17,638 total transformers*	4,246	1,517
		Above-Ground Pad-mounted *5,849 total transformers*	1,256	69
		Below-Ground Transformers *310 total transformers*	66	1
	Stroudsburg 14,109 *total transformers*	Overhead Transformers *11,987 total transformers*	2,193	4,477
		Above-Ground Pad-mounted *2,056 total transformers*	601	747
		Below-Ground Transformers *66 total transformers*	50	6
	York *44,091 total transformers*	Overhead Transformers *30,736 total transformers*	5,167	5,332
		Above-Ground Pad-mounted *13,021 total transformers*	1,471	2,226
		Below-Ground Transformers *334 total transformers*	7	53

Recloser Inspections

Section 57.198(n)(7). Recloser inspections. *Three-phase reclosers shall be inspected on a cycle of 8 years or less. Single-phase reclosers shall be inspected as part of the EDC's individual distribution line inspection plan.*

Program Description

Met-Ed visually inspects distribution line reclosers annually. The purpose for inspecting distribution line reclosers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability or system performance, and to comply with the requirements of state regulatory agencies and the NESC.

The annual preventative maintenance consists of counter readings and field inspection. The counter readings are obtained to assess system performance based on the number of operations. The field inspection includes but is not limited to the following:

- Type of recloser and current rating
- Counter reading
- Condition – rust, dents, physical damage, leaks, lightning damage
- Equipment – surge arresters, tank-ground connections, by-pass switches, control battery, pole
- Grounds – damage, condition

Further detailed information regarding Met-Ed's inspection of reclosers may be found in the Distribution Inspection & Maintenance Practice – Line Reclosers.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

Met-Ed's annual inspection cycle for reclosers is based on accepted electric utility practices and the experience of Met-Ed. The NESC Rule 12.121.A states *"Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary."* One year between inspection cycles has proven to be successful in addressing problems in

a timely manner, allowing for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

In addition to Met-Ed's Recloser Inspections Program, there are other distribution equipment inspection programs (e.g., Distribution Vegetation Management, Distribution Pole Inspections, Distribution Overhead Line Inspections, and Distribution Transformer Inspections) that allow trained utility personnel multiple opportunities to observe conditions on the distribution system. These conditions may include recloser equipment situations that warrant further investigation.

Inspection Plan

The total number of recloser units to be inspected in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

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	Area	Type	Recloser Inspections Planned *Total Number of Reclosers* 2021	2022
Met-Ed *1,114 total reclosers*	Boyertown 61 *total reclosers*	Single Phase *20 total reclosers*	20	20
		Three Phase *41 total reclosers*	41	41
	Dillsburg *75 total reclosers*	Single Phase 26 *total reclosers*	26	26
		Three Phase *49 total reclosers*	49	49
	Easton 110 *total reclosers*	Single Phase 20 *total reclosers*	20	20
		Three Phase 90 *total reclosers*	90	90
	Gettysburg 50 *total reclosers*	Single Phase 13 *total reclosers*	13	13
		Three Phase 37 *total reclosers*	37	37
	Hamburg 65 *total reclosers*	Single Phase *30 total reclosers*	30	30
		Three Phase 35 *total reclosers*	35	35
	Hanover 90 *total reclosers*	Single Phase 33 *total reclosers*	33	33
		Three Phase 57 *total reclosers*	57	57
	Lebanon 196 *total reclosers*	Single Phase *71 total reclosers*	71	71
		Three Phase 125 *total reclosers*	125	125
	Reading 124 *total reclosers*	Single Phase *40 total reclosers*	40	40
		Three Phase 84 *total reclosers*	84	84

	Stroudsburg *90 total reclosers*	Single Phase *9 total reclosers*	9	9
		Three Phase *81 total reclosers*	81	81
	York *253 total reclosers*	Single Phase *60 total reclosers*	60	60
		Three Phase *193 total reclosers*	193	193

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Substation Inspections

Section 57.198(n)(8). Substation inspections. *Substation equipment, structures and hardware shall be inspected on a cycle of 5 weeks or less.*

Program Description

Met-Ed inspects its distribution substations twelve times annually. The purpose of these monthly inspections of the distribution substations is to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

There are three types of the preventative maintenance inspections that are performed at Met-Ed substations during a twelve-month period. The chart below illustrates the type of inspection performed each month[1]:

Inspection Type	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Safety and Security of Facilities/Visual Equipment Inspection/Reporting and Recording of Deficiencies and Relay Operations (Class C)	X	X	X	X	X	X	X	X	X	X	X	X
Safety/Security, Visual Equipment Inspection and Record Readings (Class B)			X			X			X			X
Seasonal Maintenance (Class A)			X						X			

The following is a summary of each type of inspection that is conducted at Met-Ed substations:

1. *Safety and Security of Facilities and Visual Equipment Inspection of Electrical Equipment and Reporting/Recording Identified Deficiencies and Relay Operations (Class C).* Monthly visual inspection of substation equipment, structures and hardware that also includes the recording of abnormal conditions or deficiencies. This inspection may include but is not limited to the following:
   - General condition – read and record ambient temperature
   - Perimeter fence inspection (gate locks, fence and gate grounds, warning signs

[1] For illustrative purposes only.

- Yard and facility inspection (equipment grounds, vegetation condition, general yard condition, equipment condition, oil levels and leaks, structure/hardware condition, hotspots, conductors/switches/connections)
- Building inspection (security, integrity, indication lights)
- Visual inspection of major equipment (power transformers, circuit breakers, instrument transformers, etc.)
- Relays, electronic controls, and panel meters for alarms and targets
- Batteries and chargers

2. *Safety and Security, Visual Equipment Inspection and Record Readings (Class B).* In addition to the safety and security and visual equipment inspection that is performed monthly, every three months an additional visual inspection that includes the recording of readings is performed. This inspection may include but is not limited to all items listed under the Class C inspection as well as the following types of substation equipment:
   - Recording of amps and load readings
   - Recording of counter and gauge readings
   - Inspection/test of carrier communication equipment
   - Inspection of microwave/radio sites and engine generators – generator alarms and battery

3. *Seasonal Maintenance - Summer and Winter Readiness (Class A).* In addition to the monthly and three-month inspections, every six months a more comprehensive inspection of the substation and substation equipment is performed. This inspection may include but is not limited to all items listed under the Class C and B inspections as well as the following types of substation equipment:
   - Servicing fire protection equipment
   - Servicing eye wash stations
   - Yard lighting
   - Servicing filters and HVAC systems
   - Servicing of equipment cabinet heaters
   - Servicing engine generators

Further detailed information regarding Met-Ed's inspection of substations may be found in Section 20P – Substation Patrol Inspection of the Substation Maintenance Practice and Methods.

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Program Justification

Patrol inspections of distribution substations are performed on a monthly, quarterly and semi-annual basis, with a tiered approach to preventative maintenance. This tiered approach has proven effective in addressing emerging problems and allows for proper planning and remediation prior to the problem negatively impacting personal safety, equipment integrity or service reliability.

Monthly inspections ensure a trained, physical presence within the substation. Frequent, in-person inspections have been effective in detecting the degradation of facilities not always captured by existing local and remote surveillance and monitoring tools. In addition to visual inspections, load and counter readings are recorded every three months to allow local engineering to conduct planning and load studies. Finally, an intensive inspection is conducted two times a year, in spring and fall.

Advancements in technology have refined how substation equipment inspections are performed, and those advancements have been leveraged to ensure the highest levels of safety and reliability of the substation and substation equipment. For example, results from equipment and patrol inspections are captured by field personnel on site and entered directly into the maintenance database where they can be tracked. Through the use of historical inspection data and enhanced software, Met-Ed is able to target specific equipment and trigger maintenance based on equipment condition. For example, counter readings that are obtained during the three-month inspection cycle are used to trigger condition-based maintenance. Both predictive and condition-based programs extend the operating life of the equipment. They also optimize the necessary maintenance interval, improve service reliability, and reduce downtime that is typically experienced when equipment is taken off line which reduces exposure of the grid, all with consistency and efficiency.

Inspection Plan

The total number of substations to be inspected in 2021 and 2022 is based on the current system configuration (as of 2019) and thus is subject to change by the time the 2021 and 2022 plans commence.

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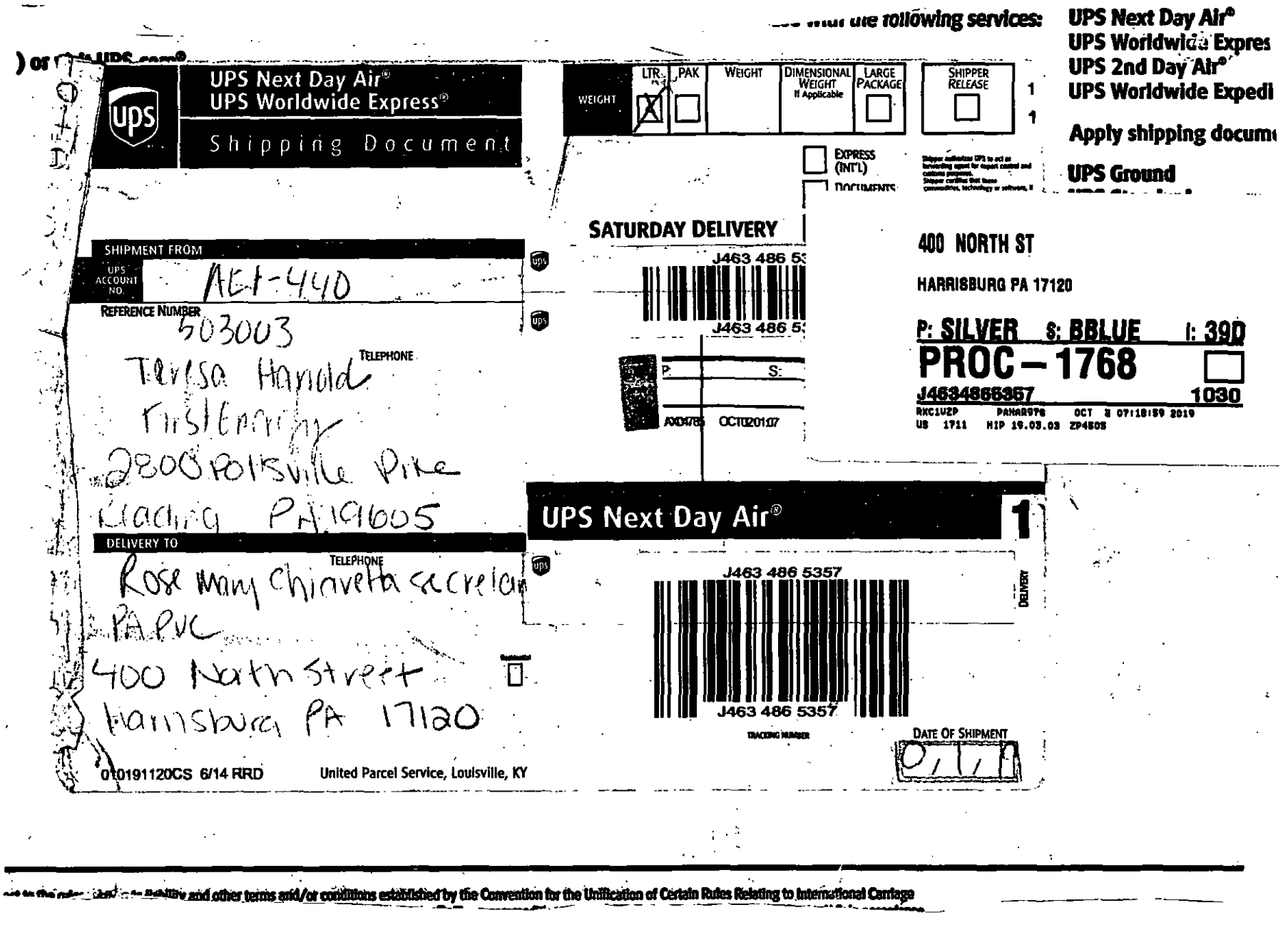
Area		Substation Inspections Planned *Number of Substations*	
		2021	2022
Met-Ed *221 total substations*	Easton *45 substations*	540	540
	Lebanon 35 *substations*	420	420
	Reading *63 substations*	756	756
	York *78 substations*	936	936



and other terms and/or conditions established by the Convention for the Unification of Certain Rules Relating to International Carriage

Contractor	Week Ending Date	Location	Activity	Activity Units
LTS	6/26/21	SOUSLEY RD	5	20
LTS	6/19/21	SOUSLEY RD	5	9
LTS	6/12/21	SOUSLEY RD	5	38
NGG	12/11/21	GUINEA RD	5	4
NGG	12/11/21	GUINEA RD	14	1
NGG	12/11/21	198 KIRK RD	5	4
NGG	12/11/21	1798 RT143	5	3
NGG	12/11/21	1755 RT143	5	2
NGG	12/4/21	KIRK RD	5	4
NGG	12/4/21	1732 RT 143	5	9
NGG	12/4/21	1604 RT143	5	3
NGG	12/4/21	1622 RT 143	5	1
NGG	12/4/21	1732 RT143	5	4
NGG	12/4/21	26034 RT143	5	1
NGG	12/4/21	1623 RT 143	5	1
NGG	12/4/21	199 KIRK RD	5	11
NGG	12/4/21	226 LONG RD	5	2
NGG	12/4/21	222 LONG RD	5	1
NGG	12/4/21	1798 RT 143	5	2
NGG	12/4/21	198 KIRK RD	5	4
NGG	12/4/21	226 LONG RD	5	2
NGG	12/4/21	167 GUINEA RD	5	4
NTS	1/18/20	BLUE ROCKS RD xx22	5	1
NTS	1/18/20	BLUE ROCKS RD xx19	5	2
NTS	8/25/18	SOUSLEY RD xx7	5	1
NTS	8/25/18	TAP OFF SOUSLEY xx0	5	6
NTS	8/25/18	SOUSLEY RD xx5	5	2
NTS	8/25/18	SOUSLEY RD xx20	5	1
NTS	8/25/18	RT.143 xx17	14	2
NTS	8/18/18	SOUSLEY RD xx49	5	4
NTS	8/18/18	SOUSLEY RD xx50	5	6
NTS	8/18/18	SOUSLEY RD xx26	5	4
NTS	8/18/18	SOUSLEY RD xx61	5	7
NTS	8/18/18	SOUSLEY RD xx54	5	1
NTS	8/18/18	TAP OFF SOUSLEY xx43	5	6
NTS	8/18/18	TAP OFF SOUSLEY xx56	5	1
NTS	8/18/18	SOUSLEY RD xx57	5	2
NTS	8/18/18	SOUSLEY RD xx33	5	3
NTS	8/18/18	SOUSLEY RD xx42	5	3
NTS	8/18/18	SOUSLEY RD xx18	5	2
NTS	8/11/18	TAP OFF SOUSLEY RD xx51	5	1
NTS	8/11/18	RT 143 xx4	5	2
NTS	8/11/18	RT 143 xx46	5	4
NTS	8/11/18	RT 143 xx7	14	18
NTS	7/28/18	KIRK RD xx61	5	1
NTS	7/28/18	SOUSLEY RD xx8	5	2

NTS	5/26/18	143 xx16	5	4
NTS	3/31/18	RT.143 xx38	5	2
TSM	9/8/18	Willow St	14	5
TSM	9/8/18	Rt.143	5	3
TSM	9/8/18	Rt.143	14	6
			Total	232

The vast majority of these trees will directly affect the complaint location. There may be a few that are further up Rt 143 that would not affect these customers.

9/14/22 IW
RESPONDENT
Exhibit-9

Project	Circuit ID	Major Storm	Contributing Cause	DBH	Distance from Center Line
10641490	703780295	WOMS	SOIL-WET	UNKNOWN	15 - 24
10688761	703780295	WOMS	N/A	24 to 26	55 - 64
10819380	703780295	WOMS	EROSION / LANDSLIDE / WASHOUT	14 to 16	25 - 34
10873124	703780295	WOMS	N/A	17 to 20	25 - 34
11173687	703780295	WOMS	N/A	14 to 16	15 - 24
11388905	703780295	WOMS	INSECT	10 to 13	25 - 34
11555091	703780295	WOMS	N/A	14 to 16	15 - 24
11584136	703780295	WOMS	N/A	17 to 20	15 - 24
11663680	703780295	WOMS	N/A	14 to 16	15 - 24
11695538	703780295	WOMS	N/A	17 to 20	15 - 24
11703718	703780295	WOMS	INSECT	17 to 20	15 - 24
11720576	703780295	WOMS	N/A	24 to 26	15 - 24
11878771	703780295	WOMS	UPHILL SLOPE	14 to 16	15 - 24
11892574	703780295	WOMS	INSECT	21 to 23	25 - 34
11944130	703780295	WOMS	INSECT	27 to 30	15 - 24

Outage Specialist	Tree Height	Tree Species	Weather Conditions	Wind Conditions	Customers Interrupted
					2,779
Richard Lamoreaux	55 - 64	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	105
Richard Lamoreaux	75 - 84	OAK-RED GROU	RAIN-HEAVY	STRONG WIND (30-50MPH)	138
Richard Lamoreaux	65 - 74	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	104
Richard Lamoreaux	65 - 74	OAK-RED GROU	BLUE SKY	STRONG WIND (30-50MPH)	871
Richard Lamoreaux	55 - 64	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	277
Richard Lamoreaux	55 - 64	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	105
Richard Lamoreaux	75 - 84	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	106
Richard Lamoreaux	65 - 74	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	106
Richard Lamoreaux	65 - 74	OTHER	RAIN-HEAVY	STRONG WIND (30-50MPH)	277
Richard Lamoreaux	65 - 74	WALNUT	RAIN-HEAVY	STRONG WIND (30-50MPH)	145
Richard Lamoreaux	65 - 74	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	106
Richard Lamoreaux	55 - 64	CATALPA	RAIN-HEAVY	STRONG WIND (30-50MPH)	111
Richard Lamoreaux	55 - 64	MAPLE-NORWA	HIGH WINDS	STRONG WIND (30-50MPH)	107
Richard Lamoreaux	65 - 74	ASH	HIGH WINDS	STRONG WIND (30-50MPH)	107
Richard Lamoreaux	75 - 84	ASH	RAIN-HEAVY	STRONG WIND (30-50MPH)	107

9/14/22 IW
RESPONDENT
Exhibit-10

Order #	Type	Status	Priority	Special
11193879-1	Outage	Archived	4	

Order Details for Order 11193879-1

Time Off	**Order Created**	**Assigned**	**Dispatch**
08/04/2020 11:29	08/04/2020 13:01	08/04/2020 14:39	08/04/2020 14:39
En Route	**Arrived**	**Last Restoration**	**Field Complete**
08/04/2020 14:40	08/04/2020 15:34	08/04/2020 15:50	08/04/2020 15:50
Closed	**ETR**	**Calls**	**Custs Affected**
08/04/2020 16:40	08/04/2020 16:15	104	793
Crew		**Crew Area**	
Smith, Arthur A - 143222		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
No Lights		261	206973

Organization

Current Org	**Substation**	**Disp Center**
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Antolic, Jeffrey S	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252659C47493 ABC 630

Type	**Voltage**
Recloser	7.62/13.2 KV

Event Details

Cause	**Cause Pole**	
Trees On ROW	51604-46062	
Failed Comp	**Facility Location**	
Conductor. - Bare	252659C47493	
Action Taken	**Outage Type**	**Weather**
Additional Work Needed	No Outage	Rain with high winds
Related Events	**Follow Ups Sent**	
	LineSAP Followup Sent	

Follow Up

walker- 40T is out at pole 51668-45992 need a tree crew to remove big tree/ blocking rod primary and neutral down at pole 51604-46062 [MDT Comments - SMITH-08/04/20 tree on wire beside pole 51604-46062 , 40 t blown = 51668-45992 request tree crew to cut, trees on road way]

Comments

order erroneously rolled up to SwMode recloser which wasn't opened according to EMS. See downstream outage orders for 40T (11210413) and tap recloser (11208353). ja -rvw. SMITH-08/04/20 tree on wire beside pole 51604-46062 , 40 t blown = 51668-45992 request tree crew to cut, trees on road way]

Order Instructions

Order #	Type	Status	Priority	Special
11193879-2	Trouble	Archived	2	

Order Details for Order 11193879-2

Time Off	**Order Created**	**Assigned**	**Dispatch**
08/04/2020 16:03	08/04/2020 16:03	08/04/2020 19:28	08/04/2020 19:28
En Route	**Arrived**	**Last Restoration**	**Field Complete**
08/04/2020 19:28	08/04/2020 19:28		08/04/2020 19:28
Closed	**ETR**	**Calls**	**Custs Affected**
08/04/2020 19:29		0	0
Crew		**Crew Area**	
Nts Martin Caprood 610-401-3050		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
On Miscellaneous		0	0

Organization

Current Org	**Substation**	**Disp Center**
Forestry	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Lamoreaux, Richard	00737-1	Reading Oper Area

Device Info

ID

Recloser Installation 252659C47493 ABC 630

Type	**Voltage**
Recloser	7.62/13.2 KV

Event Details

Cause	**Cause Pole**	
Trees Off ROW-Tree		
Failed Comp	**Facility Location**	
	252659C47493	
Action Taken	**Outage Type**	**Weather**
Related Events	**Follow Ups Sent**	

Follow Up

Comments

walker- 40T is out at pole 51668-45992 need a tree crew to tree work complete, line crew was onsite...7:28pm...8/4/20...rcl...remove big tree/ blocking rod primary and neutral down at pole 51604-46062 MDT Comments - SMITH-08/04/20 tree on wire beside pole 51604-46062 , 40 t blown = 51668-45992 request tree crew to cut, trees on road way

Order Instructions

9/14/22 IW
RESPONDENT
Exhibit-11

Order #	Type	Status	Priority	Special
11922434-1	Trouble	Archived	3	

Order Details for Order 11922434-1

Time Off	Order Created	Assigned	Dispatch
02/18/2022 07:08	02/18/2022 07:08	02/18/2022 10:41	02/18/2022 11:12
En Route	**Arrived**	**Last Restoration**	**Field Complete**
02/18/2022 11:24	02/18/2022 11:59		02/18/2022 12:51
Closed	**ETR**	**Calls**	**Custs Affected**
02/18/2022 13:10		4	0
Crew		**Crew Area**	
Cerra, Kyle P - 154069		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
Safety Forces On Site		0	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Antolic, Jeffrey S	00737-1	Reading Oper Area

Device Info

ID	
OH Transformer 51335-46410 B	
Type	**Voltage**
Transformer - OH	7.62/13.2 KV

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	51335-46410
Failed Comp	**Facility Location**
Conductor. - Bare	RTE 143, 1678, LENHARTSVILLE, PA
Action Taken	**Outage Type**	**Weather**
Additional Work Needed	Distribution	Rain with high winds
Related Events	**Follow Ups Sent**	
	LineSAP Followup Sent	

Follow Up

[MDT Comments - CERRA-02/18/22 tree on wire at pole 51335-46410, need tree crew. Line is de-energized, crew opened solid at pole 51374-46480 to isolate underground feeding overhead. tree crew can access property from sky hollow drive. service man/line crew can access opened solid from driveway on sousley rd after tree has been removed to re energize]

Comments

copied to outage 11922048 ja dcc [MDT Comments - CERRA-02/18/22 tree on wire at pole 51335-46410, need tree crew. Line is de-energized, crew opened solid at pole 51374-46480 to isolate underground feeding overhead. tree crew can access property from sky hollow drive. service man/line crew can access opened solid from driveway on sousley rd after tree has been removed to re energize]

Order Instructions

En Route time changed from 18/02/2022 11:24:15 to 18/02/2022 11:24:00.

GENERAL RULES AND REGULATIONS

21. Service Continuity: Limitation on Liability for Service Interruptions and Variations

The Customer, by accepting service from the Company, assumes responsibility for the safety and adequacy of the wiring and equipment installed by the Customer. The Customer agrees to indemnify and save harmless the Company from any liability which may arise as a result of the presence or use of the Company's electric service or property, defects in wiring or devices on the Customer's premises, or the Customer's failure to comply with the National Electrical Code.

The Company does not guarantee a continuous, uninterrupted, or regular supply of electric service. The Company may, without liability, interrupt or limit the supply of electric service for the purpose of making repairs, changes, or improvements in any part of its system for the general good of the service or the safety of the public or for the purpose of preventing or limiting any actual or threatened instability or disturbance of the system. The Company shall not be liable for any damages due to accident, strike, storm, lightning, riot, fire, flood, legal process, state or municipal interference, or any other cause beyond the Company's control.

In all other circumstances, unless caused by the willful and/or wanton misconduct of the Company, the liability of the Company to Customers or third parties for all injuries and damages, direct or consequential, including damage to computers and other electronic equipment and appliances, or loss of business, profit or production caused by variations or interruptions in electric supply, high or low voltage, spikes, surges, single phasing, phase failure or reversal, stray voltage, neutral to earth voltage, equipment failure or malfunction, response time to electric outages or emergencies, or the non-functioning or malfunctioning of street lights or traffic control signals and devices shall be limited to Five Hundred Dollars ($500) for residential customers and Two Thousand Dollars ($2,000) for commercial and industrial customers. In no case shall the Company's aggregate liability for multiple claims arising from a single alleged negligent act, incident, event, or omission exceed Two Hundred Thousand ($200,000). The Company's actions that are in conformance with electric system design, the National Electrical Safety Code, or electric industry operation practices shall be conclusively deemed not to be negligent. A variety of protective devices and alternate power supply equipment that may prevent or limit such damages are available. Due to the sensitive nature of computers and other electronically controlled equipment, the Customer, especially three-phase Customers, should provide protection against variations in supply.

GENERAL RULES AND REGULATIONS

Rule 21 – Service Continuity: Limitation on Liability for Service (continued)

To the extent applicable under the Uniform Commercial Code or on any theory of contract or products liability, the Company disclaims and shall not be liable to any Customer or third party for any claims involving and including, but not limited to, strict products liability, breach of contract, and breach of actual or implied warranties of merchantability or fitness for an intended purpose.

If the Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. §§ 2806(g) and 2809(f), for Pennsylvania state taxes not paid by an Electric Generation Supplier (EGS), the non-compliant EGS shall indemnify the Company for the amount of additional state tax liability imposed upon the Company by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 of Title 66.

22. Transfer of Electric Generation Supplier

The Company shall change a Customer's EGS in accordance with 52 Pa. Code Chapter 57, Subchapter M, "Standards for Changing a Customer's Electricity Generation Supplier." Pursuant to the Commission's Rulemaking to Amend the Provisions of 52 Pa. Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier, at Docket No. L-2014-2409383, changes in a Customer's EGS shall be effective within three (3) business days after the enrollment request is processed, regardless of whether the meter reading is actual or estimated.

23. Electric Vehicle Charging (C)

Electric vehicle charging at third-party owned electric vehicle charging stations shall not be considered resale of electricity as described in 66 Pa. C.S. § 1313. A third-party owned electric vehicle charging station is defined as a charging station owned by a third party open to the public for the sole purpose of electric vehicle charging. An electric vehicle is defined as any vehicle licensed to operate on public roadways that is propelled in whole or in part by electric energy stored on-board for the purpose of propulsion. Types of electric vehicles include, but are not limited to, plug-in hybrid electric vehicles and battery electric vehicles. Electric vehicle charging stations shall be constructed in accordance with the National Electrical Code and the Company's service installation policies. The station must be designed to protect against back flow of electricity to the Company's electrical distribution circuit as required by Company rules. The Customer, who may be either the owner or the host of the third-party owned electric vehicle charging station, shall notify the Company at least one hundred twenty (120) days in advance of the planned installation date and may be required to install metering for the station as determined by the Company. The Customer shall be responsible for all applicable Tariff rates, fees and charges.

(C) Change

9/14/22 IW
RESPONDENT
Exhibit-13

Event ID	Type	Status	Priority	Special
12088145-3	Outage	Archived	2	

Event Details for 12088145-3

Time Off	Event Created	Assigned	Dispatch
07/13/2022 19:45	07/13/2022 19:55	07/13/2022 20:38	07/13/2022 20:39
En Route	**Arrived**	**Last Restoration**	**Field Complete**
07/13/2022 20:42	07/13/2022 23:41	07/14/2022 02:28	07/14/2022 03:30
Closed	**ETR**	**Calls**	**Custs Affected**
07/14/2022 03:36	07/14/2022 03:15	191	26
Crew		**Crew Area**	
Engle, Wesley B - 154227		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
No Lights		403	10478

Organization

Current Org	Substation	Disp Center
Dispatch		Hamburg District
Owner	**Circuit**	**Disp Area**
Sensenig, Scott		Reading Oper Area

Device Info

ID

Many: Switch Installation 73779 ABC, Recloser Installation 252659C47493 ABC 630

Type	Voltage
Recloser	7.62/13.2 KV

Event Details

Cause	Cause Pole	
Equipment Failure	52673-47499	
Failed Comp	**Facility Location**	
Conductor. - Bare	252659C47493	
Action Taken	**Outage Type**	**Weather**
Replaced	Distribution	Fair-Sunny-Overcast
Related Events	**Follow Ups Sent**	
12088145-1		

Follow Up

Comments

predicted 459 bps out due to B phase missing at location..wire down pole to pole 52673-47499 %2526 52684-47480..-3 for crew and -4 for tree crew [MDT Comments - HOSTETTER-07/13/22 One phase of 2/0 acsr, 7.6/13.2, OH primary down between poles 52673-47499 %2526 52684-47480. Recloser = pole 252659C47493 opened remotely via dispatch and group operated air break switch opened = pole 53356-47468 to de energize and isolate section of down wire.] 737 line bps out from 1618 to 1919. 740 line bps from 1618 to 1809 due to equipment failure (sleeve failure) wire down. b phase was out from 73722 with tie closed (t1-737) back to 740 breaker @ s ham. wire was down @ 52673-47499 opened 73779 @ 1945 to make safe -3 for remaining bps out from 73779 to 73722 ENGLE-07/14/22 spliced and fixed] work completed under me-22-16850-cc restored remaining bps when dcc closed 73722 @ 0228

Event Instructions

Event ID	Type	Status	Priority	Special
27851	Outage	Closed	5	

9/14/22 IW
RESPONDENT
Exhibit-14

Event Details for 27851

Time Off	Event Created	Assigned	Dispatch
09/06/2022 09:59	09/06/2022 09:58	09/06/2022 10:19	09/06/2022 10:19
En Route	**Arrived**	**Last Restoration**	**Field Complete**
09/06/2022 10:43	09/06/2022 10:43	09/06/2022 14:18	09/06/2022 14:19
Closed	**ETR**	**Calls**	**Custs Affected**
09/06/2022 14:24	09/06/2022 16:30	18	47
Crew		**Crew Area**	
DANIEL_BRENT N - 44371		HAMBURG CA	
Work Desc		**Duration (Min)**	**Total CMI**
		260	12220

Organization

Current Org	Substation	Disp Center
Line	LYNNVILLE SUB	Hamburg District
Owner	**Circuit**	**Disp Area**
Sheetz, Alanna A	00737-1	Reading Oper Area

Device Info

ID

Recloser 51742-46360 B 00737-1

Type	Voltage
Recloser	

Event Details

Cause	Cause Pole
Trees On ROW	Conductor B 2 ACSR 00737-1 5119118204
Failed Comp	**Facility Location**
	1671 RT 143 LENHARTSVILLE, PA 19534
Action Taken	**Outage Type** / **Weather**
	Distribution / Raining
Related Events	**Follow Ups Sent**

Follow Up

Comments

system neutral broke and wrapped around primary @ 51724-46371 need crew w flagging to repair

Event Instructions

9/14/22 IW
RESPONDENT
Exhibit-15

Event ID	Type	Status	Priority	Special
37655	Outage	Cancelled	5	

Event Details for 37655

Time Off	Event Created	Assigned	Dispatc
09/11/2022 09:10	09/11/2022 09:10	09/11/2022 09:13	09/11/2022 09:13

En Route	Arrived	Last Restoration	Field Complete
09/11/2022 18:57	09/11/2022 19:31		09/11/2022 22:36

Closed	ETR	Calls	Custs Affected
09/12/2022 01:39	09/11/2022 21:40	3	0

Crew	Crew Area
SHAFFER_DOUGLAS - 3450	HAMBURG CA

Work Desc	Duration (Min)	Total CMI
	694	0

Organization

Current Org	Substation	Disp Center
Dispatch	LYNNVILLE SUB	Hamburg District

Owner	Circuit	Disp Area
Carroll, Jason	00737-1	Reading Oper Area

Device Info

ID

Step Transformer 51372-46502 B 00737-1

Type	Voltage
Primary Transformer	

Event Details

Cause	Cause Pole
Trees Off ROW-Tree	Fuse B 51335-46410 00737-1

Failed Comp	Facility Location
Conductor. - Bare	188 SKY HOLLOW DR LENHARTSVILLE, PA 19534

Action Taken	Outage Type	Weather
Trim/Removed Tree(s) Replaced	Distribution	Fair-Sunny-Overcast

Related Events	Follow Ups Sent
38376	

Follow Up

Comments

Removed tree near pole 51335-46410 and closed 30T ISO fuses at 51373-46502 Completed

Event Instructions