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PECO  
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July 29, 2021

**VIA E-FILING ONLY**

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

**Re: PECO 2021 Second Quarter Reliability Report PUC Docket No. M-2016-2522508**

Dear Secretary Chiavetta:

Enclosed is PECO's 2021 Quarterly Reliability Report for the period ending June 30, 2021 submitted pursuant to the Electric Service Reliability Regulations at 52 Pa. Code Chapter 57.

Because portions of the report contain sensitive and proprietary, PECO is filing two versions of the report, one public and one proprietary. PECO requests that the proprietary report, which has been separated and clearly marked with a "Confidential" header on each page, be kept confidential, pursuant to the Commission Order of March 20, 2006.

Due to the ongoing COVID-19 pandemic, PECO's office personnel are working remotely. Accordingly, PECO will not have its usual access to photocopying and U.S. mail, among other services. PECO requests that all communications with PECO be transmitted by email.

Thank you for your assistance in this matter and please direct any questions regarding the above to Richard Schlesinger, Manager, Retail Rates at (215) 841-5771 or via email: rich.schlesinger@peco-energy.com.

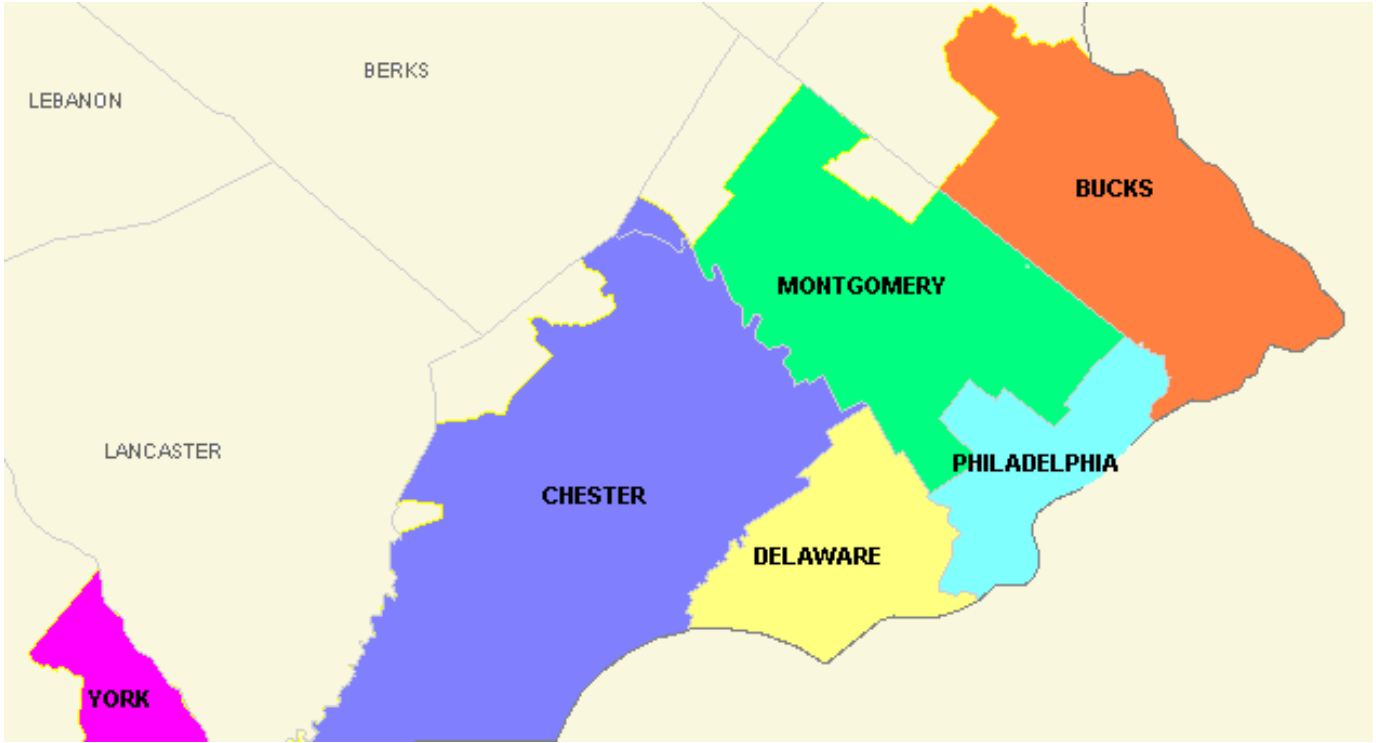
Sincerely,



Enclosure

Cc: John Van Zant (via email only)  
Dan Searfoorce (via email only)

# PECO Energy Company Quarterly Reliability Report For Period Ending June 30, 2021



**July 29, 2021**

**PECO Energy (“PECO”)**

**Quarterly Reliability Report for the Period Ending June 30, 2021 filed with the Pennsylvania Public Utility Commission.**

*Submitted per Rulemaking Re: Amending Electric Service, Docket No. M-2016-2522508 Reliability Regulations at 52 Pa.Code Chapter 57*

**Section 57.195(e)(1)** *“A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.”*

PECO experienced no major events in the second quarter of 2021.

**Section 57.195(e)(2)** *“Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC’s service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.”*

PECO Customers	Sustained Customer Interruptions	Sustained Customer Hours	Momentary Customer Interruptions	Sustained Customer Minutes	SAIFI	CAIDI	SAIDI	MAIFI
1,675,114	1,390,897	2,861,421	1,300,886	171,685,237	0.83	123	102	0.78

Data reflects 12 months ending 06/30/2021.

PECO Benchmarks and Rolling 12-Month Standards				
	SAIFI	CAIDI	SAIDI	MAIFI
Benchmark	1.23	112	138	N/A
Rolling 12-Month Standard	1.48	134	198	N/A

SAIFI and SAIDI are below their respective Benchmark and Standard and CAIDI is above its Benchmark and below its Standard. Benchmarks and Standards were established on May 7, 2004. No Benchmark or Standard was established for MAIFI. Extended service restoration times caused by storms during the last twelve months led to high CAIDI.

**Section 57.195(e)(3)** *“Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the EDC defines its worst performing circuits shall be included.”*

PECO’s worst performing 5% circuits were selected based on a weighted score combining customer interruptions, customer hours, SAIFI, SAIDI, and CEMI (Customers Experiencing Multiple Interruptions), due to outages on each circuit in a 12- month period and, to a lesser extent, in the prior 24 months. This measure is oriented toward contributions to system SAIFI, SAIDI and CAIDI, and local areas with high outage frequency or duration. In addition, circuits with a history of repeat appearance on worst performing lists were selectively included in the 5% list. Worst circuits and the rolling 12-month reliability index values requested are shown in Appendix A.

**Section 57.195(e)(4)** *“Specific remedial efforts taken and planned for the worst performing 5% of the circuits as identified in paragraph (3).”*

Remedial efforts taken or planned to date for PECO’s worst performing 5% of circuits are shown in Appendix B.

**Section 57.195(e)(5)** *“A Rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be included.”*

12 Months Ending June 30, 2021					
Cause	Service Outages	% of Service Outages	Customer Interruptions	% of Customer Interruptions	Customer Minutes
Animal	1,163	9.1%	36,273	2.6%	2,234,122
Contact/Dig-In	142	1.1%	16,552	1.2%	1,549,734
Equipment Failure	5,459	42.9%	529,422	38.1%	57,675,500
Lightning	273	2.1%	29,098	2.1%	3,973,847
Other	551	4.3%	75,692	5.4%	5,632,510
T&S	15	0.1%	34,411	2.5%	1,571,743
Unknown	457	3.6%	61,325	4.4%	7,448,693
Vegetation-Broken/Uprooted	3,657	28.7%	495,817	35.6%	78,659,452
Vegetation-Ingrowth	597	4.7%	44,785	3.2%	7,199,186
Vehicles	416	3.3%	67,522	4.9%	5,740,450

\*The data supplied is the number of interrupted customers for each interruption event summed for all events, also known as customer interruptions. A customer interrupted by three separate trouble cases represents three customer interruptions, but only one customer interrupted.

The largest contributors to customer interruptions were equipment failure and tree-related interruptions. The leading groups within the equipment failure category were aerial equipment and underground equipment. Outages due to equipment and trees are being addressed through PECO’s Long-term Infrastructure Improvement Plans and other reliability programs. Most customer interruptions caused by trees came from broken branches and tree trunks or uprooted trees (35.6% of all customer interruptions), as opposed to ingrowth (3.2% of all outage customer interruptions). PECO continues to address ash tree failures caused by emerald ash borers (invasive insects that cause ash tree deaths) with a vegetation management program to mitigate the threat to its facilities and customer reliability.

**Section 57.195(e)(6).** *“Quarterly and year to date information on progress toward meeting transmission and distribution inspection and maintenance goals /objectives” (For First, Second and Third Quarter reports only).”*

Predictive and Preventive Maintenance Program – status as of 6/30/2021					
	2 <sup>nd</sup> Quarter Tasks		YTD Tasks		2021 Total Planned
	Planned	Complete	Planned	Complete	
Recloser Inspections (Number of reclosers inspected)	90	196	149	369	246
Circuit Patrol & Thermography (Number of circuits patrolled)	500	543	900	1,116	976
Pole Inspections (Number of poles visually inspected)	12,159	8,202	15,321	8,202	34,695
Padmount Transformers (Number of transformers visually inspected)	2,728	2,072	4,402	4,469	6,718
Below Ground Transformers (Number of transformers visually inspected)	450	607	1,000	856	1,563
Substations (Number of substations inspections performed (e.g. visual inspection, reading of currents, voltages, temperature etc.) for a variety of substation components)	339	357	678	705	1,360
Unit Substations (Number of unit substations inspections performed (e.g. visual inspection, reading of currents, voltages, temperature etc.) for a variety of substation components)	741	792	1,482	1,552	2,960

Vegetation Management Preventive Maintenance Program – status as of 6/30/21					
	2 <sup>nd</sup> Quarter Miles		YTD Miles		2021 Total Planned
	Planned	Complete	Planned	Complete	
Distribution Lift and Manual Trimming	576	1,358	1,152	1,710	2,304
Transmission Trimming and Removals	50	50	104	100	202

PECO is executing a plan to complete all predictive and preventive maintenance scheduled for 2021 by the end of the year.

**Section 57.195(e)(7).** *“Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures in total and detailed by the EDC’S own functional account code or FERC account code as available.” (For first, second and third quarter reports only.)*

\$Millions	Budgeted 2 <sup>nd</sup> Quarter	Actual 2 <sup>nd</sup> Quarter	Budgeted Year-to-Date	Actual Year-to-Date
New Business Connections	\$0.9	\$0.8	\$1.8	\$2.0
Capacity Expansion	\$0.2	\$0.2	\$0.3	\$0.5
System Performance	\$17.8	\$18.7	\$33.7	\$32.0
Facility Relocation	\$0.4	\$0.2	\$0.6	\$0.3
Maintenance	\$56.3	\$60.1	\$108.4	\$115.4
Total	\$75.6	\$80.0	\$144.9	\$150.2

**Section 57.195(e)(8).** *“Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures in total and detailed by the EDC’S own functional account code or FERC account code as available.” (For first, second and third quarter reports only.)*

\$Millions	Budgeted 2 <sup>nd</sup> Quarter	Actual 2 <sup>nd</sup> Quarter	Budgeted Year-to-Date	Actual Year-to-Date
New Business Connections	\$19.6	\$18.0	\$38.9	\$34.1
Capacity Expansion	\$12.4	\$10.9	\$28.3	\$25.2
System Performance	\$113.0	\$101.0	\$207.9	\$196.9
Facility Relocation	\$4.5	\$1.4	\$8.3	\$3.8
Maintenance	\$40.5	\$48.2	\$80.8	\$89.5
Total	\$190.0	\$179.5	\$364.1	\$349.4

**Section 57.195(e)(9).** *“Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category (e.g., lineman, technician and electrician).”*

PECO’s full-time trade staff as of June 30, 2021 was as follows:

Aerial Lineman	400
Underground Lineman (Include UTS)	59
Transmission / Substation Mechanics, Operators	103
Energy Technicians	77
Aerial Foreman	74
Underground Foreman	17
Transmission / Substation Foreman	38
ET Foreman	8
Total	776

**Contact Persons:**

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**Appendix A**  
**Rolling 12- month reliability index values for 5% worst performing circuits**

CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAIDI	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFI	12 Month Rolling Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
AIRY_133	1988	1.28	53	68	0.01	2539	2250	16
AQUE_000	229	6.41	163	1044	1.94	1467	3984	445
AVONDALE_002	157	1.81	99	178	1.08	284	467	170
BACTON_000	237	0.25	214	54	0.02	60	214	5
BALA_038	303	1.99	158	314	0.06	603	1587	19
BELLEVUE_002	614	3.30	257	849	0.07	2028	8692	40
BLUE_GRASS_133	1121	2.28	67	153	1.65	2551	2863	1847
BOOT_JACK_000	637	3.07	252	774	2.28	1956	8214	1454
BRADFORD_341	1330	1.29	92	118	1.24	1719	2623	1646
BRADFORD_351	907	1.51	115	174	1.89	1374	2629	1716
BRADFORD_352	1020	2.43	101	244	4.55	2479	4154	4645
BRADFORD_353	1992	1.89	51	96	3.23	3769	3198	6433
BRYN_MAWR_134	429	1.16	470	543	0.43	496	3881	184
BUCKINGHAM_353	2044	1.88	114	215	1.08	3839	7314	2207
BUCKINGHAM_362	3305	1.99	80	159	0.81	6571	8736	2688
BYBERRY_137	1825	0.35	161	56	0.80	631	1696	1454
BYBERRY_176	171	0.46	60	28	0.01	78	79	1
BYBERRY_184	988	0.06	337	20	0.00	59	332	1
CALLOWHILL_134	1533	0.21	46	10	0.80	324	251	1229
CARMEL_003	832	2.02	103	208	0.50	1678	2887	420
CARMEL_004	567	2.23	107	237	2.81	1262	2243	1593
CEDARBROOK_132	673	0.20	82	16	0.07	135	185	46
CHALFONT_001	534	3.63	223	808	2.21	1938	7195	1181
CHALFONT_004	287	1.95	544	1060	0.04	559	5069	12
CLAY_341	832	0.37	69	25	0.99	305	349	827
CLAY_342	1951	2.65	90	237	1.98	5165	7722	3858
CLAY_343	1049	1.47	416	610	4.27	1539	10661	4484
CORNOG_002	309	2.21	74	165	2.00	684	848	619
COUNTY_LINE_002	485	0.04	188	7	0.03	17	53	15
COUNTY_LINE_006	518	0.31	66	20	0.02	158	174	8
DALEVILLE_341	1588	0.76	50	38	4.28	1204	995	6798
DANBORO_000	573	3.33	39	130	0.09	1908	1240	50
DILTOWN_002	238	0.66	1509	1002	1.05	158	3975	250
DOWNTOWN_003	956	2.06	134	276	0.45	1970	4401	433
DOWNTOWN_004	773	0.73	179	132	0.13	568	1695	101
EAGLE_353	2246	1.76	121	214	2.31	3961	8005	5184
ELLIS_001	714	0.13	383	49	0.97	92	587	695
FALLS_011	295	3.14	331	1040	2.09	927	5115	618
GARDENVILLE_000	307	9.11	108	983	3.12	2798	5027	959
GERMANTOWN_008	873	0.00	0	0	0.00	0	0	0
GERMANTOWN_022	587	3.05	72	220	0.00	1791	2157	0
GERMANTOWN_023	1067	2.92	75	219	0.00	3111	3902	0
GLADWYNE_132	517	3.91	290	1137	7.44	2024	9796	3849
GRAVEL_002	443	0.11	58	6	0.06	48	46	27
HAGYS_001	271	2.38	144	343	0.00	644	1549	0
HARVEY_001	367	0.08	21	2	0.00	28	10	0
HEARTWOOD_003	524	4.00	85	341	4.76	2097	2982	2494
HEARTWOOD_007	512	2.12	205	435	3.00	1087	3716	1536
HEATON_166	826	1.27	70	89	2.91	1052	1227	2407

CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAIDI	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFI	12 Month Rolling Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
HEATON_167	784	0.61	62	38	0.46	481	500	359
HEATON_169	1464	1.18	74	87	0.40	1726	2131	585
JARRETT_141	1471	0.67	108	73	0.85	991	1782	1255
KAOLIN_001	126	2.98	284	847	4.12	376	1779	519
KENNETT_SQUAR_004	300	5.16	91	467	6.96	1548	2337	2087
KLEYONA_004	321	2.26	110	249	0.07	725	1334	24
KNOWLTON_004	640	0.14	188	26	2.96	89	278	1896
LANTERN_000	507	3.80	114	434	0.00	1929	3670	0
LENAPE_341	1144	1.24	162	201	1.81	1424	3836	2072
LENAPE_352	1787	1.63	117	190	2.72	2919	5669	4864
LINE_161_00CO	1259	3.33	143	478	0.82	4197	10035	1037
LINE_175_00CO	494	6.79	141	960	3.54	3354	7903	1750
LINE_2327	1491	0.48	59	28	0.00	709	695	1
LINE_2352	874	0.11	212	23	0.00	96	340	0
LONGSHORE_013	590	1.08	234	252	0.00	636	2477	0
LYNDELL_000	198	3.91	114	445	1.14	775	1469	226
MAPLE_HILL_000	622	1.99	34	68	0.00	1235	700	0
MARSHALLTON_002	410	2.33	99	229	0.00	955	1568	1
MATTHEWS_000	360	5.22	76	394	0.19	1879	2366	68
MIDDLETOWN_133	1442	0.72	175	126	1.00	1037	3019	1439
MONROE_002	681	2.32	62	144	2.02	1582	1639	1375
MORRISVILLE_011	679	3.33	295	982	1.98	2262	11117	1345
NESHAMINY_162	812	0.52	175	92	0.13	426	1246	103
NEWLINVILLE_342	1961	2.78	41	113	1.48	5453	3706	2904
NEWLINVILLE_343	3326	2.15	70	151	4.33	7164	8387	14391
NEWLINVILLE_353	2920	0.97	129	125	1.92	2823	6088	5597
NEWLINVILLE_362	2709	3.37	172	578	3.62	9118	26079	9800
NEWTOWN_SQUAR_136	1540	1.36	99	134	2.88	2090	3438	4437
NEWTOWN_SQUAR_143	1013	1.05	186	195	0.49	1061	3297	497
NOLAN_001	910	1.05	17	18	0.00	953	271	0
NOLAN_004	741	1.77	267	475	5.67	1315	5862	4199
OAKMONT_003	226	1.03	56	58	0.00	232	218	0
OAKMONT_004	349	1.00	42	42	0.00	349	244	0
ORTHODOX_000	Retired	Retired	Retired	Retired	Retired	Retired	Retired	Retired
OVERBROOK_015	644	3.42	82	280	0.00	2205	3007	1
PENCOYD_013	612	1.99	78	156	0.06	1218	1592	38
PERKIOMEN_341	1558	1.53	120	183	2.57	2381	4760	4002
PERKIOMEN_354	2796	1.01	104	105	0.73	2829	4904	2040
PERKIOMEN_363	2497	1.96	159	310	1.10	4883	12906	2742
PLANEBROOK_344	1812	5.95	186	1109	3.50	10783	33500	6335
PLYMOUTH_136	578	3.01	181	544	0.12	1741	5243	68
PLYMOUTH_146	1351	1.88	86	162	0.99	2540	3655	1340
PLYMOUTH_164	1335	0.89	61	54	0.68	1189	1203	905
PLYMOUTH_182	572	3.91	77	300	0.00	2239	2862	1
ROXBOROUGH_136	1117	1.09	144	157	2.03	1219	2925	2266
RUSHLAND_000	429	1.05	211	222	1.02	450	1586	437
STARKEY_000	389	2.28	323	736	2.00	886	4771	777
STONY_002	204	3.37	237	798	2.14	687	2714	436
STREET_000	316	1.13	323	365	6.64	357	1922	2099
TACONY_132	2977	0.16	201	31	0.00	462	1548	0
TREDYFFRIN_341	617	4.34	206	891	1.00	2675	9166	620

CIRCUIT	CUSTOMERS ON CIRCUIT	12 Month Rolling Circuit SAIFI	12 Month Rolling Circuit CAIDI	12 Month Rolling Circuit SAIDI	12 Month Rolling Circuit MAIFI	12 Month Rolling Customers Interrupted	12 Month Rolling Customer Hours	12 Month Rolling Momentary Customers Interrupted
TREVOSE_136	1078	0.28	94	26	1.01	297	465	1085
TUNA_142	1080	0.06	123	8	0.97	70	144	1043
WEST_OAK_LANE_007	937	2.19	110	241	0.00	2050	3761	0
WEST_OAK_LANE_013	644	0.02	378	6	0.00	10	63	0
WESTGATE_000	205	0.20	75	15	0.00	40	50	0
WHITEMARSH_131	462	0.25	370	92	0.03	115	708	14
WHITEMARSH_133	1700	0.62	136	84	0.89	1055	2386	1520
WHITEMARSH_161	1218	1.78	117	208	0.21	2162	4228	255
WHITEMARSH_163	336	2.03	69	140	0.16	683	783	53
WILLOWDALE_001	348	4.30	212	912	3.18	1498	5287	1107
WOODBOURNE_000	265	1.14	362	414	2.25	303	1830	597
WRIGHT_000	409	1.00	88	89	1.10	411	604	449
YARDLEY_002	427	0.62	181	113	1.20	266	802	512
YARDLEY_004	350	0.11	1162	133	1.00	40	774	351

The data supplied is the number of interrupted customers for each interruption event summed for all events, also known as customer interruptions. If a customer is interrupted by three separate trouble cases, they represent three customer interruptions, but only one customer interrupted.

## Appendix B

Remedial efforts taken and planned for 5% worst performing circuits as of 06/30/21

### **AIRY\_133**

*Montgomery County*

#### **Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Install animal protection
- Install new fusing

#### **Planned:**

- Complete corrective reliability work orders

### **AQUE\_000**

*Bucks County*

#### **Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed

#### **Planned:**

- Complete corrective reliability work orders

### **AVONDALE\_002**

*Chester County*

#### **Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Upgrade secondaries

#### **Planned:**

- Complete corrective reliability work orders

### **BACTON\_000**

*Chester County*

#### **Completed:**

- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed

#### **Planned:**

- Perform regularly scheduled tree clearance

### **BALA\_038**

*Philadelphia County*

#### **Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Perform regularly scheduled tree clearance

#### **Planned:**

- Complete corrective reliability work orders

### **BELLEVUE\_002**

*Bucks County*

#### **Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Perform regularly scheduled tree clearance

**Planned:**

Complete corrective reliability work orders

**BLUE\_GRASS\_133**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Inspect selected areas of circuit for vegetation issues and correct as needed

Install animal protection

**Planned:**

Complete corrective reliability work orders

**BOOT\_JACK\_000**

*Chester County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Remedial efforts completed

**BRADFORD\_341**

*Chester County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Inspect selected areas of circuit for vegetation issues and correct as needed

Upgrade fusing

Remedial efforts completed

**BRADFORD\_351**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

Inspect selected areas of circuit for vegetation issues and correct as needed

Remedial efforts completed

**BRADFORD\_352**

*Chester County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Inspect selected areas of circuit for vegetation issues and correct as needed

Remedial efforts completed

**BRADFORD\_353**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

Remedial efforts completed

**BRYN\_MAWR\_134**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera

Inspect selected areas of circuit for vegetation issues and correct as needed

Remedial efforts completed

**BUCKINGHAM\_353***Bucks County***Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**BUCKINGHAM\_362***Bucks County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**BYBERRY\_137***Philadelphia County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**BYBERRY\_176***Philadelphia County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install animal protection  
Remedial efforts completed

**BYBERRY\_184***Bucks County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**CALLOWHILL\_134***Philadelphia County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**CARMEL\_003***Montgomery County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install new recloser

**Planned:**

Complete corrective reliability work orders

**CARMEL\_004***Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders

**CEDARBROOK\_132**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install animal protection  
Remedial efforts completed

**CHALFONT\_001**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**CHALFONT\_004**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**CLAY\_341**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**CLAY\_342**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**CLAY\_343**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Install express main  
Upgrade fusing  
Remedial efforts completed

**CORNOG\_002**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**COUNTY\_LINE\_002***Bucks County***Completed:**

- Inspect circuit visually and with thermographic camera
- Perform regularly scheduled tree clearance
- Remedial efforts completed

**COUNTY\_LINE\_006***Montgomery County***Completed:**

- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Perform regularly scheduled tree clearance
- Remedial efforts completed

**DALEVILLE\_341***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**DANBORO\_000***Bucks County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install tree resistant wire

**Planned:**

- Complete corrective reliability work orders

**DILTOWN\_002***Delaware County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**DOWNINGTOWN\_003***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**DOWNINGTOWN\_004***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**EAGLE\_353***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera

Perform regularly scheduled tree clearance  
Remedial efforts completed

**ELLIS\_001**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Install new underground direction feed  
Perform regularly scheduled tree clearance

**FALLS\_011**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Install tree resistant wire  
Perform regularly scheduled tree clearance

**GARDENVILLE\_000**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**GERMANTOWN\_008**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**GERMANTOWN\_022**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**GERMANTOWN\_023**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**GLADWYNE\_132**

*Delaware County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install cut-out mounted recloser  
Remedial efforts completed

**GRAVEL\_002***Bucks County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Remedial efforts completed

**HAGYS\_001***Delaware County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Install cut-out mounted recloser

**HARVEY\_001***Delaware County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install tree resistant wire
- Remedial efforts completed

**HEARTWOOD\_003***Bucks County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Complete corrective reliability work orders

**HEARTWOOD\_007***Bucks County***Completed:**

- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Remedial efforts completed

**HEATON\_166***Montgomery County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**HEATON\_167***Montgomery County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Install animal protection
- Remedial efforts completed

**HEATON\_169***Montgomery County***Completed:**

- Complete corrective reliability work orders
- Inspect selected areas of circuit for vegetation issues and correct as needed

Install animal protection

**Planned:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera

**JARRETT\_141**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**KAOLIN\_001**

*Chester County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**KENNETT\_SQUAR\_004**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**KLEYONA\_004**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**KNOWLTON\_004**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Install cut-out mounted recloser  
Remedial efforts completed

**LANTERN\_000**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**LENAPE\_341**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Install new fusing  
Install new recloser  
Remedial efforts completed

**LENAPE\_352***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**LINE\_161\_00CO***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**LINE\_175\_00CO***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**LINE\_2327***Philadelphia County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install animal protection
- Perform regularly scheduled tree clearance
- Remedial efforts completed

**LINE\_2352***Philadelphia County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install animal protection

**Planned:**

- Perform regularly scheduled tree clearance

**LONGSHORE\_013***Philadelphia County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**LYNDELL\_000***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**MAPLE\_HILL\_000***Montgomery County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera

**Planned:**

- Complete corrective reliability work orders

**MARSHALLTON\_002***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install express main
- Install regulator
- Remedial efforts completed

**MATTHEWS\_000***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Perform regularly scheduled tree clearance

**MIDDLETOWN\_133***Delaware County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Install tree resistant wire
- Remedial efforts completed

**MONROE\_002***Delaware County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**MORRISVILLE\_011***Bucks County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

- Perform regularly scheduled tree clearance

**NESHAMINY\_162***Bucks County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install animal protection
- Perform regularly scheduled tree clearance
- Remedial efforts completed

**NEWLINVILLE\_342***Chester County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**NEWLINVILLE\_343***Chester County***Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera

**Planned:**

Install tree resistant wire

**NEWLINVILLE\_353**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**NEWLINVILLE\_362**

*Chester County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install tree resistant wire  
Remedial efforts completed

**NEWTOWN\_SQUAR\_136**

*Delaware County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install animal protection  
Install cut-out mounted recloser  
Remedial efforts completed

**NEWTOWN\_SQUAR\_143**

*Delaware County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**NOLAN\_001**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Perform regularly scheduled tree clearance

**NOLAN\_004**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Perform regularly scheduled tree clearance

**OAKMONT\_003**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**OAKMONT\_004**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**ORTHODOX\_000**

*Philadelphia County*

**Completed:**

Circuit retired

**OVERBROOK\_015**

*Philadelphia County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders  
Perform regularly scheduled tree clearance

**PENCOYD\_013**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Perform regularly scheduled tree clearance

**Planned:**

Complete corrective reliability work orders

**PERKIOMEN\_341**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Install new recloser

**PERKIOMEN\_354**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**PERKIOMEN\_363**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Remedial efforts completed

**PLANE BROOK\_344**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**PLYMOUTH\_136**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install animal protection

**Planned:**

Complete corrective reliability work orders

**PLYMOUTH\_146**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**PLYMOUTH\_164**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**PLYMOUTH\_182**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Install animal protection  
Upgrade transformer

**Planned:**

Complete corrective reliability work orders

**ROXBOROUGH\_136**

*Philadelphia County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Install animal protection  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**RUSHLAND\_000**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**STARKEY\_000**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Perform regularly scheduled tree clearance

**STONY\_002**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed  
Install animal protection  
Remedial efforts completed

**STREET\_000**

*Chester County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**TACONY\_132**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders

**TREDYFFRIN\_341**

*Chester County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**TREVOSE\_136**

*Bucks County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

Complete corrective reliability work orders

**TUNA\_142**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**WESTGATE\_000**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**WEST\_OAK\_LANE\_007***Philadelphia County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera

**Planned:**

- Complete corrective reliability work orders

**WEST\_OAK\_LANE\_013***Philadelphia County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Complete corrective reliability work orders

**WHITEMARSH\_131***Montgomery County***Completed:**

- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**WHITEMARSH\_133***Montgomery County***Completed:**

- Inspect circuit visually and with thermographic camera
- Install animal protection
- Remedial efforts completed

**WHITEMARSH\_161***Montgomery County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Complete corrective reliability work orders

**WHITEMARSH\_163***Montgomery County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Remedial efforts completed

**WILLOWDALE\_001***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed
- Remedial efforts completed

**WOODBOURNE\_000***Bucks County***Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Perform regularly scheduled tree clearance

**Planned:**

Complete corrective reliability work orders

**WRIGHT\_000**

*Bucks County*

**Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Install new reclosers
- Remedial efforts completed

**YARDLEY\_002**

*Bucks County*

**Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera

**Planned:**

- Perform regularly scheduled tree clearance

**YARDLEY\_004**

*Bucks County*

**Completed:**

- Complete corrective reliability work orders
- Inspect circuit visually and with thermographic camera
- Inspect selected areas of circuit for vegetation issues and correct as needed

**Planned:**

- Perform regularly scheduled tree clearance

## **Appendix C**

### **New Business Connections**

This work category includes all the facility work required to add a new customer or to increase the load to an existing customer. The facility work will include the facilities required to directly connect the customer to the system and the upgrade/replacement of any existing facility to serve the requested additional load.

### **Capacity Expansion**

This work category includes only capacity work generated by the system design engineer to prevent system failure and to assure the delivery of voltage as specified in the tariff. The addition of new substations and substation enlargements for future load growth will also be included in this project.

### **System Performance**

This work category includes projects designed to upgrade, modify or improve the performance of the distribution system. Also included in this category are indirect costs in support of all categories and one-time accounting adjustment items.

### **Facility Relocation**

This work category includes all requests for relocation of PECO facilities including municipal as well as customer related relocation requests.

### **Maintenance**

This work category includes work performed to repair and restore equipment to its normal state of operation, along with planned preventive maintenance work such as visual and thermographic inspections and tree trimming around transmission and distribution lines.

### **Storm Funds**

Incremental costs (primarily; overtime, contractors, mutual assistance, and meals) incurred while responding to major storms (storms that meet customer outage and duration criteria).