



peco<sup>SM</sup>

AN EXELON COMPANY

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July 29, 2022

**VIA E-FILING**

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

**Re: PECO 2022 Second Quarter Reliability Report PUC Docket No. M-2016-2522508**

Dear Secretary Chiavetta:

Enclosed is PECO's 2022 Quarterly Reliability Report for the period ending June 30, 2022 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 continuing COVID-19 pandemic, PECO's employees are working remotely in the office on a part-time basis. Accordingly, PECO employees will have limited access to photocopying and U.S. mail, among other services. PECO requests that all communications with PECO employees continue to be transmitted by email.

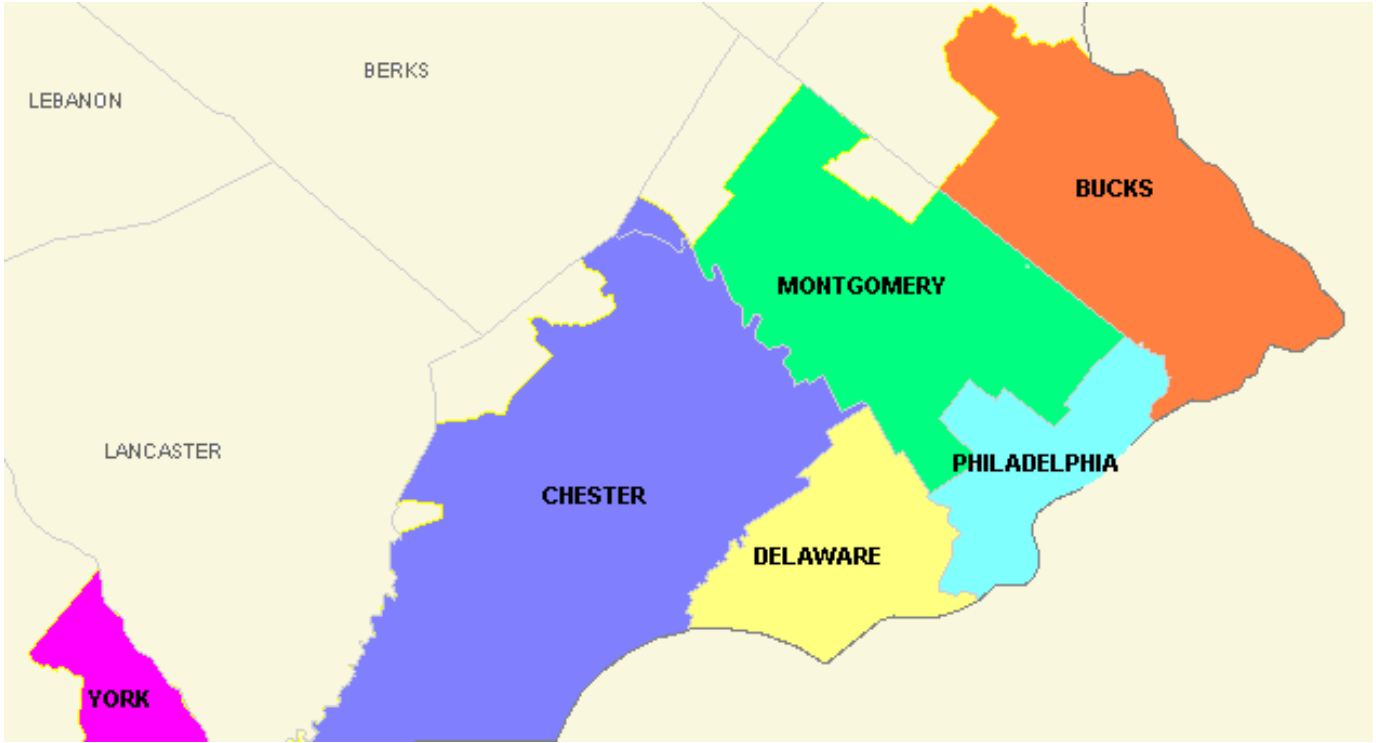
Thank you for your assistance in this matter and please direct any questions regarding the above to Megan McDevitt, Manager, Retail Rates at (215) 841 6361 or via email: [megan.mcdevitt@exeloncorp.com](mailto:megan.mcdevitt@exeloncorp.com).

Sincerely,

Enclosure

Cc: John Van Zant (via email only)  
Dan Searfoorce (via email only)  
Harry R. Bidelspach (via email only)  
Office of Consumer Advocate (via email only)  
Office of Small Business Advocate (via email only)

# PECO Energy Company Quarterly Reliability Report For Period Ending June 30, 2022



**July 29, 2022**

**PECO Energy (“PECO”)**

**Quarterly Reliability Report for the Period Ending June 30, 2022 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.”

In the second quarter of 2022, PECO experienced no events that qualified as major events under Pa. Code § 57.192, which specifies that a minimum of 10% of customers must be affected for the event to qualify.

**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
1,681,669	1,541,197	4,769,997	1,681,954	286,199,791	0.92	186	170	1.00

Data reflects 12 months ending 06/30/2022.

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 is below its Benchmark and Standard; CAIDI is above its Benchmark and Standard; SAIDI 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, including the remnants of Hurricane Ida, led to high CAIDI and SAIDI.

The following table shows PECO’s reliability index values excluding the interruptions that occurred during the Hurricane Ida remnants. Apart from the effects of Ida, SAIFI and SAIDI would be under their respective Benchmarks and Standards, while CAIDI would be above its Benchmark and slightly above its Standard. Rolling 12-month CAIDI continues to be high due to elevated storm activity in the PECO service territory.

*Reliability Index Values, Excluding Hurricane Ida Remnants\**

PECO Customers	Sustained Customer Interruptions	Sustained Customer Hours	Momentary Customer Interruptions	Sustained Customer Minutes	SAIFI	CAIDI	SAIDI	MAIFI
1,681,669	1,379,168	3,105,435	1,551,448	186,326,052	0.82	135	111	0.92

Data reflects 12 months ending 06/30/2022.

\* PECO's service territory was substantially affected by remnants of Hurricane Ida in the 3rd Quarter 2021, which caused downed tree limbs on power lines, tornados, and flooding which interrupted electric service to 164,989 customers (9.85% of PECO customers). Exclusion of the Hurricane Ida event was not requested; however, reliability index values were reported in the 3rd quarter report both with and without the impacts of Ida. PECO is presenting reliability index values in this 1st quarter report in a similar manner.

**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, 2022					
Cause	Service Outages	% of Service Outages	Customer Interruptions	% of Customer Interruptions	Customer Minutes
Animal	1,244	9.2%	33,401	2.2%	2,106,770
Contact/Dig-In	168	1.2%	17,868	1.2%	1,416,707
Equipment Failure	5,057	37.3%	507,757	32.9%	53,185,755
Lightning	491	3.6%	56,705	3.7%	9,020,221
Other	569	4.2%	72,003	4.7%	13,843,848
T&S	24	0.2%	89,241	5.8%	44,548,483
Unknown	497	3.7%	64,728	4.2%	5,333,252
Vegetation-Broken/Uprooted	4,473	33.0%	585,570	38.0%	139,336,792
Vegetation-Ingrowth	569	4.2%	46,821	3.0%	11,056,921
Vehicles	455	3.4%	67,103	4.4%	6,351,043

\*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 (38.0% of all customer interruptions), as opposed to ingrowth (3.0% 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. Note that Hurricane Ida remnants caused an increase in nearly all categories of customer interruption causes, particularly in vegetation events. (See table below for an outage cause breakdown without interruptions from Hurricane Ida remnants.)

*Outage Causes, Excluding Hurricane Ida Remnants\**

12 Months Ending June 30, 2022					
Cause	Service Outages	% of Service Outages	Customer Interruptions	% of Customer Interruptions	Customer Minutes
Animal	1,236	9.7%	33,401	2.4%	2,106,770
Contact/Dig-In	168	1.3%	17,868	1.3%	1,416,707
Equipment Failure	4,890	38.4%	479,118	34.7%	42,762,063
Lightning	468	3.7%	50,613	3.7%	5,625,955
Other	442	3.5%	71,293	5.2%	13,362,022
T&S	21	0.2%	52,991	3.8%	23,344,502
Unknown	431	3.4%	61,906	4.5%	3,772,722
Vegetation-Broken/Uprooted	4,108	32.3%	503,985	36.5%	80,137,184
Vegetation-Ingrowth	509	4.0%	42,310	3.1%	7,478,260
Vehicles	452	3.6%	65,683	4.8%	6,319,867

\* PECO's service territory was substantially affected by remnants of Hurricane Ida in the 3rd Quarter 2021, which caused downed tree limbs on power lines, tornados, and flooding which interrupted electric service to 164,989 customers (9.85% of PECO customers). Exclusion of the Hurricane Ida event was not requested; however, outage cause information was reported in the 3rd quarter report both with and without the impacts of Ida. PECO is presenting outage cause data in this 1st quarter report in a similar manner.

**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 6/30/2022					
	2 <sup>nd</sup> Quarter Tasks		YTD Tasks		2022 Total Planned
	Planned	Complete	Planned	Complete	
Recloser Inspections (Number of reclosers inspected)	110	286	170	504	407
Circuit Patrol & Thermography (Number of circuits patrolled)	435	327	637	624	970
Pole Inspections (Number of poles visually inspected)	11,960	18,071	14,960	30,187	34,000
Padmount Transformers (Number of transformers visually inspected)	2,150	1,215	3,150	4,080	6,666
Below Ground Transformers (Number of transformers visually inspected)	340	339	588	693	1,234
Substations (Number of substations inspections performed (e.g., visual inspection, reading of currents, voltages, temperature etc.) for a variety of substation components)	341	356	679	701	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)	708	765	1,416	1,490	2,830

Vegetation Management Preventive Maintenance Program – status as of 6/30/22					
	2 <sup>nd</sup> Quarter Miles		YTD Miles		2022 Total Planned
	Planned	Complete	Planned	Complete	
Distribution Lift and Manual Trimming	599	717	1,198	1,649	2,396
Transmission Trimming and Removals	51	55	94	99	193

PECO is executing a plan to complete all predictive and preventive maintenance scheduled for 2022 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	\$2.2	\$1.7	\$4.1
Capacity Expansion	\$0.1	\$0.2	\$0.1	\$0.3
System Performance	\$22.6	\$26.2	\$44.1	\$46.8
Facility Relocation	\$0.3	\$0.1	\$0.5	\$0.2
Maintenance	\$54.8	\$54.2	\$105.2	\$106.0
Total	\$78.7	\$82.9	\$151.6	\$157.4

**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	\$18.8	\$20.7	\$36.5	\$38.0
Capacity Expansion	\$3.7	\$6.8	\$8.7	\$13.2
System Performance	\$126.0	\$158.5	\$224.8	\$277.4
Facility Relocation	\$4.0	\$4.0	\$7.2	\$5.8
Maintenance	\$36.5	\$44.2	\$75.1	\$87.0
Total	\$189.0	\$234.2	\$352.3	\$421.4

**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, 2022 was as follows:

Aerial Lineman	402
Underground Lineman (Include UTS)	59
Transmission / Substation Mechanics, Operators	95
Energy Technicians	90
Aerial Foreman	74
Underground Foreman	17
Transmission / Substation Foreman	44
ET Foreman	8
Total	789

**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
ABINGTON_002	514	0.00	0	0	1.01	0	0	518
BALA_039	444	0.00	0	0	0.00	0	0	0
BALA_134	4	0.00	0	0	0.00	0	0	0
BALA_135	1103	1.54	51	78	0.68	1699	1433	752
BIG_OAK_001	527	0.46	122	57	2.07	245	497	1092
BIG_OAK_002	785	0.08	822	63	0.96	60	822	757
BIRCH_000	293	0.52	241	125	3.99	152	609	1170
BLUE_GRASS_132	2130	1.51	84	127	0.37	3218	4514	793
BLUE_GRASS_139	1291	7.78	54	419	1.46	10044	9023	1879
BLUE_GRASS_144	1127	2.70	51	138	1.72	3048	2591	1934
BOYD_000	439	1.23	71	88	4.04	539	641	1774
BRADFORD_346	2489	1.52	103	157	4.66	3771	6504	11592
BROOMALL_002	440	1.13	114	128	0.01	496	940	3
BRYAN_002	370	2.19	158	346	0.02	810	2135	6
BUCKINGHAM_346	1489	1.59	167	265	2.37	2370	6582	3525
BYBERRY_162	1412	1.78	166	295	3.05	2513	6941	4306
BYBERRY_171	1004	1.92	388	746	0.61	1928	12475	614
CALLOWHILL_142	1477	0.64	57	36	0.88	938	886	1307
CALN_000	507	1.21	438	530	2.19	614	4481	1111
CARMEL_002	485	2.38	561	1335	2.43	1154	10795	1177
CLAY_352	984	1.85	74	138	3.55	1822	2255	3491
COOPER_353	308	0.47	151	71	1.10	145	365	339
CRESCENTVILLE_138	840	1.41	73	103	0.06	1183	1440	48
CURLY_000	436	3.00	133	399	0.16	1310	2899	70
DAVISVILLE_004	869	1.80	166	299	0.00	1565	4325	0
DOYLESTOWN_001	339	1.03	107	110	2.84	350	622	962
EDGELY_001	674	0.04	56	3	2.01	30	28	1356
ELLIS_002	540	1.16	37	43	1.01	629	384	547
ELLWOOD_001	808	0.07	531	39	0.00	60	531	0
EMILIE_134	1027	0.01	307	4	0.00	15	77	0
EUREKA_001	199	0.24	304	73	1.01	48	243	201
FAIR_004	389	1.25	106	132	2.38	485	859	926
FALLS_341	1086	2.30	219	503	4.27	2500	9107	4633
FALLS_342	58	0.02	53	1	1.97	1	1	114
FERRY_001	302	0.93	82	77	1.16	282	385	351
FLINT_132	1264	1.22	88	107	1.50	1544	2263	1900
FLINT_143	527	1.51	117	177	0.53	798	1556	279
FORREST_002	1227	1.00	76	76	0.00	1224	1558	0
GAP_000	679	3.35	58	194	1.98	2278	2197	1343
GERMANTOWN_014	584	0.02	1151	18	0.00	9	173	0
GLADWYNE_001	184	5.15	217	1116	3.02	947	3421	555
GOLF_002	391	1.04	92	96	0.15	408	623	59
GOSHEN_351	2029	2.43	82	200	1.49	4939	6755	3017
GROVE_000	612	1.24	110	136	5.01	756	1385	3065
HANOVER_001	1056	2.93	84	245	0.00	3098	4313	0
HARMONY_003	454	1.97	174	343	3.50	895	2598	1587
HARVEY_002	663	3.10	60	187	2.01	2058	2069	1332
HEARTWOOD_001	582	1.04	157	164	1.03	608	1596	597
HUNTING_PARK_046	805	0.25	78	19	0.10	199	258	77

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
HUNTING_PARK_047	1109	0.39	64	25	0.00	430	460	0
JENKINTOWN_130	438	2.13	603	1282	0.43	931	9362	190
JENKINTOWN_143	1497	2.38	381	904	3.35	3556	22562	5008
JORDAN_004	313	0.01	313	2	0.04	2	10	12
KAOLIN_003	228	2.06	55	114	5.24	470	433	1194
KELLER_000	393	0.09	468	41	4.05	34	265	1590
KENNETT_SQUAR_003	629	1.01	22	22	2.00	634	235	1259
KENNETT_SQUAR_005	305	2.49	49	122	2.73	758	619	832
KEYSTONE_033	0	0.00	0	0	0.00	0	0	0
LANDENBERG_000	544	3.35	187	627	6.13	1823	5686	3335
LEDERACH_003	258	2.07	67	138	2.98	533	593	768
LENAPE_000	437	0.15	648	98	3.00	66	712	1309
LENAPE_344	2046	0.40	39	16	0.01	826	537	20
LEOPARD_002	Retired	Retired	Retired	Retired	Retired	Retired	Retired	Retired
LEOPARD_004	144	0.17	382	64	1.02	24	153	147
LEWIS_001	572	3.53	114	401	1.14	2018	3827	652
LINE_116_00BM	639	2.90	130	376	3.52	1855	4004	2250
LINE_162_00	560	3.13	92	288	1.76	1752	2683	987
LINE_2235	2222	0.66	423	277	0.14	1457	10277	301
LINE_2381	1001	2.90	99	287	0.42	2905	4788	420
LINE_2389	524	5.91	76	447	0.01	3098	3907	4
LINE_2787	2808	1.74	79	138	1.50	4886	6465	4211
LINE_4100PB	2295	2.40	91	218	3.68	5511	8326	8443
LINE_708	1689	0.11	115	13	0.00	185	353	0
LINE_7200WH	227	3.98	173	689	0.00	903	2608	1
LINE_734	173	0.09	350	30	0.03	15	88	6
LLANERCH_141	1332	2.95	37	108	1.02	3933	2398	1356
MALVERN_003	218	1.99	239	477	1.01	434	1732	220
MANOR_002	417	5.24	76	396	11.33	2185	2756	4724
MARSHALLTON_001	750	2.25	78	175	3.00	1684	2187	2251
MIDDLETOWN_132	1682	1.76	61	108	2.15	2958	3030	3615
MORRISVILLE_012	801	1.02	62	63	1.01	819	844	806
MORWOOD_000	680	4.69	400	1874	6.04	3188	21242	4107
NEWLINVILLE_341	2339	1.60	55	87	3.99	3733	3391	9337
NEWLINVILLE_344	2648	1.16	108	126	2.29	3077	5542	6076
NEWLINVILLE_354	2091	1.23	76	93	3.11	2568	3235	6499
NEWTOWN_SQUAR_144	1513	0.25	124	31	0.00	382	790	0
NORTH_OXFORD_002	820	0.95	610	582	0.04	782	7953	34
NORTH_WALES_353	2531	2.32	624	1449	2.82	5877	61127	7139
PASSYUNK_138	1576	0.03	58	2	1.11	52	50	1752
PENCOYD_133	1256	0.50	44	22	1.55	633	464	1950
PENLLYN_001	911	2.11	819	1728	3.12	1923	26233	2845
PENNSBURY_000	298	1.31	212	279	0.00	391	1385	0
PENROSE_162	704	1.07	41	44	0.64	753	520	453
PLYMOUTH_140	1248	0.98	153	150	0.01	1221	3115	7
PLYMOUTH_160	778	1.93	767	1477	0.20	1499	19155	152
RICKERTS_001	398	0.11	37	4	2.11	42	26	840
SADSBURY_000	618	1.27	144	184	1.00	786	1891	617
SCHWENKSVILLE_001	537	2.36	581	1369	3.00	1266	12251	1609
SCHWENKSVILLE_002	663	4.09	489	1997	2.25	2709	22070	1495
SILES_004	495	1.99	113	226	0.00	987	1862	0

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
SOLEBURY_001	481	4.37	440	1922	4.18	2101	15411	2010
SPRING_CITY_002	1191	2.05	90	186	0.27	2447	3684	321
TACONY_013	942	0.05	89	4	0.00	45	67	1
UPPER_DARBY_135	2239	1.28	150	191	1.30	2859	7132	2903
UPPER_DARBY_139	2318	0.67	44	30	1.36	1563	1152	3145
UPPER_PROVIDENCE_343	1511	3.59	265	950	1.58	5422	23915	2381
UPPER_PROVIDENCE_352	806	0.59	61	36	0.05	472	477	43
WARMINSTER_132	1215	0.18	630	111	0.01	214	2248	13
WAYNE_142	830	1.54	72	110	0.12	1275	1523	98
WAYNE_143	731	1.60	118	190	1.53	1172	2314	1118
WEST_OAK_LANE_009	605	0.98	180	177	0.00	593	1784	0
WESTOVER_000	639	0.11	3386	371	0.09	70	3950	59
WILLOWDALE_002	451	0.66	274	181	7.14	298	1363	3221
WOODBOURNE_343	873	0.71	120	86	0.99	622	1245	864

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 06/30/22

### **ABINGTON\_002**

*Montgomery County*

#### **Completed:**

Complete corrective reliability work orders

#### **Planned:**

Inspect circuit visually and with thermographic camera

### **BALA\_039**

*Delaware County*

#### **Completed:**

Inspect circuit visually and with thermographic camera

Remedial efforts completed

### **BALA\_134**

*Philadelphia County*

#### **Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

#### **Planned:**

Complete corrective reliability work orders

### **BALA\_135**

*Delaware County*

#### **Completed:**

Inspect circuit visually and with thermographic camera

Install cut-out mounted recloser

Remedial efforts completed

### **BIG\_OAK\_001**

*Bucks County*

#### **Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Upgrade transformer

Remedial efforts completed

### **BIG\_OAK\_002**

*Bucks County*

#### **Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Install animal protection

Upgrade fusing

Upgrade insulators

Remedial efforts completed

### **BIRCH\_000**

*Bucks County*

#### **Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Perform regularly scheduled tree clearance

Remedial efforts completed

**BLUE\_GRASS\_132***Philadelphia County***Completed:**

Complete corrective reliability work orders

**Planned:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

**BLUE\_GRASS\_139***Philadelphia County***Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**BLUE\_GRASS\_144***Philadelphia County***Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**BOYD\_000***Chester County***Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Install animal protection

Remedial efforts completed

**BRADFORD\_346***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

Perform regularly scheduled tree clearance

Remedial efforts completed

**BROOMALL\_002***Delaware County***Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Install new fusing

**Planned:**

Perform regularly scheduled tree clearance

**BRYAN\_002***York County***Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**BUCKINGHAM\_346***Bucks County***Completed:**

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

**Planned:**

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

**BYBERRY\_162***Bucks County***Completed:**

Complete corrective reliability work orders  
Perform regularly scheduled tree clearance

**Planned:**

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

**BYBERRY\_171***Bucks County***Completed:**

Complete corrective reliability work orders  
Perform regularly scheduled tree clearance

**Planned:**

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

**CALLOWHILL\_142***Philadelphia County***Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**CALN\_000***Chester County***Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**CARMEL\_002***Montgomery County***Planned:**

Inspect circuit visually and with thermographic camera

**CLAY\_352***Chester County***Completed:**

Upgrade fusing

**Planned:**

Inspect circuit visually and with thermographic camera

**COOPER\_353***York County***Completed:**

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

Install cut-out mounted recloser

**Planned:**

Inspect circuit visually and with thermographic camera

**CRESCENTVILLE\_138**

*Philadelphia County*

**Planned:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

**CURLY\_000**

*Bucks County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Perform regularly scheduled tree clearance

Upgrade fusing

Upgrade transformer

Remedial efforts completed

**DAVISVILLE\_004**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders

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

Upgrade fusing

**Planned:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

**DOYLESTOWN\_001**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera

Perform regularly scheduled tree clearance

Remedial efforts completed

**EDGELY\_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

Remedial efforts completed

**ELLIS\_002**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

Install tree resistant wire

Remedial efforts completed

**ELLWOOD\_001**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders

**EMILIE\_134**

*Bucks County*

**Completed:**

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

**EUREKA\_001**

*Bucks County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**FAIR\_004**

*Montgomery County*

**Completed:**

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

**Planned:**

Perform regularly scheduled tree clearance

**FALLS\_341**

*Bucks County*

**Completed:**

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

**FALLS\_342**

*Bucks County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**FERRY\_001**

*Philadelphia County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**FLINT\_132**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera  
Upgrade fusing

**Planned:**

Complete corrective reliability work orders

**FLINT\_143**

*Montgomery County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**FORREST\_002**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders  
Perform regularly scheduled tree clearance

**GAP\_000**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Install cut-out mounted recloser  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**GERMANTOWN\_014**

*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  
Upgrade insulators

**Planned:**

Install new fusing

**GLADWYNE\_001**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**GOLF\_002**

*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  
Install new fusing  
Upgrade fusing  
Remedial efforts completed

**GOSHEN\_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

**GROVE\_000***Chester 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  
Install tree resistant wire

**HANOVER\_001***Montgomery County***Completed:**

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

**Planned:**

Complete corrective reliability work orders

**HARMONY\_003***Chester 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

**Planned:**

Install cut-out mounted recloser

**HARVEY\_002***Delaware 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

**HEARTWOOD\_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  
Upgrade secondary  
Remedial efforts completed

**HUNTING\_PARK\_046***Philadelphia County***Completed:**

Complete corrective reliability work orders

Perform regularly scheduled tree clearance

**Planned:**

Inspect circuit visually and with thermographic camera  
Upgrade secondary

**HUNTING\_PARK\_047**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Perform regularly scheduled tree clearance

**Planned:**

Inspect circuit visually and with thermographic camera

**JENKINTOWN\_130**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**JENKINTOWN\_143**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders  
Install tree resistant wire

**Planned:**

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

**JORDAN\_004**

*Bucks County*

**Completed:**

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

**KAOLIN\_003**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**KELLER\_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  
Install animal protection  
Perform regularly scheduled tree clearance  
Remedial efforts completed

**KENNETT\_SQUAR\_003**

*Chester County*

**Completed:**

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

**KENNETT\_SQUAR\_005**

*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
- Install new underground direction feed

**Planned:**

- Install tree resistant wire

**KEYSTONE\_033**

*Philadelphia County*

**Planned:**

- Inspect circuit visually and with thermographic camera

**LANDENBERG\_000**

*Chester County*

**Completed:**

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

**LEDERACH\_003**

*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
- Remedial efforts completed

**LENAPE\_000**

*Chester County*

**Completed:**

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

**LENAPE\_344**

*Chester County*

**Planned:**

- Inspect circuit visually and with thermographic camera

**LEOPARD\_002**

*Chester County*

**Completed:**

- Circuit retired

**LEOPARD\_004**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**LEWIS\_001**

*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

**LINE\_116\_00BM**

*Delaware County*

**Planned:**

Inspect circuit visually and with thermographic camera

Install express main

Perform regularly scheduled tree clearance

**LINE\_162\_00**

*Delaware County*

**Completed:**

Complete corrective reliability work orders

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

**Planned:**

Inspect circuit visually and with thermographic camera

**LINE\_2235**

*Montgomery County*

**Completed:**

Complete corrective reliability work orders

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

**Planned:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

**LINE\_2381**

*Philadelphia County*

**Completed:**

Install animal protection

**Planned:**

Inspect circuit visually and with thermographic camera

**LINE\_2389**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders

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

**Planned:**

Inspect circuit visually and with thermographic camera

Install new fusing

Upgrade transformer

**LINE\_2787**

*Philadelphia County*

**Completed:**

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

**LINE\_4100PB**

*Chester County*

**Planned:**

Inspect circuit visually and with thermographic camera

**LINE\_708**

*Philadelphia County*

**Completed:**

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

**Planned:**

Inspect circuit visually and with thermographic camera

**LINE\_7200WH**

*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

**LINE\_734**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders  
Install animal protection

**Planned:**

Inspect circuit visually and with thermographic camera

**LLANERCH\_141**

*Delaware 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

**MALVERN\_003**

*Chester County*

**Planned:**

Inspect circuit visually and with thermographic camera  
Install tree resistant wire

**MANOR\_002**

*Chester County*

**Completed:**

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

**MARSHALLTON\_001***Chester County***Completed:**

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

**MIDDLETOWN\_132***Delaware County***Completed:**

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

**Planned:**

- Inspect circuit visually and with thermographic camera

**MORRISVILLE\_012***Bucks County***Completed:**

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

**MORWOOD\_000***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
- Upgrade fusing
- Remedial efforts completed

**NEWLINVILLE\_341***Chester County***Completed:**

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

**NEWLINVILLE\_344***Chester County***Completed:**

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

**NEWLINVILLE\_354***Chester County***Completed:**

- Inspect circuit visually and with thermographic camera

**Planned:**

- Install tree resistant wire
- Perform regularly scheduled tree clearance

**NEWTOWN\_SQUAR\_144**

*Delaware County*

**Completed:**

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

**Planned:**

- Perform regularly scheduled tree clearance

**NORTH\_OXFORD\_002**

*Chester County*

**Planned:**

- Inspect circuit visually and with thermographic camera

**NORTH\_WALES\_353**

*Montgomery County*

**Completed:**

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

**PASSYUNK\_138**

*Philadelphia 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

**PENCOYD\_133**

*Delaware County*

**Planned:**

- Inspect circuit visually and with thermographic camera

**PENLLYN\_001**

*Montgomery County*

**Completed:**

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

**Planned:**

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

**PENNSBURY\_000**

*Chester County*

**Completed:**

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

**PENROSE\_162**

*Philadelphia County*

**Planned:**

- Inspect circuit visually and with thermographic camera

**PLYMOUTH\_140**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**PLYMOUTH\_160**

*Montgomery County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**RICKERTS\_001**

*Bucks County*

**Completed:**

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

**SADSBURY\_000**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**SCHWENKSVILLE\_001**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera  
Remedial efforts completed

**SCHWENKSVILLE\_002**

*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  
Upgrade fusing  
Upgrade transformer  
Remedial efforts completed

**SILES\_004**

*Bucks County*

**Completed:**

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

**SOLEBURY\_001**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Perform regularly scheduled tree clearance

**SPRING\_CITY\_002**

*Chester County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders

**TACONY\_013**

*Philadelphia County*

**Completed:**

Complete corrective reliability work orders

Install animal protection

**Planned:**

Inspect circuit visually and with thermographic camera

Upgrade fusing

**UPPER\_DARBY\_135**

*Delaware County*

**Completed:**

Complete corrective reliability work orders

Install animal protection

**Planned:**

Inspect circuit visually and with thermographic camera

**UPPER\_DARBY\_139**

*Delaware County*

**Completed:**

Complete corrective reliability work orders

**Planned:**

Inspect circuit visually and with thermographic camera

**UPPER\_PROVIDENCE\_343**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera

Remedial efforts completed

**UPPER\_PROVIDENCE\_352**

*Montgomery County*

**Completed:**

Inspect circuit visually and with thermographic camera

Remedial efforts completed

**WARMINSTER\_132**

*Bucks County*

**Completed:**

Complete corrective reliability work orders

Inspect circuit visually and with thermographic camera

Remedial efforts completed

**WAYNE\_142**

*Delaware County*

**Completed:**

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

**WAYNE\_143**

*Delaware County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Install tree resistant wire

**WESTOVER\_000**

*Montgomery County*

**Completed:**

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

**Planned:**

Perform regularly scheduled tree clearance

**WEST\_OAK\_LANE\_009**

*Philadelphia County*

**Completed:**

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

**Planned:**

Complete corrective reliability work orders

**WILLOWDALE\_002**

*Chester County*

**Completed:**

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

**WOODBOURNE\_343**

*Bucks County*

**Completed:**

Inspect circuit visually and with thermographic camera

**Planned:**

Complete corrective reliability work orders

## **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).