



COMMONWEALTH OF PENNSYLVANIA

September 29, 2017

E-FILED

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

Re: Petition of PPL Electric Utilities Corporation for Approval of its Long-Term Infrastructure Improvement Plan for the Period January 1, 2018 through December 31, 2022 / Docket No. P-2017-2622393

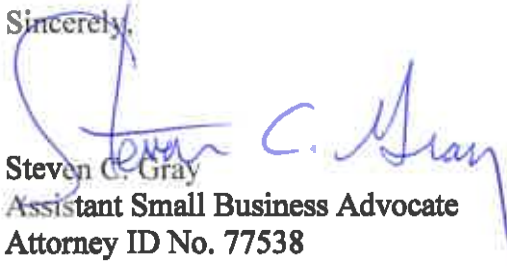
Dear Secretary Chiavetta:

I am delivering for filing today the Comments of the Office of Small Business Advocate (“OSBA”) to the Petition of PPL Electric Utilities Corporation for Approval of its Long-Term Infrastructure Improvement Plan for the period January 1, 2018 through December 31, 2022, at the above-docketed proceeding.

Copies of these Comments will be served on all known parties, as indicated on the attached Certificate of Service.

If you have any questions, please contact me.

Sincerely,



Steven C. Gray
Assistant Small Business Advocate
Attorney ID No. 77538

Enclosures

cc: Parties of Record
Robert D. Knecht

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of PPL Electric Utilities Corporation :
Corporation for Approval of its Long-Term : Docket No. P-2017-2622393
Infrastructure Improvement Plan for the Period :
January 1, 2018 through December 31, 2022 :**

**COMMENTS OF THE
OFFICE OF SMALL BUSINESS ADVOCATE**

I. Introduction

On August 31, 2017, PPL Electric Utilities Corporation (“PPL” or “the Company”) filed a Petition for Approval of its Long-Term Infrastructure Improvement Plan (“*LTIIIP-IP*”) with the Pennsylvania Public Utility Commission (“Commission”). PPL’s proposed *LTIIIP-II*, which covers the years 2018 to 2022, is closely patterned on the Company’s first LTIIIP (“*LTIIIP-I*”), which was approved on January 10, 2013, at Docket No. P-2012-2325034, and covered the years 2013 to 2017.

The Office of Small Business Advocate (“OSBA”) submits these Comments to the Company’s LTIIIP as permitted by 52 Pa. Code § 121.4(c).

II. Comments

The requirements for a Long-Term Infrastructure Improvement Plan (“LTIIIP”) are set forth in Section 1352 of the Public Utility Code, 66 Pa. C.S. § 1352. In addition, the Commission regulations state, as follows:

A utility has the burden of proof to demonstrate that its proposed LTIIIP and associated expenditures are reasonable, cost effective and are designed to ensure and maintain efficient, safe, adequate, reliable and reasonable service to consumers.

52 Pa. Code § 121.4(d).

A. In General

In its proposed *LTIP-II*, PPL has included \$903.1 million for the future five-year period (2018 through 2022). This is compared to \$705.6 million in *LTIP-I*, which is an increase of \$198 million, implying an average annual increase of 5.1 percent. Actual/forecast spending for 2013-2017 was \$685 million, only a little below the \$705.6 million set forth in *LTIP-I*. A summary of each of the programs and annual costs, matched up as best as the OSBA can, is attached to these Comments.

In contrast, actual spending during the 2008 to 2012 period (prior to *LTIP-I*) was \$442 million.

LTIP-II's categories of costs that most contribute to the increase in spending are, as follows:

Distribution pole replacements (\$81 million, including C-Truss distribution poles increase)

Improve system reliability projects (\$96 million, or \$51 million when the "Circuit SAIDI Improvement category from *LTIP-I*" is netted out)

Replace failed underground cable (\$45 million, primary and secondary)

Volt var optimization (\$23 million)

The OSBA addresses each of these categories below.

Unfortunately, PPL provides little information about the age of the equipment being replaced. While PPL includes an Appendix A with a listing of the average age of its equipment by FERC account number, the Company provides neither information regarding the distribution of equipment age nor any reasonable estimate of the reasonable lifespan for the equipment. While PPL also did not provide such information in *LTIP-I*, the OSBA observes that the

Commission has recently put increased reliance on a Company's Commission-approved LTIP in evaluating waivers to basic consumer protections that apply to the distribution system improvement charge ("DSIC").¹ In light of this increased emphasis on the LTIP, the OSBA respectfully submits that it is incumbent upon the utility to demonstrate that there is a significant need to replace aging equipment, and to present reasonable evidence as to how much of the very old equipment will be replaced over the plan period. For example, PPL reports average pole age of 40 years. It would be much more useful for PPL to provide a reasonable estimate for pole life, and to provide a distribution of pole age, such as number of poles 40-50 years old, 50-60 years old, 60-70 years old, and 70 plus years old.

B. Distribution Pole Replacements/C-Truss Distribution Poles

Of the nearly \$200 million overall increase in plan spending from *LTIP-I* to *LTIP-II*, some \$81 million is related to distribution pole replacement or reinforcement. See *LTIP-II*, at 18-19.

In *LTIP-I*, PPL stated, as follows:

PPL Electric inspects approximately 90,000 poles per year. Historical data suggests an approximate 5% rejection rate from the population of yearly inspections; of those rejected, 70% are candidates for reinforcement while 30% are candidates for replacement. PPL Electric is in the process of incorporating additional reinforcement technologies that are projected to reduce the replacement rate to approximately 15%. Replacing rejected poles avoids property damage and risk of accidental injury, and it mitigates the costs associated with extended service outages. Replacement rates are expected to fall as a result of PPL Electric's pole treatment program. The average age of an in-service wooden distribution pole is 35 years.

¹ For example, the Commission indicated that one factor in approving the waiver of the legislated rate cap on the DSIC for UGI Central Penn Gas was the fact that the company had "... increase[d] the amount of infrastructure spending over its original LTIP to improve the safety and reliability of its system." See *Opinion and Order*, Docket No. P-2016-2537609, (Order entered May 10, 2017), at 41. Consequently, the OSBA is concerned that PPL will advance a similar argument, despite the fact that PPL offers little in the way of explanation for the large increase in spending in *LTIP-II* over the original *LTIP-I*.

LTIIIP-I, at 17.

By basic arithmetic, *LTIIIP-I* would imply pole replacement of $(90,000) \times (.05) \times (.30) = 1350$ poles per year before the new technologies, and $(90,000) \times (.05) \times (.15) = 675$ after the adoption of new technologies. Reasonably consistent with that, PPL forecasted replacements of 900-1200 in 2013, and 600-800 for 2014 to 2017. However, in *LTIIIP-I*, PPL did not obviously reflect any further forecast reduction in replacement rates in the planning period, as the forecast replacements remained at 600-800 poles for 2014 through 2017. *LTIIIP-I*, at 17.

PPL, in its proposed *LTIIIP-II*, makes a very similar statement:

PPL Electric inspects approximately 90,000 poles per year. Historical data suggests an approximate 5% rejection rate from the population of yearly inspections; *of those rejected, 70% are candidates for reinforcement while 25% are candidates for replacement.* Replacing rejected poles avoids property damage and risk of accidental injury, and it mitigates the costs associated with extended service outages. Replacement rates are expected to fall as a result of PPL Electric's pole treatment program. The average age of an in-service wooden distribution pole is 38 years.

LTIIIP-II, at 18 (emphasis added).

It is unclear what PPL plans to do with the 5 percent of rejected poles that are neither replaced (25%) nor reinforced (70%). PPL also offers no explanation as to what happened to the "additional reinforcement technologies" that served to reduce the forecast replacement rate in *LTIIIP-I*. The OSBA respectfully submits that PPL should explain this significant change in its forecasting.

Even with the elimination of additional reinforcement technologies, PPL's figures suggest a replacement of $(90,000) \times (.05) \times (.25) = 1,125$ poles per year. However, PPL now forecasts replacements of 2,900 to 3,200 poles per year for every year in the plan (again with no

recognition of the forecast reduction in replacement rate). *See LTIP-II*, at 18. Based on PPL's explicit language for pole replacement, the forecast replacements are significantly overstated.

The OSBA observes, however, that in the "C-Truss Distribution Poles" section of *LTIP-II*, the rejection rate on pole inspections has mysteriously climbed to 10 percent from the 5 percent value reported in *LTIP-I* and the Distribution Pole Replacement section of the *LTIP-II*. *Compare LTIP-II*, at 18 with *LTIP-II*, at 19. The OSBA suspects that the rejection rate in the "Distribution Poles" section is an error, and the Company's intent was to use a rejection rate of 10 percent.

However, if the OSBA's supposition is correct, this raises two additional issues.

First, what has caused the rejection rate to double between 2012 and 2017? The rejection rate is presumably based on some multi-year average, and the Company offers no explanation as to why the rate has increased so dramatically over five years, nor does it provide any historical information in support of its position. The OSBA respectfully submits that PPL should do so to reasonably meet its burden in this proceeding.

Second, even at a 10 percent rejection rate, the replacement poles should be $(90,000) \times (.10) \times (.25) = 2,250$ poles per year, well below the Company's forecast of 2,900 to 3,200 poles per year. PPL does not explain this discrepancy.

The OSBA also observes that the apparent overstatement in pole replacements is more or less offset by a corresponding understatement in the forecast for C-Truss reinforcements. While it is unclear what causes the apparent understatement of reinforcements, it is possible that PPL has mis-stated the percentage of rejected poles that must be replaced (and, correspondingly, the ones that can be reinforced).

The OSBA estimates that if about 35 percent of the rejected poles needed to be replaced and 66 percent could be reinforced, the Company's numbers would be at least in the ballpark of being correct:

$$(90,000) \times (.10) \times (.35) = 3150 \text{ replaced}$$

$$(90,000) \times (.10) \times (.65) = 5850 \text{ reinforced}$$

However, if this is what the Company intended, it raises the question as to why the replacement rate is higher than it was in *LTIIIP-I*. As the Company offers no explanation in *LTIIIP-II*, the OSBA respectfully requests that the Company clarify its calculations and provide reasonable supporting data for the key assumptions, particularly those that have changed substantially since *LTIIIP-I*.

C. System Reliability Improvement Projects

PPL generally describes this cost account as projects developed on a quarterly basis that may extend over multiple years targeted at the "worst performing circuits." See *LTIIIP-II*, at 40-41.

In *LTIIIP-I*, the Company planned to spend \$76 million on anywhere from 52 to 111 projects, implying a possible range of \$685,000 to \$1.47 million per project. See *LTIIIP-I*, at 40-41. For *LTIIIP-II*, the Company has reduced its project range to 52 to 94 projects, but more than doubled the cost to \$172 million (or a range of \$1.83 to \$3.30 million per project). See *LTIIIP-II*, at 40-41.

PPL offers no basis for the large increase in estimated project cost. In fact, the Company uses the identical language in *LTIIIP-II* as it used in *LTIIIP-I*. The OSBA respectfully submits that this proposed increase is not supported by any facts, and that PPL has not met its burden to justify the proposed cost increase.

D. Volt Var Optimization (formerly “Capacitors”)

PPL proposes to increase planned spending for capacitors on its system from \$1.4 million in *LTIP-I* to \$24.4 million in *LTIP-II*, with average number of locations increasing from 100 to 2,250. The average cost per location declines modestly from \$13,800 to \$10,800. *See LTIP-II*, at 22.

PPL offers no rationale for this very large increase in spending. In fact, virtually the identical language is used in *LTIP-II* that is used in *LTIP-I*. The Commission should require PPL to explain this large increase in spending.

E. Replace Failed Underground Cable

The replacement of underground cable in the Company's *LTIP-I* and *LTIP-II* show up in a variety of different categories, and it is not at all clear that there is not double-counting of expected costs. *See LTIP-II*, at 26.

Replacing underground cable appears to be included in the following categories in *LTIIIP-*

I and *LTIIIP-II*:

PPL LTIIIP Underground Cable Replacement Accounts		
\$mm		
	LTIIIP-I	LTIIIP-II
Replace failed underground primary cable (residential)	\$17.9	\$72.6*
Replace failed underground secondary cable (residential)	\$9.7	N/A
Replace failed 12 kV underground getaway cables	\$2.4	\$7.4
Underground Cable Replacement and Life Extension	\$51.7	\$40.0
Replace deteriorated/failed low tension network equipment and structures	\$7.1	\$5.0
Low Tension Network Primary Cable, Equipment and Structures	\$27.8	\$23.0
Underground 12 kV Getaway Cable Replacements and Life Extension	\$25.9	\$30.6
Sub-Total	\$114.7	\$155.5
* May include secondary voltage cable, but LTIIIP reports only primary.		

As shown in the table above, the categories are not easy to delineate, and thus there is potential for overlapping costs. For example, there are two categories for addressing 12 kV “Getaway” cables, with no obvious delineation. Moreover, the differences in the definitions for “underground cable replacement and life extension” are not clearly different from “replace failed underground primary cable.” In fact, the descriptions for those two categories start with “candidates are selected based on history of cable failures” and “candidates are identified via actual failures.”

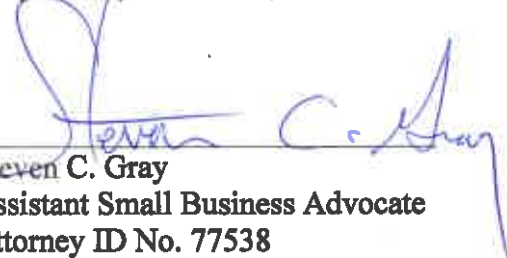
In the “replace failed underground cable” category, which has the largest increase in costs, PPL provides no information at all as to why the planned spending increases from \$17.9

million for *LTIP-I* (\$27.6 million if secondary is included) to \$72.6 million in *LTIP-II*. The OSBA respectfully submits that this large increase should be justified. Moreover, PPL should be required to explain how it ensures that costs are not double-counted in the *LTIP-II* categories.

III. Conclusion

Wherefore, the OSBA respectfully submits that *LTIIIP-II* is inadequate as filed. The OSBA requests that the Company be given the opportunity to supplement its filing to (a) provide a reasonable explanation for the cost increases addressed in these comments and (b) clarify the inconsistencies in *LTIIIP-II* as discussed herein. The OSBA further respectfully requests that the Commission consider these Comments and the Company's response when it decides whether to approve, reject, modify, or refer to the Office of Administrative Law Judge for hearings on PPL's *LTIIIP-II*.

Respectfully submitted,



Steven C. Gray
Assistant Small Business Advocate
Attorney ID No. 77538

For:
John R. Evans
Small Business Advocate

Office of Small Business Advocate
Suite 202, Commerce Building
300 North Second Street
Harrisburg, PA 17101
(717) 783-2525
(717) 783-2831

Dated: September 29, 2017

	2013	2014	2015	2016	2017	Total	LTRP	2018	2019	2020	2021	2022	Total	\$ Diff	% Diff	
Infrastructure Website																
Circuit 5410 Improvement	6.54	8.44	8.76	11.21	9.23	44.18								0.00	0.00%	
Copper Weld Copper	4.97	6.56	5.92	6.11	6.32	29.88	Copper Weld Copper	0.76	1.82	2.50	2.34	2.04	9.66	-20.22	-100%	
Cross-Tie'd 12 KV Underground Tie	1.09	1.06	1.07	1.11	1.13	5.47	Cross-Tie'd 12 KV Underground Tie	1.72	1.65	3.03	2.99	2.05	11.44	6.02	111%	
CT-Loop Distribution Poles	1.45	1.54	1.57	1.60	2.00	8.16	CT-Loop Distribution Poles	4.25	4.46	4.36	4.48	5.05	22.87	14.51	178%	
Customers Experiencing Multiple Interruptions	4.41	2.37	2.44	3.42	2.86	15.50	Customers Experiencing Multiple Interruptions	2.78	3.29	4.35	4.35	3.81	18.59	3.09	20%	
Distribution Animal Guarding	1.06	1.50	1.52	0.84	0.86	5.78	Distribution Animal Guarding	0.70	0.77	0.76	0.75	0.77	3.75	-2.03	-35%	
Distribution Automation Development	9.99	14.73	21.29	22.74	24.43	93.18	Distribution Automation Development	12.07	17.55	17.55	21.11	18.13	74.98	6.02	-20%	
Distribution Filled Equipment	13.35	13.17	13.88	14.01	14.57	68.98	Distribution Filled Equipment	16.50	16.50	17.70	17.69	17.80	67.09	18.11	26%	
Distribution Pole Replacements	6.81	4.00	4.40	4.43	4.64	24.08	Distribution Pole Replacements	17.45	17.82	18.13	11.10	11.23	48.12	3.22	7%	
Distribution Reliability Preservation	10.81	7.39	7.27	9.62	9.81	44.90	Distribution Reliability Preservation	6.58	8.09	8.09	8.09	5.78	4.65	24.77	8.08	39%
Distribution Substation Circuit Breaker	5.74	3.74	4.30	4.27	3.64	21.10	Distribution Substation Circuit Breaker	6.90	6.04	5.90	5.78	4.65	4.65	0.00	0%	
Distribution Substation DC Equipment	0.35	0.37	0.39	0.39	0.39	1.89	Distribution Substation DC Equipment	0.19	0.26	0.25	0.25	0.27	1.22	-0.67	-35%	
Fiber Wrap Distribution Poles	3.36	1.58	1.57	1.62	1.50	9.63	Fiber Wrap Distribution Poles	2.05	2.15	2.14	2.15	2.14	2.43	1.29	15%	
Improve System Reliability Projects	13.58	15.07	15.31	15.95	16.30	76.21	Improve System Reliability Projects	2.14	2.44	2.44	2.44	2.44	2.44	17.78	95.57	125%
Low Tension Network Primary Cables, Equipment and Structures	4.41	8.56	4.51	4.64	5.61	27.41	Low Tension Network Primary Cables, Equipment and Structures	1.51	1.51	1.51	1.51	1.51	1.02	7.06	87%/01	
Miscellaneous Substation Equipment	1.59	1.06	1.67	0.99	1.73	7.38	Miscellaneous Substation Equipment	0.00	3.43	3.41	4.67	0.00	11.51	11.51	87%/01	
New Hydraulic Reducers	0.81	0.70	0.62	0.50	0.40	3.03	New Hydraulic Reducers	1.36	1.97	2.23	2.23	2.06	9.85	2.47	35%	
Protection and Control	1.41	0.88	1.00	1.00	1.00	5.29	Protection and Control	0.02	0.23	0.23	0.23	0.25	0.96	-2.07	-68%	
Reducer Replacements	6.38	5.72	5.76	4.77	4.92	27.55	Reducer Replacements	1.90	2.16	4.98	5.05	5.18	19.27	13.98	264%	
Reliability Preservation Emergent	1.01	1.13	1.55	1.59	1.70	6.98	Reliability Preservation Emergent	1.80	1.77	2.08	1.74	1.74	9.08	-77.55	-100%	
Repair Filled 13kv/12 KV Transformers	1.07	1.10	1.14	0.01	0.01	3.33	Repair Filled 13kv/12 KV Transformers							2.10	30%	
Replace Deteriorated/Filled Low-Tension Network Equipment and Structures	1.46	1.52	1.34	1.37	1.39	7.08	Replace Deteriorated/Filled Low-Tension Network Equipment	0.86	0.85	1.21	1.21	0.81	4.85	-2.19	-30%	
Replace Filled 12KV Underground Gateway Cable	0.46	0.47	0.48	0.49	0.51	2.41	Replace Filled 12KV Underground Gateway Cable	1.32	1.52	1.51	1.51	1.53	7.39	4.98	207%	
Replace Filled Underground Primary Cable	3.60	3.48	3.50	3.62	3.68	17.80	Replace Filled Underground Cable	14.19	14.19	14.19	14.69	14.86	72.63	54.75	308%	
Replace Filled Underground Secondary Cable	1.89	1.90	1.95	1.96	2.08	9.67	Replace Filled Underground Cable							-6.67	-100%	
Replace Deteriorated/Filled Area Supply Substation Equipment	1.05	1.09	1.12	1.15	1.19	5.60	Replace Deteriorated/Filled Area Supply Substation Equipment	2.39	2.52	3.02	3.02	2.48	13.57	7.97	142%	
Substation 69/12 KV Transformer Replacement	3.42	7.76	3.40	5.27	4.50	24.35	Substation 69/12 KV Transformer Replacement	5.87	5.04	4.07	4.08	4.39	23.45	-0.90	-6%	
Underground Residential Development Cable	3.25	2.66	2.55	2.57	2.68	13.51	Underground Residential Development Cable	0.51	0.51	0.51	0.51	0.51	2.30	-11.21	-69%	
Underground and Life Extension	11.54	9.66	9.97	10.16	10.40	51.73	Underground Cable Replacement and Life Extension	7.89	7.98	8.35	8.33	7.40	30.55	-11.78	-35%	
12 KV Underground Gateway Cables	2.72	5.02	5.80	6.13	6.21	25.88	12 KV Underground Gateway Cables	5.05	5.30	7.05	7.05	6.10	30.55	4.67	18%	
Underground Highway Reducers	2.88	2.98	3.05	3.14	3.33	15.31	Underground Highway Reducers	5.21	4.60	4.57	4.56	3.85	22.79	7.48	49%	
Capacitors	0.24	0.23	0.28	0.36	0.26	1.37	Volt Var Optimization	2.72	2.97	8.64	4.79	5.25	24.37	23.00	1679%	
Total	133.67	186.72	193.89	167.94	149.29	705.18	Total	189.80	171.81	195.76	226.14	188.79	903.11	197.48	28%	

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of PPL Electric Utilities Corporation :
Corporation for Approval of its Long-Term : Docket No. P-2017-2622393
Infrastructure Improvement Plan for the Period :
January 1, 2018 through December 31, 2022 :**

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing have been served via email and/or first-class mail (unless other noted below) upon the following persons, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

Gladys M. Brown, Chairman
Pennsylvania Public Utility Commission
400 North Street
3rd Floor, Room N-304 Keystone Building
Harrisburg, PA 17120

Andrew G. Place, Vice Chairman
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
3rd Floor, Room N-305
Harrisburg, PA 17120

John F. Coleman Jr., Commissioner
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
3rd Floor, Room N-306
Harrisburg, PA 17120

David W. Sweet, Commissioner
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
3rd Floor, Room N-307
Harrisburg, PA 17120

Richard A. Kanaskie, Esquire
Bureau of Investigation & Enforcement
400 North Street
Commonwealth Keystone Bldg., 2nd Floor
Harrisburg, PA 17120
rkanaskie@pa.gov
(Email and Hand Delivery)

Darryl A. Lawrence, Esquire
Lauren M. Burge, Esquire
Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101
dlawrence@paoca.org
lburge@paoca.org

David B. MacGregor, Esquire
Michael W. Hassell, Esquire
Christopher T. Wright, Esquire
Post & Schell
17 North Second Street, 12th Floor
Harrisburg, PA 17101-1601
dmacgregor@postschell.com
mhassell@postschell.com
cwright@postschell.com

Joseph Otis Minott, Esquire
Logan Welde, Esquire
Benjamin Z. Hartung, Esquire
Clean Air Council
135 S. 19th Street, Suite 300
Philadelphia, PA 19103
joe_minott@cleanair.org
lwelde@cleanair.org
bhartung@cleanair.org

Michael Panfil, Esquire
1875 Connecticut Avenue
N.W. #600
Washington, DC 20009
mpanfil@edf.org

John Finnigan, Esquire
128 Winding Brook Lane
Terrace Park, OH 45174
jfinnigan@edf.org

Heather M. Langeland, Esquire
PennFuture
200 First Avenue, Suite 200
Pittsburgh, PA 15222
langeland@pennfuture.org

Joseph L. Vullo, Esquire
Burke Vullo Reilly Roberts
1460 Wyoming Avenue
Forty Fort, PA 18704
jvullo@aol.com

Eric Epstein
4100 Hillsdale Road
212 Locust Street, Suite 600
Harrisburg, PA 17112
epstein@efmr.org

Pamela C. Polacek, Esquire
Adeolu A. Bakare, Esquire
Alessandra L. Hylander, Esquire
McNees, Wallace & Nurick
100 Pine Street
PO Box 1166
Harrisburg PA 17108-1166
ppolacek@mwn.com
abakare@mwn.com
ahylander@mwn.com

Daniel Clearfield, Esquire
Deanne M. O'Dell, Esquire
Sarah C. Stoner, Esquire
Eckert Seamans Cherin & Mellott, LLC
213 Market Street, 8th Floor
Harrisburg, PA 17101
dclearfield@eckertseamans.com
dodell@eckertseamans.com
sstoner@eckertseamans.com

Patrick M. Cicero, Esquire
Elizabeth R. Marx, Esquire
Joline Price, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pciceropulp@palegalaid.net
emarxpul@palegalaid.net
pulp@palegalaid.net

Kenneth L. Mickens, Esquire
316 Yorkshire Drive
Harrisburg, PA 17111-6933
kmickens11@verizon.net

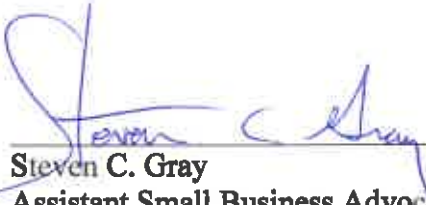
Mark Szybist, Esquire
1152 15th Street, NW, Suite 300
Washington, DC 20005
mszybist@nrdc.org

Jacob Schlesinger, Esquire
Keyes, Fox & Weidman LLP
1400 16th Street
16 Market Square Suite 400
Denver, CO 80202
jschlesinger@kfwlaw.com

David R. Wooley, Esquire
Keyes, Fox & Weidman LLP
436 14th Street, Suite 1305
Oakland, CA 94612
dwooley@kfwlaw.com

Kimberly A. Klock, Esquire
Amy E. Hirakis, Esquire
Two North Ninth Street
Allentown, PA 18101
kklock@pplweb.com
achirakis@pplweb.com

DATE: September 29, 2017



Steven C. Gray
Assistant Small Business Advocate
Attorney ID No. 77538