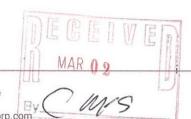
Andrew J. McNally
Assistant General Counsel





An Exelon Company

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February 28, 2020

VIA FEDERAL EXPRESS and ELECTRONIC MAIL aida.camacho@bpu.nj.gov board.secretary@bpu.nj.gov

Aida Camacho-Welch Secretary of the Board Board of Public Utilities 44 South Clinton Avenue, 9<sup>th</sup> Floor P.O. Box 350 Trenton, New Jersey 08625-0350 RECEIVED MAIL ROOM MAR 0 2 2020 BOARD OF PUBLIC UTILITIES TRENTON, NJ

RE: Semi-Annual Report Associated With PowerAhead Program Arising Out of Order Approving Stipulation in Connection With Phase II of Atlantic City Electric Company's 2016 Base Rate Case BPU Docket No. ER16030252

Dear Secretary Camacho-Welch:

By way of follow up to Paragraph 12 of the Order Approving Settlement (dated May 31, 2017) and Paragraph 12 of the Stipulation of Settlement in connection with the above referenced matter, enclosed are an original and ten copies of the "2019 Semi-Annual Status Report of the PowerAhead Program" (the "Report"), dated February 28, 2020. The Report covers the period through December 31, 2019.

Kindly return one date and time-stamped "filed" copy of this correspondence and the Report to the undersigned in the self-addressed, postage-prepaid envelope provided.

Case mano

list resied

Aida Camacho-Welch February 28, 2020 Page 2

Thank you for your cooperation and courtesies. Feel free to contact the undersigned with any questions.

Respectfully submitted,

Andrew J. McNally

#### Enclosure

cc: Paul Flanagan, Esquire, BPU (overnight mail and electronic mail)
Abraham Silverman, Esquire, BPU (overnight mail and electronic mail)
Grace Strom-Power, Esquire, BPU (overnight mail and electronic mail)
Stacy Peterson, BPU (overnight mail and electronic mail)
Suzanne N. Patnaude, Esquire, BPU (overnight mail and electronic mail)
Jackie O'Grady, BPU (overnight mail and electronic mail)
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Brandon C. Simmons, Esquire, Deputy Attorney General (First Class Mail and electronic mail)
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Debora Layugan, Division of Rate Counsel (First Class Mail and electronic mail)

# 2019 SEMI-ANNUAL STATUS REPORT OF THE POWERAHEAD PROGRAM

## Filed by ATLANTIC CITY ELECTRIC COMPANY

Pursuant to

The Stipulation of Settlement Executed in Connection With BPU Docket No. ER16030252

Date of Report: February 28, 2020



### 2019 PA Semi-Annual Status Report Introduction

In accordance with the Stipulation of Settlement (the "Stipulation") executed and adopted in connection with BPU Docket No. ER16030252, Atlantic City Electric Company ("ACE" or the "Company") submits its Semi-Annual Status Report for the 2019 PowerAhead Program ("PA"). The Stipulation authorized ACE to undertake distribution system improvements through 2022, including Structural and Electrical ("S&E") Hardening, Selective Undergrounding, Barrier Island ("BI") Feeder Ties, Distribution Automation ("DA"), Electronic Fusing, and the New Substation at Harbor Beach. The Stipulation, as approved by the New Jersey Board of Public Utilities (the "Board" or "BPU"), directed that the Company provide: (1) total quantity of work completed or major tasks completed, for each of the six sub-programs; (2) forecasted and actual PA costs for the reporting period and program-to-date; (3) estimated PA project completion date within each sub-program; (4) performance metrics reports; and (5) any anticipated changes to PA projects.

## PowerAhead Program Budget Forecast and 2019 PA Spend

**Table 1** indicates the budget forecast for PA for the entire program timeline from 2017 through 2022 as presented in the Stipulation. The budget forecast for 2017 – 2022 was based on the Company's 2016 five-year plan.

Table 1

PA Categories (\$ in thousands)	Budget Forecast Based on Stipulation of Settlement							
	Original Forecast	Revised Forecast	Jan. – Dec. 2019 Budget	Jan. – Dec. 2019 Actual	Cumulative Program Spend-to-Date			
			Capital Bud	dget				
Structural and Electrical Hardening	\$24,000.0	\$23,068.0	\$5,535.0	\$5,380.6	\$11,276.9			
Selective Undergrounding	\$11,000.0	\$11,000.0	\$3,485.0	\$370.7	\$1,272.7			
Barrier Island Feeder Ties	\$13,000.0	\$13,000.0	\$3,530.0	\$7,115.4	\$8,562.5			
Distribution Automation	\$15,000.0	\$15,932.0	\$3,650.0	\$4,482.3	\$10,323.4			
Electronic Fusing	\$2,000.0	\$2,000.0	\$500.0	\$901.7	\$2,059.9			
New Substation Harbor Beach	14,000.0	14,000.0	\$2,001.0	\$1,221.9	\$1,878.9			
Total	\$79,000.0	\$79,000.0	\$18,701.0	\$19,472.6	\$35,374.3			

For the second half of 2019, ACE spent \$9.7 million with respect to capital spending. The Company anticipates meeting completion dates for all projects in all sub-programs and for spending to increase as sub-program projects move beyond their initial phases.

Note: ACE underreported its Distribution Automation spend by \$21,900 in the first half of 2019. The amount for this period should have totaled \$2,628.7.

### 2019 PA Work Category Status

The 2019 PA work category spend includes the current status of work completed and actuals through the end of 2019.

#### Structural and Electrical Hardening

ACE has performed work on six feeders as a part of PowerAhead: Washington NJ2097, Lamb NJ1215, Winslow NJ0242, Fairton NJ0671, Lake NJ0972, and Pleasantville South NJ0424. Portions of selected storm feeders for Winslow NJ0242 and Fairton NJ067 have been hardened in 2019. As of the end of the year, all hardening work for the Washington NJ2097 and Lamb NJ1215 feeders have been completed; reconductoring and feeder improvements for Lake NJ0972 are currently in design; and hardening for one Pleasantville South project was completed in the second half of 2019, with the other projects in design. ACE will also begin construction on the Lake Pine NJ0972 feeder in 2020 and anticipates completion of the four projects in the first half of the year. All reconductoring and feeder improvement work was completed on Minotola NJ0813 and Atco NJ0922 in 2018. Through the end of the year, ACE has completed construction on four of the 12 selected feeders. The project work in the sub-program is on target to be completed by 2022.

Total Cost (\$ in thousands)

Revised	Jan. – Dec.	Jan. – Dec. 2019	Jan. – Dec. 2019	Jan. – Dec. 2019	Cumulative
Forecast	2019 Budget	Actual Spend	Materials Spend	Other Spend	Program Spend
\$23,068.0	\$5,535.0	\$5,380.6	\$643.8	\$4,736.8	\$11,276.9

#### **Selective Undergrounding**

ACE is currently performing work on three feeders as part of the PowerAhead Program: Washington NJ2097, Second Street NJ0213, and NJ0146 Egg Harbor Elwood. ACE has begun construction on Washington NJ2097, with completion anticipated to occur in the second quarter of 2020. Design work is ongoing for Second Street and Egg Harbor Elwood feeders. ACE is gaining the necessary approvals to begin construction. Through the end of 2019, ACE has completed construction on one of the four designated projects for this sub-program. The project work in the sub-program is on target to be completed by 2022.

Total Cost (\$ in thousands)

Revised	Jan. – Dec.	Jan. – Dec. 2019	Jan. – Dec. 2019	Jan. – Dec. 2019	Cumulative
Forecast	2019 Budget	Actual Spend	Materials Spend	Other Spend	Program Spend
\$11,000.0	\$3,485.0	\$370.7	\$0	\$370.7	\$1,272.7

#### Variance Explanation:

Due to the acceleration of projects within other sub-programs and the complex designs for the selective undergrounding work, ACE has experienced delays in construction for this sub-program. Construction began in the fourth quarter of 2019 and is on target to meet the PowerAhead timeline.

#### **Barrier Island Feeder Ties**

ACE is currently performing work on three feeder ties as part of the PowerAhead Program: Court NJ0383 – Lake NJ0974, Marven NJ1357 – Pleasantville NJ0426, and Lake NJ0972 – Rio Grande NJ0488. This analysis has generated 13 project segments and multiple phases targeting the barrier island ties for these feeders. For the Court NJ0383 – Lake NJ0974 barrier tie, construction was completed on all three projects in the second half of 2019; for the Marven NJ1357 – Pleasantville NJ0426 tie, four sections have been completed, and the final sections are in design; and for the Lake NJ0972 – Rio Grande NJ0488 tie, the first section is designed and ready to be built in conjunction with the associated transmission project scheduled for 2020-2021, and the second section is in design. The project work in the sub-program is on target to be completed by 2022.

Total Cost (\$ in thousands)

Revised	Jan. – Dec. 2019	Cumulative			
Forecast	Budget	Actual Spend	Materials Spend	Other Spend	Program Spend
\$13,000.0	\$3,530.0	\$7,115.4	\$1,509.7	\$5605.7	\$8,562.5

#### Variance Explanation:

The Court NJ0383 – Lake NJ 0974 BI tie project had an additional cost of \$1.4 million. Some of those cost increases included the need to extend the existing duct bank system, install voltage regulators to maintain system voltage levels during peak load seasons, as well as installation of reclosers for remote operation of the barrier tie. This remote functionality will increase ACE's ability to restore customers affected by an outage, which had an additional cost of \$530,000. Additional areas of cost increases included expanded scope changes due to avian environmental restrictions and increased permitting costs to cross the Garden State Parkway (\$191,000), as well as contractor labor cost changes of \$133,000.

#### **Distribution Automation**

The Distribution Automation Sub-Program has three major sub-program components: DA Reconductoring, DA Recloser/Communication, and DA Substation Upgrades.

For DA Reconductoring, ACE completed work on the Northfield NJ0424, Linwood NJ0423, Lamb NJ1215, Upper Pittsgrove NJ2352, Glassboro NJ0747, Searstown NJ0985, and NJ0982 segment of the Northfield project. Through the end of 2019, ACE has completed construction on seven of the reconductoring projects.

For DA Recloser/Communication, the Barnegat/Cedar/Motts Farm project, which include 76 reclosers, is in design, with a scheduled installation for 2020. The Winslow NJ0241-NJ0243 and Churchtown NJ2061 projects, which include 17 new reclosers, 4 technology upgrades, and 59 communications enablement, are complete with automatic circuit reclosers fully communicating.

For DA Substation Upgrades, the Churchtown Substation upgrades has begun construction. The Beckett Substation is still in design and will begin construction in 2020 along with the Winslow Substation upgrade.

The project work in the sub-program is on target to be completed by 2022.

Revised Jan. - Dec. 2019 Jan. - Dec. 2019 Jan. - Dec. 2019 Jan. - Dec. 2019 Cumulative **Forecast** Budget **Actual Spend Materials Spend** Other Spend **Program Spend** \$15,932.0 \$3,650.0 \$4,482.3 \$685.0 \$3,797.3 \$10,323.4

Total Cost (\$ in thousands)

#### **Variance Explanation:**

The Upper Pittsgrove project had an additional cost of \$50,000 due to the need for additional police and traffic control in a high traffic area, which ensured the safety of the public and the construction crews.

For the Northfield 1.1 project, the Company incurred additional costs for labor and materials due to increased work scope. Based upon actual field conditions, an additional 2,100 feet of reconductoring and replacement of 18 poles was needed. Nine switches were also installed to allow for isolation of feeder faults and quicker restoration of customers. The Company also had an additional cost of \$78,000 due to the need for additional police and traffic control in a high traffic area, which ensured the safety of the public and the construction crews.

For the Northfield 1.2 project, the Company incurred additional costs of \$110,000 for labor and materials due to increased work scope. Based upon actual field conditions and due to the area being heavily occupied by businesses, an additional 5,800 feet of secondary conductor was needed. The Company replaced the old secondary wire with new 2/0 aluminum triplex to increase reliability and build a more resilient secondary system for these businesses. The Company also had an additional cost of \$50,000 due to the need for additional police and traffic control in a high traffic area, which ensured the safety of the public and the construction crews.

#### **Electronic Fusing**

ACE has exceeded the original target of 200 Trip Savers across 56 feeders as part of the Electronic Fusing Sub-Program. For the second half of 2019, the Company has installed an additional 45 Trip savers on seven feeders: NJ0581, NJ0585, NJ0815, NJ1461, NJ1463, NJ2041, and NJ2043. The Company met its original target in the first half of 2019 by installing electronic fuses on 56 feeders: NJ0061, NJ0063, NJ0146, NJ0182, NJ0186, NJ0202, NJ0211, NJ0213, NJ0216, NJ0262, NJ0361, NJ0383, NJ0384, NJ0474, NJ0481, NJ0484, NJ0486, NJ0487, NJ0551, NJ0552, NJ0553, NJ0554, NJ0555, NJ0557, NJ0558, NJ0698, NJ0741, NJ0744, NJ0745, NJ0747, NJ0811, NJ0813, NJ0814, NJ0851, NJ0921, NJ0922, NJ0924, NJ0926, NJ0927, NJ0928, NJ0973, NJ0982, NJ0991, NJ0993, NJ1292, NJ1293, NJ1294, NJ1296, NJ1311, NJ1312, NJ1406, NJ1408, NJ1410, NJ1463, NJ1983, NJ1984. ACE has completed the work for this sub-program.

Total Cost (\$ in thousands)

Revised	Jan. – Dec. 2019	Cumulative			
Forecast	Budget	Actual Spend	Materials Spend	Other Spend	Program Spend
\$2,000.0	\$500.0	\$901.7	\$342.4	\$559.3	\$2,059.9

#### **New Substation: Harbor Beach**

ACE is currently approaching 90 percent engineering for the substation, overhead transmission lines, and underground transmission lines. ACE has awarded the GIS and switchgear contracts and is working on site plans for the feeder getaway design for the substation. The project work in the sub-program is on target to be completed by 2022.

Total Cost (\$ in thousands)

Revised	Jan. – Dec. 2019	Cumulative			
Forecast	Budget	Actual Spend	Materials Spend	Other Spend	Program Spend
\$14,000.0	\$2,001.0	\$1,221.9	\$269.7	\$952.2	\$1,878.9

#### Variance Explanation:

Year-to-date spend is low due to the current status of the design and planning portions of the project. Spend will continue to increase during the PowerAhead window.

## Performance Metrics by Feeder<sup>1</sup>

As part of the Order adopting the Stipulation, during major events ACE will report reliability indices for feeders being improved under PA, specifically, customer minutes interrupted ("CMI") and customer average interruption duration index ("CAIDI"). During the second half of 2019, ACE had no major events after having five major events in the first half of the year. The following table reflects the reliability indices for the cumulative performance for the duration of this program.

Five-Year Average			201	.9	Cumulative	
Stor	m Performa	nce	Storm Perf	ormance	Storm Performance	
Feeder	CMI	CAIDI	CMI	CAIDI	CMI	CAIDI
NJ0146	1,502,526	922	17,843	16	1,750,872	439
NJ0151	353,305	195	3,744	50	42,655	288
NJ0152	414,375	86	12,734	72	150,986	72
NJ0153	139,742	80	N/A	N/A	343,553	700
NJ0154	446,469	283	19,530	178	110,625	422
NJ0213	68,669	160	355	177	5,065,894	665
NJ0232	221,657	210	N/A	N/A	1,145,197	273
NJ0241	701,198	441	N/A	N/A	1,107,188	380
NJ0242	1,449,203	852	418	209	2,714,342	465
NJ0243	1,792,557	394	N/A	N/A	543,133	1,226
NJ0244	1,093,004	371	165	82	2,335,053	436
NJ0383	299,334	524	143	71	5,842	209
NJ0423	122,820	335	136	136	51,513	412
NJ0424	42,663	317	N/A	N/A	120,027	790
NJ0426	3,090	474	217	217	2,845	948
NJ0488	130,245	188	1,240	207	11,301	91
NJ0551	136,575	479	N/A	N/A	64,720	912
NJ0671	45,977	440	N/A	N/A	1,395,139	1,803
NJ0745	2,038,498	474	172	172	2,472,935	350
NJ0747	1,093,913	499	677	75	2,603,993	439
NJ0813	997,211	318	7,021	113	4,984,878	918
NJ0922	2,402,535	698	N/A	N/A	2,603,246	647

<sup>&</sup>lt;sup>1</sup> CMI and CAIDI performance for each feeder is measured against its CMI and CAIDI performance during major events for the years 2013 through 2017, i.e., the Five-Year Average Storm Performance. Cumulative Storm Performance relates to each feeder's CMI and CAIDI during major events since the commencement of the PowerAhead Program in July 2017.

Five-Year Average			201	.9	Cumulative	
Storm Performance			Storm Perf	ormance	Storm Performance	
Feeder	CMI	CAIDI	CMI CAIDI		CMI	CAIDI
NJ0972	207,102	440	5,955	89	8,351	119
NJ0974	1,192,001	396	6,948	224	17,087	427
NJ0982	1,650	156	N/A	N/A	71,276	412
NJ0983	57,527	335	129	129	111,538	64
NJ0985	45,816	319	N/A	N/A	15,685	1,120
NJ1192	215,642	593	1,876	104	662,643	995
NJ1215	3,745,367	790	N/A	N/A	403,962	191
NJ1324	1,834	57	N/A	N/A	N/A	N/A
NJ1325	5,779	187	N/A	N/A	560,018	789
NJ1326	254,706	177	N/A	N/A	105,605	812
NJ1327	17,897	385	N/A	N/A	16,988	629
NJ1328	138,953	285	39	39	18,953	592
NJ1329	236,877	354	61	61	251,242	1,056
NJ1357	181,658	385	N/A	N/A	8,167	1,167
NJ1634	27,257	259	N/A	N/A	292,894	222
NJ2061	710,091	448	N/A	N/A	3,877,451	907
NJ2062	920,729	326	57	57	152,233	1,258
NJ2097	4,380,570	973	N/A	N/A	104,179	898
NJ2352	220,375	1,066	2,443	39	1,099,007	1,368
NJ2391	75,278	214	N/A	N/A	180,902	1,103
NJ2392	25,139	348	N/A	N/A	50,941	1,132
NJ2393	95,254	400	1,101	184	127,991	400