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May 10, 2017

VIA EMAIL & OVERNIGHT DELIVERY

BOARD OF PUBLIC UTILITIES

Hon. Irene Kim Asbury, Secretary Board of Public Utilities 44 South Clinton Avenue, 3rd Floor, Suite 314 Post Office Box 350 Trenton, New Jersey 08625-0350

MAY 1 1 2017

MAIL RECEIVED

RE: In the Matter of the Petition of Atlantic City Electric Company for Approval of Amendments to Its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to *N.J.S.A.* 48:2-21 and *N.J.S.A.* 48:2-21.1, for Approval of a Grid Resiliency Program and Cost Recovery Related Thereto, and for Other Appropriate Relief (2016) – Phase II BPU Docket No. ER16030252

Dear Secretary Asbury:

The undersigned represents the Petitioner, Atlantic City Electric Company ("ACE" or "Company"), in the above-referenced Phase II proceeding. Enclosed for filing please find an original and two copies of a Stipulation of Settlement ("Stipulation") executed on behalf of the Company, the Division of Rate Counsel, the Staff of the Board of Public Utilities, and the Environmental Defense Fund (together, the "Signatory Parties").¹ The Stipulation sets out the agreement of the Signatory Parties on the Company's PowerAhead program and related cost-recovery mechanism.

Please note that the Stipulation contains Confidential Appendix One, which has been prepared at the request of Board Staff, and for which confidential treatment is sought. To that end, two copies of the Stipulation with a redacted Confidential Appendix One have also been attached.

¹ Participant, Public Service Electric and Gas Company, filed a separate letter stating that it does not object to the terms of the Stipulation. Intervenor, Unimin Corporation, has provided the undersigned with a letter stating that it does not object to the terms of the Stipulation.



Stephen B. Genzer - Newark Managing Partner One Riverfront Plaza, Suite 1520 • Newark, NJ 07102-5426 • Phone: (973) 286-6700 • Fax: (973) 286-6800 Hon. Irene Kim Asbury, Secretary May 10, 2017 Page 2

The Company respectfully requests that this matter be placed on the May 31, 2017 public agenda meeting. Should you have any questions, please contact me at 973-286-6711. Thank you for your attention to this matter.

Respectfully submitted,

Collen A. Toley

Colleen A. Foley

Cc: Electronic Service List (via email only)

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EOARD OF PUBLIC UTILITIES

STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

MAY 1 1 2017

MAIL RECEIVED

• IN THE MATTER OF THE PETITION OF : **ATLANTIC CITY ELECTRIC COMPANY** : FOR APPROVAL OF AMENDMENTS TO : **ITS TARIFF TO PROVIDE FOR AN INCREASE IN RATES AND CHARGES** : FOR ELECTRIC SERVICE PURSUANT : TO N.J.S.A. 48:2-21 AND N.J.S.A. 48:2-21.1, : FOR APPROVAL OF A GRID RESILIENCY: **INITIATIVE AND COST RECOVERY RELATED THERETO, AND FOR OTHER** : **APPROPRIATE RELIEF (2016)** : :

BPU DOCKET NO. ER16030252

PHASE II STIPULATION OF SETTLEMENT

APPEARANCES:

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Wendy E. Stark, Esq., Vice President & General Counsel, Philip J. Passanante, Esq., Assistant General Counsel, and Colleen A. Foley, Esq. (Saul Ewing LLP), on behalf of Atlantic City Electric Company, Petitioner

Alex Moreau and Veronica Beke, Deputy Attorneys General (Christopher S. Porrino, Attorney General of New Jersey), on behalf of the Staff of the Board of Public Utilities

Stefanie A. Brand, Esq., Director, Brian O. Lipman, Esq., Deputy Rate Counsel, Ami Morita, Esq., Deputy Rate Counsel, Diane Schulze, Esq., Assistant Deputy Rate Counsel, James Glassen, Esq., Assistant Deputy Rate Counsel, and Kurt Lewandowski, Esq., Assistant Deputy Rate Counsel, on behalf of the Division of Rate Counsel

Bradford M. Stern, Esq., Law Offices of Bradford M. Stern LLC, on behalf of Intervenor, Unimin Corporation

Raghu Murthy, Esq., and Aaron Kleinbaum, Eastern Environmental Law Center, on behalf of Intervenor, the Environmental Defense Fund

Joseph F. Accardo, Jr., Esq., and Martin Rothfelder, Esq., on behalf of Participant, Public Service Electric and Gas Company

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

The parties to this proceeding are as follows: Atlantic City Electric Company (the

"Company," "Petitioner" or "ACE"), the Division of Rate Counsel ("Rate Counsel"), the Staff of

the New Jersey Board of Public Utilities ("Board Staff" or "Staff"), Intervenors, Unimin

Corporation ("Unimin") and the Environmental Defense Fund ("EDF"), and Participant, Public Service Electric and Gas Company ("PSE&G"). The New Jersey Board of Public Utilities shall be referred to in this Stipulation of Settlement (the "Stipulation") as the "Board" or "BPU." The settlement memorialized in this Stipulation regarding the Petitioner's PowerAhead proposal shall sometimes be referred to herein as the "Settlement."

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PROCEDURAL HISTORY

Petitioner is a corporation organized and existing under the laws of the State of New Jersey, subject to the jurisdiction of the Board, with a regional office located at 5100 Harding Highway, Mays Landing, New Jersey 08330. On March 22, 2016, the Company filed a Verified Petition with the Board pursuant to <u>N.J.S.A.</u> 48:2-21 and <u>N.J.A. C.</u> 14:1-5.12 seeking an increase in the Company's base rates for electric distribution service, approval of a storm resiliency and grid modernization initiative known as PowerAhead, approval of a cost-recovery mechanism related to PowerAhead, and to make other tariff changes. As described in the Company's Verified Petition, PowerAhead was proposed as a five-year, \$176 million program focused on storm resiliency and hardening, grid modernization, and support of New Jersey's Energy Master Plan through energy reduction and increased deployment of renewable energy resources.¹

The Board transmitted the matter to the Office of Administrative Law ("OAL") as a contested case, and Administrative Law Judge ("ALJ") Irene Jones was assigned to hear the case. On April 28, 2016, PSE&G filed a Motion to Participate. On May 3, 2016, Unimin filed a Motion to Intervene. By letter dated May 12, 2016, the Company indicated that it did not oppose the granting of either Motion. On May 16, 2016, the Environmental Defense Fund ("EDF") filed

¹ The Company, on May 10, 2016, filed a First Amendment to the Verified Petition, revising its requested rate increase. This issue was resolved by settlement as the subject of an earlier order in this docketed matter.

a Motion to Intervene, which was opposed by the Company in a letter dated May 27, 2016. An in-person Pre-Hearing Conference was convened by ALJ Jones on May 19, 2016. ALJ Jones granted the Motions of PSE&G and Unimin, but did not act on the EDF Motion.²

After proper notice, two public hearings were held in Mays Landing, New Jersey at 3:30 P.M. and 5:30 P.M. on June 30, 2016, with ALJ John S. Kennedy and ALJ W. Todd Miller presiding, respectively. Several members of the public appeared at the hearings, and provided comments on the Company's proposed requests. All comments were transcribed and made a part of the record.

Ultimately, a settlement was reached regarding the Company's revenue requirement and certain related matters. The settlement also contained a proposal that the PowerAhead program, and related cost recovery mechanism, be reviewed in a Phase II of this proceeding. On August 19, 2016, the Board recalled the entire case from the OAL to consider the proposed Stipulation of Settlement³ and to address issues relating to PowerAhead.

On August 24, 2016, the Board issued an Order approving the proposed Stipulation of Settlement, directing that PowerAhead be considered in a Phase II of this proceeding, and designating Commissioner Upendra Chivukula as the presiding Commissioner for the Phase II proceeding. On October 5, 2016, Commissioner Chivukula issued an Order granting EDF's Motion to Intervene. An in-person pre-hearing conference was held on October 6, 2016, and a pre-hearing Order was issued on October 18, 2016.

Discovery was conducted and multiple settlement discussions were held. The Company, Board Staff, Rate Counsel, and EDF (collectively, the "Signatory Parties" and each a "Signatory Party") have come to an agreement on the matters set forth in this Stipulation.

² The ALJ's decisions were reflected in the corrected Pre-Hearing Order dated July 14, 2016.

³ The Stipulation of Settlement was filed with the Board on August 19, 2016. Board Staff, Rate Counsel and Unimin were parties to the Stipulation of Settlement. PSE&G indicated that it did not object to the settlement.

PSE&G and Unimin, while not Signatory Parties, have indicated that they do not object to the terms of this Stipulation. Therefore, the Signatory Parties hereto agree and stipulate as follows:

STIPULATED MATTERS

<u>PowerAhead Program – Overall Investment Levels</u>

1. The Signatory Parties agree that the PowerAhead program will include an investment level of \$79 million recovered through the stipulated cost recovery mechanism described below. The projects are intended to improve the storm resiliency of, and restoration times for, the Company's distribution infrastructure to benefit its customers. These projects and amounts are incremental to the Company's normal capital spending budget. The PowerAhead program will run over a five-year period beginning on the effective date of the Board's Order authorizing the PowerAhead program and cost recovery mechanism.

2. The Signatory Parties agree that the specific PowerAhead investment levels to be recovered through the stipulated cost recovery mechanism, as described more fully herein, shall be up to the amounts specified below for the following initiatives:

| Sub-Program | <u>\$ Million</u> |
|-------------------------------------|-------------------|
| Structural and Electrical Hardening | \$24 |
| Selective Undergrounding | \$11 |
| Barrier Island Feeder Ties | \$13 |
| Distribution Automation | \$15 |
| Electronic Fusing | \$2 |
| New Substation – Harbor Beach | \$14 |
| TOTAL | \$79 |

PowerAhead Program – Sub-Program Work Descriptions

3. <u>Structural and Electrical Hardening</u>. ACE will invest up to a total of \$24 million in the Structural and Electrical Hardening Sub-program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The twelve feeders where work will be performed under this sub-program are identified in Confidential Appendix One.⁴ The work to be performed in this sub-program includes: storm guying, replacement of wood cross-arms and braces, pole and conductor upgrades, and elevation of pad-mounted transformers and equipment in areas that are the most vulnerable to the effects of severe weather.

If ACE determines that it would be beneficial to adjust the feeders on which the work will be performed to a feeder with comparable characteristics as described by the selection criteria contained in Exhibit D "Performance Metrics" or to alter significantly the scope of work to be done on those feeders, it will notify Staff and Rate Counsel of the proposed change via letter. In its letter⁵ to Staff and Rate Counsel, ACE will describe its proposed program amendments, including the reason for the changes as well as provide a written description of the proposed changes and the associated costs. Staff and Rate Counsel will have 20 business days within which to file comments and/or objections on the proposed project amendments. If no objection is made within the 20 business day period, then ACE may move forward with the amended identified work. ACE agrees that it will not commence work on any proposed project amendments until the collaborative process described in this paragraph has concluded.

⁴ The twelve feeders listed in Confidential Appendix One will comprise the complete list of distribution feeder work under this PowerAhead sub-program, to be completed over five years. These feeders were selected such that no more than one feeder would be worked on per substation. Additionally, no feeders on the Worst Performing Circuits list were selected.

⁵ Electronic and hard copies will be provided to Staff and Rate Counsel.

4. <u>Selective Undergrounding</u>. ACE will invest \$11 million in the Selective Undergrounding Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes undergrounding of four feeders identified in Confidential Appendix One.

5. <u>Barrier Island Feeder Ties</u>. ACE will invest \$13 million in the Barrier Island Feeder Ties Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: creation of additional tie points to enable temporary restoration, upgrade and expansion of the distribution system to facilitate restoration, provision of redundant feeder capacity, and creation of mainland to barrier island ties to improve resiliency. Specific projects are identified in Confidential Appendix One.

6. <u>Distribution Automation</u>. ACE will invest \$15 million in the Distribution Automation Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: the rebuild and upgrade of approximately 15.5 miles of distribution feeder lines to increase feeder tie capability and storm resiliency (including the installation of voltage regulators), relay upgrades at three substations, installation of 71 reclosers (non-Automatic Sectionalizing and Restoration ("ASR")) to optimize feeder segmentation, and addition of communications/remote control capability to 90 standalone (non-ASR) reclosers. A Protective Coordination Study shall be completed before any distribution automation work is started. Exhibit B and Confidential

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Appendix One hereto contain additional, detailed information regarding the specific work to be performed in this sub-program.

7. <u>Electronic Fusing</u>. ACE will invest \$2.0 million in the Electronic Fusing Sub-Program pilot program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: the replacement of single operation fuses with reusable electronic fuses that are intended to automatically restore service. ACE shall provide a copy of its Protective Coordination Manual and Protocol for performing fault current and sectionalization studies to Staff and Rate Counsel before work is started on this Electronic Fusing Sub-Program.

8. <u>New Substation – Harbor Beach</u>. ACE will invest \$14 million in the design and construction of a new Harbor Beach Substation (to replace the existing substation) over the next five years following the issuance of a Board Order approving this Settlement. This distribution system capital investment will be recoverable through the cost recovery mechanism established herein, and does not include the related transmission system capital investment which will be required to extend energy supplies to the substation. Related transmission system capital investment will continue to be recovered in transmission rates. Exhibit C hereto contains additional, detailed information regarding the specific work to be performed in constructing the new Harbor Beach Substation.

9. If ACE makes a future filing to address Smart Grid issues including smart street lighting, Advanced Metering Infrastructure or other similar initiatives, ACE agrees to consult with EDF on that filing. ACE agrees to discuss with EDF issues including voltage optimization, integration of distributed energy resources and customer access to energy usage data, and to evaluate the costs and benefits of these initiatives.

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10. The Signatory Parties recognize that the resiliency and storm hardening initiatives included in the PowerAhead program are significant in scale and scope, and that some flexibility in budgeting each sub-group of programs is appropriate. Accordingly, the Signatory Parties agree that ACE may make adjustments to Sub-Program budgets in the following manner: changes in the cumulative amount of 5% or less of any sub-program investment level may be made immediately by ACE, with notice to Board Staff and Rate Counsel of the changes within 30 days following the change. "Cumulative amount" in this paragraph shall mean cumulative for the entire period of the program. ACE shall not make changes exceeding 5% of any sub-program investment level without 20 business days prior written and electronic notification to Board Staff and Rate Counsel, including the reason for the changes as well as a written description of the proposed changes and the associated costs, providing Staff and Rate Counsel within 20 business days of receipt of the electronic notice, ACE may move forward with the change.

PowerAhead – Reporting Requirements

11. Beginning with the quarterly Reliability Improvement Plan ("RIP") meeting covering the results for the fourth quarter of 2017, and then semi-annually thereafter, ACE will discuss the status of the PowerAhead program with Board Staff and Rate Counsel during the regularly scheduled RIP meetings.

12. On a semi-annual basis, ACE shall provide a report to Staff and Rate Counsel detailing the following information for each sub-program of PowerAhead programs:

• estimated PowerAhead total quantity of work completed for each of the six subprograms. If the work completed cannot be quantified, the major tasks completed, e.g., design phase, material procurement, permitting, phases of construction, etc. should be specified;

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• forecasted and actual PowerAhead costs (broken out by sub-program and cost category) for the reporting period and for the program-to-date;

• estimated PowerAhead project completion date by program within each subprogram;

- performance metrics reports; and
- anticipated changes to the PowerAhead projects.

This reporting requirement will continue through the review of the prudency of the PowerAhead investments.

PowerAhead – Cost Recovery Mechanism

13. The Signatory Parties agree that ACE shall be permitted to recover up to \$79 million in PowerAhead program investments as defined in Paragraphs three through eight above, plus associated Allowance for Funds Used During Construction ("AFUDC"), through the PowerAhead Rider as described below. The prudence of the execution of these programs will be reviewed in the Company's subsequent base rate proceedings, as appropriate, including a review to ensure that they are distribution, not transmission, investments. Nothing herein will preclude any party from raising in the subsequent base rate case proceedings any objection that could have been raised in any change notice, or other filing or report made by the Company. If the cost of a particular sub-program exceeds the amount allowable under the PowerAhead program, the Signatory Parties agree that ACE may seek recovery of those additional costs, not subject to recovery in the PowerAhead cost recovery mechanism, in a subsequent base rate case.

14. Cost recovery for completed projects will occur on a semi-annual basis provided the plant-in-service additions during the semi-annual period are at least \$7.0 million, with schedules, procedures, and filings as detailed in subsequent paragraphs. Should recoverable plant-in-service additions not exceed \$7.0 million during the semi-annual period, then costs

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associated with those plant-in-service additions shall be included and recovered in the next semiannual period through the cost recovery mechanism described herein. ACE agrees to forego filing a request for cost recovery associated with the PowerAhead program until PowerAhead has been in effect for a period of one year.⁶ Costs to be recovered include the return on net plant in-service as of the end of the semi-annual reporting period. The rate of return shall be calculated based on the overall rate of return approved in ACE's most recent base rate case. AFUDC included in plant-in-service additions will be calculated using a return on equity ("ROE") that is no higher than the ROE authorized in the Company's most recent base rate case. Net plant will be calculated as gross plant in-service less accumulated depreciation less applicable accumulated deferred income taxes. The revenue requirement will also include depreciation expense, income taxes, the associated interest synchronization adjustment, and the BPU and Rate Counsel assessments. Depreciation will be included in the revenue requirement at ACE's current Board-approved depreciation rates. The Company will begin to depreciate an asset once it is placed into service. Operations and Maintenance expenses associated with the PowerAhead program will not be included in the semi-annual revenue requirement calculations and will not be subject to deferral. Exhibit A contains a detailed explanation of how the PowerAhead revenue requirement shall be calculated, along with an illustrative calculation, and a schedule of filing dates and rate effective dates.

PowerAhead - Rate Design

15. The rate design for the PowerAhead recovery mechanism will utilize the rate design methodology used to set base rate rates in Phase I of this proceeding. The Signatory Parties acknowledge that ACE will file base rate proceedings during the term of the PowerAhead program and may propose a rate design methodology that differs from the rate design

⁶ A detailed list of filing dates reflecting this provision is included in Exhibit A, subsection C.

methodology used to set base rates in Phase I of this proceeding.⁷ In the event an alternative rate design methodology is adopted in a future base rate proceeding during the term of the PowerAhead program, then that rate design shall be utilized for the PowerAhead recovery mechanism.

PowerAhead - Program Review

16. The Signatory Parties agree, and ACE understands, that the review of the prudence of the execution of all projects undertaken in the PowerAhead program will be determined in the Company's future base rate cases. ACE agrees that the rate adjustments established in the semi-annual filings are provisional and subject to refund in the event the Board determines that such costs have been imprudently incurred under the PowerAhead program. Upon completion of the base rate case review of the PowerAhead projects, the PowerAhead surcharge associated with those projects will be rolled into base distribution rates when new rates go into effect at the conclusion of the base rate case. The Signatory Parties further agree that the base rate case review of PowerAhead investment costs is not only to ensure the investments are distribution, not transmission, investments. ACE further agrees that it will file a base rate case no later than three years from the effective date of the Board Order approving this Stipulation and the PowerAhead program.

17. Along with its semi-annual filing, the Company agrees to provide the information outlined in Exhibit D, attached hereto. Board Staff and Rate Counsel will have the opportunity to request discovery on the information provided by ACE in its semi-annual PowerAhead filings.

⁷ On March 30, 2017, ACE filed a request to increase base rates, which has been docketed as BPU Docket No. ER17030308.

Additional Provisions

18. Each Signatory Party agrees to use its best efforts to ensure that this Stipulation shall be presented to the Board for approval at the Board's May 31, 2017 public agenda meeting. Each Signatory Party understands that a Board Order adopting this Stipulation will become effective in accordance with N.J.S.A. 48:2-40.

19. This Stipulation shall be binding on the Signatory Parties upon approval by the Board. This Stipulation shall bind the Signatory Parties in this matter only and shall have no precedential value. This Stipulation contains terms, each of which is interdependent with the others and essential in its own right to the signing of this Stipulation. Each term is vital to the agreement as a whole, since the Signatory Parties expressly and jointly state that they would not have signed the Stipulation had any term been modified in any way. Since the Signatory Parties have compromised in numerous areas, each is entitled to certain procedures in the event that any modifications whatsoever are made to the Stipulation. If, upon consideration of this Stipulation, the Board were to modify any of the terms described above, each Signatory Party must be given the right to be placed in the position it was in before this Stipulation was entered into. It is essential that each Signatory Party be afforded the option, prior to the implementation of any new rate resulting from any modification of this Stipulation, either to modify its own position to accept the proposed change(s) or to resume the proceeding as if no agreement had been reached. This proceeding, under such circumstances, would resume at the point where it was terminated. The Signatory Parties agree that these procedures are fair to all concerned, and therefore, they are made an integral and essential element of this Stipulation. None of the Signatory Parties shall be prohibited from or prejudiced in arguing a different policy or position before the Board in any other proceeding, as such agreements pertain only to this matter and to no other matter.

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

ATLANTIC CITY ELECTRIC COMPANY

<u>May 3, 2017</u> Date

Colleen A. Foley, 'Esq.

Saul Ewing LLP Attorney for Petitioner

CHRISTOPHER S. PORRINO ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities

5,2017

By:

Veronica Beke/Alex Moreau Deputy Attorney General

STEFANIE A. BRAND, ESQ. DIRECTOR – DIVISION OF RATE COUNSEL

By:

By:

Stefanie A. Brand, Esq. Director, Division of Rate Counsel

ENVIRONMENTAL DEFENSE FUND

By:

Date

Date

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

ATLANTIC CITY ELECTRIC COMPANY

May 3, 2017 Date

By:

Colleen A. Foley, Esq. Saul Ewing LLP Attorney for Petitioner

CHRISTOPHER S. PORRINO ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities

By:

Veronica Beke/Alex Moreau Deputy Attorney General

STEFANIE A. BRAND, ESQ. DIRECTOR – DIVISION OF RATE COUNSEL

5/10/17

Date

D Bv:

Stefanie A. Brand, Esq. Director, Division of Rate Counsel

ENVIRONMENTAL DEFENSE FUND

By:

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

ATLANTIC CITY ELECTRIC COMPANY

<u>May 3, 2017</u> Date

Colleen A. Foley, Esq. Saul Ewing LLP Attorney for Petitioner

CHRISTOPHER S. PORRINO ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities

Date

By:

By:

Veronica Beke/Alex Moreau Deputy Attorney General

STEFANIE A. BRAND, ESQ. DIRECTOR – DIVISION OF RATE COUNSEL

Date

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Date

Stefanie A. Brand, Esq. Director, Division of Rate Counsel

ENVIRONMENTAL DEFENSE FUND

Ву:

EXHIBIT A

PowerAhead Cost Recovery Mechanism Detailed Summary

- A. The PowerAhead cost recovery mechanism shall be calculated as summarized below.
 - a. PowerAhead Investment Costs All qualifying PowerAhead capital expenditures, including actual costs of engineering, design and construction, and property acquisitions, including actual labor, materials, overhead, and capitalized AFUDC associated with the projects ("PowerAhead Investment Costs"), will be recovered through base rate roll-ins for each of the time periods described below. The PowerAhead Investment Costs will be recorded, during construction, in an associated Construction Work In Progress ("CWIP") account or in a Plant In-Service account upon the respective project being deemed used and useful. The Company will follow its current policies and practices with regard to capitalizing costs, including overheads.

Net Investment – Is equal to the PowerAhead Investment Costs related to projects that have been placed into service <u>less</u> the associated accumulated depreciation <u>less</u> applicable accumulated deferred income taxes.

Weighted Average Cost of Capital ("WACC") – ACE agrees that the return on the incremental investments undertaken in the PowerAhead Program shall be at the Board-approved weighted average cost of capital as determined in the Company's most recent base rate case (currently the WACC is 7.64% as determined in Phase I of this proceeding).⁸

The rate base roll-ins will be calculated using the following formula:

Revenue Requirement = ((PowerAhead Rate Base * After Tax WACC) + Depreciation Expense (net of tax) + Tax Adjustments)* Revenue Factor

i. PowerAhead Rate Base – The PowerAhead Rate Base will be calculated as Plant In-Service, including CWIP transferred into service and associated AFUDC, less accumulated depreciation and less applicable accumulated deferred income taxes. AFUDC will be calculated using the same methodology used for current distribution assets consistent with the Company's AFUDC policy, and as permitted by FERC Order 561, which includes compounding AFUDC on a semi-annual basis. The AFUDC rate will include the cost of equity approved in the Company's most recent base rate case.

⁸ Should the Company file, and the Board decide, a base rate case during the five-year term of the PowerAhead program, then the existing amount of in-service PowerAhead projects being recovered in the surcharge would be rolled into base rates, on the effective date of the base rate decision, and the surcharge reset to zero. The next filing of the PowerAhead surcharge would reflect new projects placed in-service under the PowerAhead program, and the surcharge based on the return on common equity, the cost of long-term debt, and the rate design decided by the BPU in the Company's most recently approved base rate case.

- Depreciation Expense Depreciation expense will be calculated as the PowerAhead Investment Costs by asset class multiplied by the associated depreciation rate applied to the same asset in current base rates and then calculated net of tax.
- iii. Tax Adjustments Includes the effects of any flow through items and any tax law changes codified by the Internal Revenue Service, the State of New Jersey or any other taxing authority.
- iv. Revenue Factor The Revenue Factor adjusts the Revenue Requirement Net of Tax for federal and state income taxes and the costs associated with the BPU and Rate Counsel Annual Assessments. The then-current statutory state and federal income tax rates and then-current BPU/Rate Counsel Assessment rates will be utilized.

B. A sample calculation is noted below:

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PowerAhead Revenue Requirement Calculation Example

| (1) | (2) | | | | (3) |
|------------|--|-----------------|--------|-----------|---------------|
| <u>No.</u> | ltem | | | | <u>\$</u> |
| 1 | Earnings | | | | |
| 2 | Book Depreciation Expense | 2.44% | | | \$170,800 |
| 3 | State Tax Depreciation Expense MACPS | 3 75% | ¢ | 262 500 | |
| 5 | Federal Tax Depreciation Expense - MACKS | 3.75% An nn% | φ ¢ | 2 800 000 | |
| 6 | Federal Tax Depreciation Expense - MACRS | 3 75% | ŝ | 157 500 | |
| 7 | rederal rax bepresidion Expense - monto | 0.7070 | Ψ | 107,000 | |
| 8 | Deferred State Income Tax | | | | \$8,253 |
| 9 | Deferred Federal Income Tax | | | | \$972.456 |
| 10 | State Income Tax | | | | (\$23,625) |
| 11 | Federal Income Tax | | | | (\$1,026,856) |
| 12 | Total Expense | | | | \$101.028 |
| 13 | · | | | | |
| | Allowance for Funds Used During | | | | |
| 14 | Construction | | | | \$10,000 |
| 15 | | | | | |
| 16 | Earnings | | | | (\$91,028) |
| 17 | | | | | |
| 18 | Rate Base | | | | |
| 19 | | | | | |
| 20 | PowerAhead Plant Closings | | | | \$7,000,000 |
| 21 | Depreciation Reserve | | | | \$170,800 |
| 22 | Net Plant | | | | \$6,829,200 |
| 23 | | | | | |
| 24 | | | | | |
| 25 | Deferred State Income Tax | | | | \$0 * |
| 26 | Deterred Federal Income Tax | | | | (\$972,456) * |
| 27. | | | | | |
| 28 | Net Rate Base Adjustment | | | | \$5,856,744 |
| 29 | | | | | |
| 30 | Revenue Requirement | | | | |
| 31 | After Tax Weighted Average Cost of Capital | 7.64% | | | |
| 32 | Revenue Factor | 1.6955 | | | |
| 33 | Tax Adjustment (Interest Synchronization) | | | | 67,468 |
| 34 | Revenue Requirement | | | | \$798,607 |

* Based on forecasted Federal and New Jersey Net Operating Loss Carryforward positions

C. In order to implement the cost recovery mechanism for the PowerAhead Investments, ACE shall proceed on the schedule set out below following public notice and public comment hearing, recognizing that the prudency of the PowerAhead Investments will be determined in a future base rate proceeding as addressed herein. The schedule below anticipates semi-annual notice, public comment hearings, and rate adjustments to cover all rate changes for the PowerAhead investments: Please note that the dates below assume an April 21, 2017 Order of Approval by the Board, with an effective date of May 1, 2017 and are illustrative only. Actual filing dates will be based on the effective date of the Board's Order of Approval of the PowerAhead program.

a. First Roll-In Period. Revenue Requirements associated with program investments that are placed into service from May 1, 2017 through and including April 30, 2018 [1 year after the effective date of the BPU Order approving this Settlement] shall go into base rates effective July 30, 2018 [90 days after in-service date cut-off]. ACE shall make its initial filing for such rates by March 1, 2018 [60 days before cut-off date], and update such filing for actual data through April 30, 2018 by May 16, 2018.

b. Second Roll-In Period. Provided the \$7 million spending requirement is met during the six month period, Revenue Requirements associated with program investments that are placed into service from May 1, 2018 through and including October 31, 2018 shall go into base rates effective February 1, 2019. ACE shall make its initial filing for such rates by September 1, 2018, and update such filing for actual data through October 31, 2018 by November 16, 2018.

c. Third Roll-In Period. Provided the \$7 million spending requirement is met during the six month period, Revenue Requirements associated with program investments that are placed into service from November 1, 2018 through and including April 30, 2019 shall go into base rates effective August 1, 2019. ACE shall make its initial filing for such rates by March 1, 2019, and update such filing for actual data through April 30, 2019 by May 16, 2019.

d. The filing schedule set out above shall continue for the five-year term of the PowerAhead program. To the extent that any portion of the \$79 million authorized PowerAhead investment amount is not included in the roll-in schedule described above for the five year term of PowerAhead, then the unrecovered amount is eligible for recovery in ACE's next base rate.

EXHIBIT B

The following tables provide additional detail for the Distribution Automation Sub-Program. This information was originally provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, pages 30-33.

| Type of Work | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|------------------------------------|---------|---------|---------|---------|---------|----------|
| Reconductoring | \$300 | \$2,450 | \$1,500 | \$0 | \$1,750 | \$6,000 |
| Substation Upgrades | \$200 | \$1,300 | \$1,500 | \$0 | \$0 | \$3,000 |
| DA Recloser Additions | \$0 | \$250 | \$900 | \$1,650 | \$1,700 | \$4,500 |
| Standalone Recloser Communications | \$730 | \$0 | \$0 | \$350 | \$420 | \$1,500 |
| Total | \$1,230 | \$4,000 | \$3,900 | \$2,000 | \$3,870 | \$15,000 |

Summary of Capital Cost & Estimated Timing of Work

Reconductoring Work

Work to be completed involves 15.5 miles of feeders, impacting approximately 6,500 customers, and is identified more specifically in Confidential Appendix One.

Recloser Additions

Work to be performed includes 71 DA recloser additions, impacting approximately 47,300 customers, and is identified more specifically in Confidential Appendix One.

Communications Added to Standalone Reclosers

Work to be performed includes adding communications to 90 standalone reclosers, impacting approximately 45,000 customers.

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|----------|---|---------------------|------------|--|
| All | Add communication and remote control capability to approximately 90 standalone reclosers | \$1,500 | 2017-2021 | Remote visibility and control capability will result in quicker restoration of service to impacted customers. Operators know more precisely the location of the fault and can restore equipment remotely under conditions in which field crews cannot work (such as high winds). |
| | TOTAL | \$1,500 | No. SPIRIT | |

Substation Upgrades

Work to be completed involves upgrades to three substations bringing ASR functionality to 16 feeders, serving approximately 28,000 customers.

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|------------|--|---------------------|---------------------|---|
| Winslow | Add DA functionality to Winslow substation | \$1,600 | Complete in 2018 | Winslow substation serves nearly 8,000 customers. DA expansion at Winslow would be expected to result in significant reliability improvements for these customers. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. Winslow is also a logical geographical location for DA because there is capability to tie to DA feeders served out of the surrounding substations. All of Williamstown substation's feeders are to be part of DA schemes in 2017, and Dacosta and Minotola substations' feeders are to be equipped with DA in 2018. |
| Pennsville | Add DA functionality to Churchtown substation | \$400 | Complete in 2019 | Churchtown substation currently serves 5,300 customers. There are plans to retire several older substations in the area and transfer the load to Churchtown, so the customer count will be doubling. DA expansion to Churchtown would be expected to result in significant reliability improvements for these customers. Customers served out of Woodstown substation would also see some benefit due to the creation of ties between the substations' feeders. (Woodstown is expected to gain DA capability in 2019). In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Swedesboro | Add DA capability to Beckett substation | \$1,000 | Complete in 2019 | Beckett substation serves about 7,500 customers. Upgrading Becket substation would enable future DA expansion to its seven feeders. The Beckett area is a logical place for DA expansion since the surrounding feeders served from Woodstown, Mantua, and High Street substations are to be given DA functionality in 2019. |
| | TOTAL | \$3,000 | | |

EXHIBIT C

The following discussion provides additional details regarding the new Harbor Beach Substation. This information was originally provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, pages 42-44.⁹

Project Description: New Harbor Beach Substation

This project involves the construction of a new substation to replace the existing Harbor Beach substation to provide additional capacity to this island area. This work would be incremental to the Company's current Construction Plan and incorporates the following elements:

- Storm surge and flooding mitigation measures,
- High-wind and flying debris protection measures,
- Additional redundancy of supply to customers affected by past storm events, and
- Accommodations for distribution hardening and resiliency plans, as outlined in the following section of this report.

Hardening and Resiliency Measures Proposed:

- 1. Install new equipment above advisory base flood elevations (ABFE) 1 percent flood plain plus two feet,
- 2. Install new 69/12kV transformers to provide redundant supply to customers in case of transformer outages and provide additional capacity to tie over distribution load,
- 3. Install new 12kV switch gear to provide redundant supply to customers in case of distribution feeder outages, and
- 4. Install wind resistant masonry buildings as per FEMA standards for:
 - a. New 12kV switchgear,
 - b. New 69 kV Gas Insulated Switchgear,
 - c. Protective equipment, controls, and auxiliary equipment, and
 - d. Main Transformers.

Additional Details:

The proposed building and new equipment will be installed to the new elevation of ABFE 1 percent plus two feet, providing further protection from flooding waters. This project will also

⁹ Please note that the diagram of the proposed Harbor Beach Substation included below is a revised version of the diagram included in Mr. Sullivan's Direct Testimony.

provide protection from flying material due to the installation of a new concrete enclosed building. The building will be of compartmentalized construction and contain the 69 kV Gas Insulated Switchgear, 69/12kV transformers, 12 kV switchgear, auxiliary equipment, relay protection and controls.

Due to the geographic location of Brigantine on a barrier island, there is no capacity to transfer 12 kV distribution load to alternate mainland substations and limited transformer capacity for transfers between the existing substations. As such, substantial load is at risk should the existing equipment experience a failure. This project would also meet the criteria for feeder firming, allowing a backup transfer of power should any single feeder fail, which is presently not available for every feeder.

This project scope consolidates two substations and reconfigures the existing distribution feeder system to allow load transfer should there be a failure. Two new 69/12 kV, 40 MVA transformers will be installed as part of this project to provide complete firm capacity should an installed transformer fail. Also within the project scope is the installation of new sources of supply. Two new 69 kV sources of supply will have to be installed to support the new Harbor Beach substation. The 69 kV sources of supply will be from the Huron and Ontario substations. The installation of the new 69 kV sources from the mainland, together with the feeder reconfigurations is expected to reduce the customer outage minutes experienced within the area.

A new 69 kV line terminal position will be created on the Huron 69 kV ring bus. The position will be complete with bus work, breaker, line disconnect switches, voltage transformers and required protective relays. Similarly, at the Ontario substation a new 69 kV line terminal position will be created. New communication pathways to the Harbor Beach substation for protective relaying will be created and installed as part of this project. The proposed transmission portion of this project is not included in this submittal.



The replacement substation at Harbor Beach is proposed to be constructed utilizing temporary switchgear that will be located in an adjacent parking lot due to site space restrictions. This will allow demolition of the existing substation equipment and construction of the new 69/12 kV substation within the existing property limits. The temporary switchgear will be removed from the parking lot, which will be restored at the completion of construction. The smaller Brigantine substation and its distribution load will be reconfigured and ultimately served by the new Harbor Beach substation. The existing Brigantine substation will then be demolished, providing a location for a future substation on the island of Brigantine if required at a later date.

EXHIBIT D

Minimum Filing Requirements

- 1) ACE's income statement for the most recent 12 month period, as filed with the Board.
- 2) ACE's balance sheet for the most recent 12 month period, as filed with the Board.
- 3) ACE's capital spending for each of the past five years, broken down by major category (e.g., customer driven, reliability, load and general plant).
- 4) ACE's overall approved PowerAhead capital budget broken down by major categories, both budgeted and actual amounts.
- 5) For each PowerAhead sub-program:
 - a. The original project summary for each sub-program;
 - b. Expenditures incurred to date; and
 - c. Appropriate metric (e.g., relays installed).
- 6) Anticipated sub-program timeline with updates and expected changes.
- 7) A calculation of the proposed rate adjustment based on details related to PowerAhead projects included in Plant in Service.
- 8) A calculation of the associated depreciation expense, based on those projects closed to Plant in Service during the period.
- 9) A list of any and all funds or credits received from the United States government, the State of New Jersey, a county or a municipality, for work related to any of the PowerAhead Program projects, such as relocation, reimbursement, or stimulus money.
 - a. An explanation of the financial treatment associated with the receipt of the government funds or credits.
- 10) A revenue requirement calculation showing the actual capital expenditures for the period for which the filing is made, as well as supporting calculations.

With each semi-annual filing, ACE will provide for each PowerAhead sub-program:

- the estimated quantity of work and the quantity completed to date or, if the project cannot be quantified, the major tasks completed, e.g., design phase, material procurement, permit gathering, phases of construction, etc.;
- the forecasted and actual PowerAhead costs for each sub-program to date for the semiannual reporting period and for the program-to-date;

• the estimated PowerAhead project completion date for each sub-group program.

The project expenditures shall be broken out between material and other costs. This reporting will begin two months after the end of the first full calendar six months following the issuance of a written Board Order authorizing the PowerAhead Program and continue through the PowerAhead Program construction phase and prudency review.

Performance Metrics. For the PowerAhead program, ACE will report to Board Staff and Rate Counsel, on a semi-annual basis and after any Major Event, severe weather event performance at the feeder level, the operating level and system wide, measured against a performance baseline that reflects severe weather event conditions for the prior five years, on a rolling basis, for the applicable operating area and system wide. Feeder level or device level data, as appropriate, will be provided for feeders in which PowerAhead investments were made under the Distribution Automation and Electronic Fusing Sub-programs as detailed herein. Additionally, ACE will provide Staff and Rate Counsel with copies of its quarterly reports filed pursuant to the Board's February 20, 2013 Order in BPU Docket No. EO12070650, as codified at <u>N.J.A.C.</u> 14:5-8.7, regarding non-storm ("blue sky") performance. This material will be provided to Board Staff and Rate Counsel beginning in January 2018 and continue through the construction phase of the PowerAhead Program and prudency review.

ACE shall provide a baseline analysis detailing the selection criteria of feeders for the PowerAhead program based on major event reliability metrics. The analysis should also include justification why the chosen feeders are incremental to the Company's existing reliability improvement programs and base reliability spending.

The reporting requirements and metrics set forth herein will allow the Board to review the performance of the investments:

Structural and Electrical Hardening: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Structural and Electrical Hardening investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Structural and Electrical Hardening investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Barrier Island Feeder Ties: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Barrier Island Feeder Ties investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Barrier Island Feeder Ties investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Harbor Beach Substation: Post construction, Storm Circuit Customer Minutes of Interruption (CMI) and Customer Average Interruption Duration Index (CAIDI) will be measured against a baseline that reflects the average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the applicable group of impacted feeders associated with the Harbor Beach substation investment. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare aggregated Storm Circuit CMI and CAIDI performance of feeders affected by the Harbor Beach substation investments against the 5 year average baseline CMI and CAIDI values.

Distribution Automation: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Distribution Automation investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Distribution Automation investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Electronic Fusing: Storm device level CMI and circuit level CAIDI will be measured against a baseline that reflects average device level CMI and circuit level CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for impacted devices replaced with the Electronic Fusing investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm device level CMI and circuit level CAIDI performance of feeders where Electronic Fusing investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Selective Undergrounding: Storm feeder CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the prior 5 years for the applicable feeders associated with the Selective Undergrounding Feeders investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Selective Undergrounding investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

These metrics shall be reported semi-annually. This reporting will begin two months after the end of the first full calendar six months following the issuance of a written Board Order authorizing the PowerAhead Program and continue through the construction phase of the PowerAhead Program and prudency review.

Confidential Appendix One

Please note that the following information is considered confidential, should not be distributed or disseminated, and is the subject of a request to the Board of Public Utilities for confidential treatment.

Structural and Electrical Hardening: Under this sub-program, work will be performed on the following feeders:

| District | Substation | Location | Feeder | Miles | Customers Served | Customer Minutes |
|-----------|------------|----------------|--------|-------|---------------------|------------------|
| Winslow | Minotola | Minotola | NJ0813 | 123 | 1,989 | 19,149,522 |
| Glassboro | Washington | Cross Keys | NJ2097 | 26 | 1,794 | 23,384,817 |
| Glassboro | Lamb | Pitman | NJ1215 | 27 | 3,278 | 16,978,363 |
| Glassboro | Fairton | Bridgeton City | NJ0671 | 32 | 2,528 | 14,910,624 |
| Winslow | Winslow | Winslow | NJ0242 | 78 | 2,580 | 14,840,995 |
| Winslow | Atco | Atco | NJ0922 | 36 | 1,243 | 14,167,576 |

Table One-Originally Identified Feeders

Table Two-Supplemental Feeder List

| District | Substation | Location | Feeder | Miles | Customers Served | Customer Minutes |
|---------------|---------------|-----------------|--------|-------|---------------------|------------------|
| Cape May | Lake | Wildwood | NJ0972 | 22 | 2,570 | 29,870,115 |
| Pleasantville | Scull | Somers Point | NJ1634 | 39 | 4,024 | 26,214,295 |
| Pleasantville | Pleasantville | Northfield | NJ0424 | 34 | 2,733 | 23,607,248 |
| Pleasantville | Shipbottom | North Beach | NJ0551 | 6 | 1,507 | 18,384,432 |
| Pleasantville | Egg Harbor | Devonshire, | NJ0146 | 66 | 1,092 | 18,769,699 |
| Pleasantville | Dorothy | Mays Landing | NJ1192 | 104 | 2,430 | 16,331,956 |

<u>Selective Undergrounding</u>: The work to be performed under this sub-program includes undergrounding feeders located in Bridgeton (Feeder Number NJ0232), Laurel Lakes (Feeder Number NJ0213), Washington Township (Feeder Number NJ2097), and Elwood Road and Atlantic City Expressway (Feeder Number NJ0146).

Barrier Island Feeder Ties: The specific projects included in this sub-program are identified in Table Three below.¹⁰

| Substation/Location | Construction | COST (thousands) | Justification |
|--|---|---------------------|---|
| Court & Lake Ave Substations - serving Wildwood | Create a new 12kv feeder at Court sub to create a tie with Anglesea feeder. The new feeder will be installed as an underbuilt on Corson - Middle 69kv line (Line No. 0717). Approx. 20000' (3.8 miles) of new 954 wire will be used for the new feeder from Court sub to Indian Trail Rd. In additon, reconductor approx. 12000' ((2.3 miles) with 954 AA wire on Rte 47 and then, install approx. 7000' of 1000 MCM 15kv cable to be suspended to the bridge on Rte 147. | \$4,500 | Additional tie from Mainland source in the event barrier island sub is lost |
| Lake Ave & Rio Grande Substations serving Wildwood | Reconductor North Wildwood Blvd and create new express feeder into North Wildwood from Rio Grande: Create a new 12kv express feeder at Rio sub. The 1st 3000' of the new feeder will be underbuilt on #1 Middle to Rio Grande (Line no. 0736) line. The next 25000' (4.7 miles) will be built on Corson-Middle-Lake 69kv (Line no. 0720) line to Lake sub. | \$3,000 | Additional tie from Mainland source in the event barrier island sub is lost |
| Ocean City, Merion & Marven Subs - serving Ocean City, Longport, Margate and Ventnor | Create a tie b/w Ocean City Island and Marven Island from Ocean City to Somer's Point. Attached the line to fixed bridge. Reconductor of existing feeder. | \$3,000 | Additional tie |
| Pleasantville & Marven Substations - serving West Atlantic City, Margate & Ventnor | Strengthen tie between mainland and Absecon Island. | \$2,500 | Strengthen tie |
| Ontario & Harbor Beach - serving Brigantine & Atlantic City | Create 12kv distribution tie between Atlantic City and Brigantine, utilizing the abandoned 23kv crossings. | \$0 | Create tie - majority of costs are included in the Harbor Beach Substation family of projects. However, this tie requires Harbor Beach project to be completed first |
| | TOTAL | \$13,000 | |

Table Three-Barrier Island Feeder Ties

¹⁰ Table Three was provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, page 25, Table 7.

Distribution Automation: The Distribution Automation sub-program includes several components.

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|------------------------|---|------------------|------------------|--|
| Pitman | Upgrade 5,200 feet of 1/0 CU conductor to 477AAC on feeder NJ1215 | \$306 | Complete in 2017 | Reconductoring would increase the tie capacity between DA feeders NJ1215 and NJ0744. The transfer capability would be Increased from 3.9 MVA to 6.8 MVA, allowing DA to operate at higher load levels. |
| Upper Pittsgrove | Upgrade 40,100 feet of #4CU conductor to 477AAC at the tie between feeders NJ0747 and NJ2352 | \$2,448 | Complete in 2018 | Reconductoring would increase the tie capacity between these two feeders. The transfer capability would be increased from 1.9 MVA to 6.9 MVA, allowing DA to operate at higher load levels. |
| Northfield | Upgrade 5,900 feet of 4/0 AAC conductor to 477AAC on feeder NJ0982 | \$360 | Complete in 2019 | Reconductoring would increase the tie capacity between DA feeders NJ0982 and NJ0424. The transfer capability would be increased from 5.1 MVA to 8 MVA, allowing DA to operate at higher load levels. |
| Egg Harbor Township | Upgrade 700 feet of 2/0 CU conductor to 477AAC on feeder NJ0983 | \$43 | Complete in 2019 | Reconductoring would increase the tie capacity between DA feeders NJ0983 and NJ0424. The transfer capability would be increased from 3 MVA to 7.8 MVA, allowing DA to operate at higher load levels. |
| Linwood | Upgrade 610 feet of 4/0 AAC conductor to 477AAC at the tie between feeders NJ0985 and NJ0423 | \$37 | Complete in 2019 | Reconductoring would increase the tie capacity between these two DA feeders. The transfer capability would be increased from 2 MVA to 4.1 MVA, allowing DA to operate at higher load levels. |
| Northfield | Upgrade 4,240 feet of 4/0 AAC conductor to 477AAC on feeder NJ0424 | \$260 | Complete in 2019 | Reconductoring would increase the tie capacity between DA feeders NJ0424 and NJ0985. The transfer capability would be increased from 3.8 MVA to 4.6 MVA, allowing DA to operate at higher load levels. |
| Linwood | Upgrade 14,000 feet of 4/0 AAC conductor to 477AAC on feeder NJ0985 | \$860 | Complete in 2019 | Reconductoring would increase the tie capacity between DA feeders NJ0985 and NJ0430. The transfer capability would be increased from 2.2 MVA to 4.1 MVA, allowing DA to operate at higher load levels. |
| Franklinville | Upgrade 10,900 feet of #4CU conductor to 477AAC on feeder NJ0745 | \$636 | Complete in 2021 | Reconductoring would increase the tie capacity between feeders NJ0745 and NJ2352. The transfer capability would be increased from 1.9 to 6.9 MVA, allowing DA to operate at higher load levels. |
| Elk Township | Upgrade 16,700 feet of #4CU conductor to 477AAC on feeder NJ0747 | \$1,056 | Complete in 2021 | Reconductoring would increase the tie capacity between DA feeders NJ0747 and NJ0745. The transfer capability would be increased from 2.1 to 7.8 MVA, allowing DA to operate at higher load levels. |
| | TOTAL | \$6,006 | | |

Reconductoring work involves 15.5 miles of feeders listed below:

71 Recloser Additions listed below:

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|----------------------|---|---------------------|--------------------------------------|--|
| Winslow | Add 4 DA reclosers to Winslow substation feeders NJ0241, NJ0242, NJ0243, and NJ0244 | \$250 | Complete in 2018 | DA expansion to these feeders would be expected to result in significant reliability improvements for the 8,000 customers they serve. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Pennsville | Add 16 DA reclosers to Churchtown substation feeders NJ2061, and NJ2062 | \$1,000 | Complete in 2019 | Churchtown substation currently serves 5,300 customers. There are plans to retire several older substations in the area and transfer the load to Churchtown, so the customer count will be doubling by 2019. DA expansion to these feeders would be expected to result in significant reliability improvements for these customers. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Barnegat | Add 10 DA reclosers to Barnegat substation feeders NJ2391, NJ2392, and NJ2393 | \$650 | Complete in 2020 or early 2021 | DA expansion to these feeders would be expected to result in significant reliability improvements for the 8,000 customers they serve. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Stafford Township | Add 21 DA reclosers to Cedar substation feeders NJ1323, NJ1324, NJ1325, NJ1326, NJ1327, NJ1328, and NJ1329 | \$1,350 | Complete in 2020 or early 2021 | DA expansion to these feeders would be expected to result in significant reliability improvements for the 11,000 customers they serve. It is expected that DA would reduce outage impacts from coastal weather events, which are likely to hit the Manahawkin area. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Tuckerton | Add 20 DA reclosers to Motts Farm substation feeders NJ0151, NJ0152, NJ0153,and NJ0154 | \$1,300 | Complete in 2020 or early 2021 | DA expansion to these feeders would be expected to result in significant reliability improvements for the 15,000 customers they serve. It is expected that DA would reduce outage impacts from coastal weather events, which are likely to hit the Tuckerton/Little Egg Harbor area. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| - Production of the | TOTAL | \$4,550 | | |

STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

REDACTED

IN THE MATTER OF THE PETITION OF : ATLANTIC CITY ELECTRIC COMPANY : FOR APPROVAL OF AMENDMENTS TO : ITS TARIFF TO PROVIDE FOR AN : INCREASE IN RATES AND CHARGES : FOR ELECTRIC SERVICE PURSUANT : TO <u>N.J.S.A.</u> 48:2-21 AND <u>N.J.S.A.</u> 48:2-21.1, : FOR APPROVAL OF A GRID RESILIENCY: INITIATIVE AND COST RECOVERY : RELATED THERETO, AND FOR OTHER : APPROPRIATE RELIEF (2016) :

BPU DOCKET NO. ER16030252

PHASE II STIPULATION OF SETTLEMENT

APPEARANCES:

Wendy E. Stark, Esq., Vice President & General Counsel, Philip J. Passanante, Esq., Assistant General Counsel, and Colleen A. Foley, Esq. (Saul Ewing LLP), on behalf of Atlantic City Electric Company, Petitioner

Alex Moreau and Veronica Beke, Deputy Attorneys General (Christopher S. Porrino, Attorney General of New Jersey), on behalf of the Staff of the Board of Public Utilities

Stefanie A. Brand, Esq., Director, Brian O. Lipman, Esq., Deputy Rate Counsel, Ami Morita, Esq., Deputy Rate Counsel, Diane Schulze, Esq., Assistant Deputy Rate Counsel, James Glassen, Esq., Assistant Deputy Rate Counsel, and Kurt Lewandowski, Esq., Assistant Deputy Rate Counsel, on behalf of the Division of Rate Counsel

Bradford M. Stern, Esq., Law Offices of Bradford M. Stern LLC, on behalf of Intervenor, Unimin Corporation

Raghu Murthy, Esq., and Aaron Kleinbaum, Eastern Environmental Law Center, on behalf of Intervenor, the Environmental Defense Fund

Joseph F. Accardo, Jr., Esq., and Martin Rothfelder, Esq., on behalf of Participant, Public Service Electric and Gas Company

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

The parties to this proceeding are as follows: Atlantic City Electric Company (the

"Company," "Petitioner" or "ACE"), the Division of Rate Counsel ("Rate Counsel"), the Staff of

the New Jersey Board of Public Utilities ("Board Staff" or "Staff"), Intervenors, Unimin

Corporation ("Unimin") and the Environmental Defense Fund ("EDF"), and Participant, Public Service Electric and Gas Company ("PSE&G"). The New Jersey Board of Public Utilities shall be referred to in this Stipulation of Settlement (the "Stipulation") as the "Board" or "BPU." The settlement memorialized in this Stipulation regarding the Petitioner's PowerAhead proposal shall sometimes be referred to herein as the "Settlement."

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PROCEDURAL HISTORY

Petitioner is a corporation organized and existing under the laws of the State of New Jersey, subject to the jurisdiction of the Board, with a regional office located at 5100 Harding Highway, Mays Landing, New Jersey 08330. On March 22, 2016, the Company filed a Verified Petition with the Board pursuant to <u>N.J.S.A.</u> 48:2-21 and <u>N.J.A. C.</u> 14:1-5.12 seeking an increase in the Company's base rates for electric distribution service, approval of a storm resiliency and grid modernization initiative known as PowerAhead, approval of a cost-recovery mechanism related to PowerAhead, and to make other tariff changes. As described in the Company's Verified Petition, PowerAhead was proposed as a five-year, \$176 million program focused on storm resiliency and hardening, grid modernization, and support of New Jersey's Energy Master Plan through energy reduction and increased deployment of renewable energy resources.¹

The Board transmitted the matter to the Office of Administrative Law ("OAL") as a contested case, and Administrative Law Judge ("ALJ") Irene Jones was assigned to hear the case. On April 28, 2016, PSE&G filed a Motion to Participate. On May 3, 2016, Unimin filed a Motion to Intervene. By letter dated May 12, 2016, the Company indicated that it did not oppose the granting of either Motion. On May 16, 2016, the Environmental Defense Fund ("EDF") filed

¹ The Company, on May 10, 2016, filed a First Amendment to the Verified Petition, revising its requested rate increase. This issue was resolved by settlement as the subject of an earlier order in this docketed matter.

a Motion to Intervene, which was opposed by the Company in a letter dated May 27, 2016. An in-person Pre-Hearing Conference was convened by ALJ Jones on May 19, 2016. ALJ Jones granted the Motions of PSE&G and Unimin, but did not act on the EDF Motion.²

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After proper notice, two public hearings were held in Mays Landing, New Jersey at 3:30 P.M. and 5:30 P.M. on June 30, 2016, with ALJ John S. Kennedy and ALJ W. Todd Miller presiding, respectively. Several members of the public appeared at the hearings, and provided comments on the Company's proposed requests. All comments were transcribed and made a part of the record.

Ultimately, a settlement was reached regarding the Company's revenue requirement and certain related matters. The settlement also contained a proposal that the PowerAhead program, and related cost recovery mechanism, be reviewed in a Phase II of this proceeding. On August 19, 2016, the Board recalled the entire case from the OAL to consider the proposed Stipulation of Settlement³ and to address issues relating to PowerAhead.

On August 24, 2016, the Board issued an Order approving the proposed Stipulation of Settlement, directing that PowerAhead be considered in a Phase II of this proceeding, and designating Commissioner Upendra Chivukula as the presiding Commissioner for the Phase II proceeding. On October 5, 2016, Commissioner Chivukula issued an Order granting EDF's Motion to Intervene. An in-person pre-hearing conference was held on October 6, 2016, and a pre-hearing Order was issued on October 18, 2016.

Discovery was conducted and multiple settlement discussions were held. The Company, Board Staff, Rate Counsel, and EDF (collectively, the "Signatory Parties" and each a "Signatory Party") have come to an agreement on the matters set forth in this Stipulation.

² The ALJ's decisions were reflected in the corrected Pre-Hearing Order dated July 14, 2016.

³ The Stipulation of Settlement was filed with the Board on August 19, 2016. Board Staff, Rate Counsel and Unimin were parties to the Stipulation of Settlement. PSE&G indicated that it did not object to the settlement.

PSE&G and Unimin, while not Signatory Parties, have indicated that they do not object to the terms of this Stipulation. Therefore, the Signatory Parties hereto agree and stipulate as follows:

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STIPULATED MATTERS

PowerAhead Program - Overall Investment Levels

1. The Signatory Parties agree that the PowerAhead program will include an investment level of \$79 million recovered through the stipulated cost recovery mechanism described below. The projects are intended to improve the storm resiliency of, and restoration times for, the Company's distribution infrastructure to benefit its customers. These projects and amounts are incremental to the Company's normal capital spending budget. The PowerAhead program will run over a five-year period beginning on the effective date of the Board's Order authorizing the PowerAhead program and cost recovery mechanism.

2. The Signatory Parties agree that the specific PowerAhead investment levels to be recovered through the stipulated cost recovery mechanism, as described more fully herein, shall be up to the amounts specified below for the following initiatives:

| <u>Sub-Program</u> | <u>\$ Million</u> |
|-------------------------------------|-------------------|
| Structural and Electrical Hardening | \$24 |
| Selective Undergrounding | \$11 |
| Barrier Island Feeder Ties | \$13 |
| Distribution Automation | \$15 |
| Electronic Fusing | \$2 |
| New Substation – Harbor Beach | \$14 |
| TOTAL | \$79 |

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PowerAhead Program - Sub-Program Work Descriptions

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3. <u>Structural and Electrical Hardening</u>. ACE will invest up to a total of \$24 million in the Structural and Electrical Hardening Sub-program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The twelve feeders where work will be performed under this sub-program are identified in Confidential Appendix One.⁴ The work to be performed in this sub-program includes: storm guying, replacement of wood cross-arms and braces, pole and conductor upgrades, and elevation of pad-mounted transformers and equipment in areas that are the most vulnerable to the effects of severe weather.

If ACE determines that it would be beneficial to adjust the feeders on which the work will be performed to a feeder with comparable characteristics as described by the selection criteria contained in Exhibit D "Performance Metrics" or to alter significantly the scope of work to be done on those feeders, it will notify Staff and Rate Counsel of the proposed change via letter. In its letter⁵ to Staff and Rate Counsel, ACE will describe its proposed program amendments, including the reason for the changes as well as provide a written description of the proposed changes and the associated costs. Staff and Rate Counsel will have 20 business days within which to file comments and/or objections on the proposed project amendments. If no objection is made within the 20 business day period, then ACE may move forward with the amended identified work. ACE agrees that it will not commence work on any proposed project amendments until the collaborative process described in this paragraph has concluded.

⁴ The twelve feeders listed in Confidential Appendix One will comprise the complete list of distribution feeder work under this PowerAhead sub-program, to be completed over five years. These feeders were selected such that no more than one feeder would be worked on per substation. Additionally, no feeders on the Worst Performing Circuits list were selected.

⁵ Electronic and hard copies will be provided to Staff and Rate Counsel.

4. <u>Selective Undergrounding</u>. ACE will invest \$11 million in the Selective Undergrounding Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes undergrounding of four feeders identified in Confidential Appendix One.

5. <u>Barrier Island Feeder Ties</u>. ACE will invest \$13 million in the Barrier Island Feeder Ties Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: creation of additional tie points to enable temporary restoration, upgrade and expansion of the distribution system to facilitate restoration, provision of redundant feeder capacity, and creation of mainland to barrier island ties to improve resiliency. Specific projects are identified in Confidential Appendix One.

6. <u>Distribution Automation</u>. ACE will invest \$15 million in the Distribution Automation Sub-Program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: the rebuild and upgrade of approximately 15.5 miles of distribution feeder lines to increase feeder tie capability and storm resiliency (including the installation of voltage regulators), relay upgrades at three substations, installation of 71 reclosers (non-Automatic Sectionalizing and Restoration ("ASR")) to optimize feeder segmentation, and addition of communications/remote control capability to 90 standalone (non-ASR) reclosers. A Protective Coordination Study shall be completed before any distribution automation work is started. Exhibit B and Confidential

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Appendix One hereto contain additional, detailed information regarding the specific work to be performed in this sub-program.

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7. <u>Electronic Fusing</u>. ACE will invest \$2.0 million in the Electronic Fusing Sub-Program pilot program over the next five years following the issuance of a Board Order approving this Settlement. This investment will be recoverable through the cost recovery mechanism established herein. The work to be performed under this sub-program includes: the replacement of single operation fuses with reusable electronic fuses that are intended to automatically restore service. ACE shall provide a copy of its Protective Coordination Manual and Protocol for performing fault current and sectionalization studies to Staff and Rate Counsel before work is started on this Electronic Fusing Sub-Program.

8. <u>New Substation – Harbor Beach</u>. ACE will invest \$14 million in the design and construction of a new Harbor Beach Substation (to replace the existing substation) over the next five years following the issuance of a Board Order approving this Settlement. This distribution system capital investment will be recoverable through the cost recovery mechanism established herein, and does not include the related transmission system capital investment which will be required to extend energy supplies to the substation. Related transmission system capital investment will continue to be recovered in transmission rates. Exhibit C hereto contains additional, detailed information regarding the specific work to be performed in constructing the new Harbor Beach Substation.

9. If ACE makes a future filing to address Smart Grid issues including smart street lighting, Advanced Metering Infrastructure or other similar initiatives, ACE agrees to consult with EDF on that filing. ACE agrees to discuss with EDF issues including voltage optimization, integration of distributed energy resources and customer access to energy usage data, and to evaluate the costs and benefits of these initiatives.

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10. The Signatory Parties recognize that the resiliency and storm hardening initiatives included in the PowerAhead program are significant in scale and scope, and that some flexibility in budgeting each sub-group of programs is appropriate. Accordingly, the Signatory Parties agree that ACE may make adjustments to Sub-Program budgets in the following manner: changes in the cumulative amount of 5% or less of any sub-program investment level may be made immediately by ACE, with notice to Board Staff and Rate Counsel of the changes within 30 days following the change. "Cumulative amount" in this paragraph shall mean cumulative for the entire period of the program. ACE shall not make changes exceeding 5% of any sub-program investment level without 20 business days prior written and electronic notification to Board Staff and Rate Counsel, including the reason for the changes as well as a written description of the proposed changes and the associated costs, providing Staff and Rate Counsel within 20 business days of receipt of the electronic notice, ACE may move forward with the change.

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PowerAhead - Reporting Requirements

11. Beginning with the quarterly Reliability Improvement Plan ("RIP") meeting covering the results for the fourth quarter of 2017, and then semi-annually thereafter, ACE will discuss the status of the PowerAhead program with Board Staff and Rate Counsel during the regularly scheduled RIP meetings.

12. On a semi-annual basis, ACE shall provide a report to Staff and Rate Counsel detailing the following information for each sub-program of PowerAhead programs:

• estimated PowerAhead total quantity of work completed for each of the six subprograms. If the work completed cannot be quantified, the major tasks completed, e.g., design phase, material procurement, permitting, phases of construction, etc. should be specified;

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• forecasted and actual PowerAhead costs (broken out by sub-program and cost category) for the reporting period and for the program-to-date;

 estimated PowerAhead project completion date by program within each subprogram;

• performance metrics reports; and

anticipated changes to the PowerAhead projects.

This reporting requirement will continue through the review of the prudency of the PowerAhead investments.

PowerAhead - Cost Recovery Mechanism

13. The Signatory Parties agree that ACE shall be permitted to recover up to \$79 million in PowerAhead program investments as defined in Paragraphs three through eight above, plus associated Allowance for Funds Used During Construction ("AFUDC"), through the PowerAhead Rider as described below. The prudence of the execution of these programs will be reviewed in the Company's subsequent base rate proceedings, as appropriate, including a review to ensure that they are distribution, not transmission, investments. Nothing herein will preclude any party from raising in the subsequent base rate case proceedings any objection that could have been raised in any change notice, or other filing or report made by the Company. If the cost of a particular sub-program exceeds the amount allowable under the PowerAhead program, the Signatory Parties agree that ACE may seek recovery of those additional costs, not subject to recovery in the PowerAhead cost recovery mechanism, in a subsequent base rate case.

14. Cost recovery for completed projects will occur on a semi-annual basis provided the plant-in-service additions during the semi-annual period are at least \$7.0 million, with schedules, procedures, and filings as detailed in subsequent paragraphs. Should recoverable plant-in-service additions not exceed \$7.0 million during the semi-annual period, then costs

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associated with those plant-in-service additions shall be included and recovered in the next semiannual period through the cost recovery mechanism described herein. ACE agrees to forego filing a request for cost recovery associated with the PowerAhead program until PowerAhead has been in effect for a period of one year.⁶ Costs to be recovered include the return on net plant in-service as of the end of the semi-annual reporting period. The rate of return shall be calculated based on the overall rate of return approved in ACE's most recent base rate case. AFUDC included in plant-in-service additions will be calculated using a return on equity ("ROE") that is no higher than the ROE authorized in the Company's most recent base rate case. Net plant will be calculated as gross plant in-service less accumulated depreciation less applicable accumulated deferred income taxes. The revenue requirement will also include depreciation expense, income taxes, the associated interest synchronization adjustment, and the BPU and Rate Counsel assessments. Depreciation will be included in the revenue requirement at ACE's current Board-approved depreciation rates. The Company will begin to depreciate an asset once it is placed into service. Operations and Maintenance expenses associated with the PowerAhead program will not be included in the semi-annual revenue requirement calculations and will not be subject to deferral. Exhibit A contains a detailed explanation of how the PowerAhead revenue requirement shall be calculated, along with an illustrative calculation, and a schedule of filing dates and rate effective dates.

PowerAhead - Rate Design

15. The rate design for the PowerAhead recovery mechanism will utilize the rate design methodology used to set base rate rates in Phase I of this proceeding. The Signatory Parties acknowledge that ACE will file base rate proceedings during the term of the PowerAhead program and may propose a rate design methodology that differs from the rate design

⁶ A detailed list of filing dates reflecting this provision is included in Exhibit A, subsection C.

methodology used to set base rates in Phase I of this proceeding.⁷ In the event an alternative rate design methodology is adopted in a future base rate proceeding during the term of the PowerAhead program, then that rate design shall be utilized for the PowerAhead recovery mechanism.

PowerAhead - Program Review

16. The Signatory Parties agree, and ACE understands, that the review of the prudence of the execution of all projects undertaken in the PowerAhead program will be determined in the Company's future base rate cases. ACE agrees that the rate adjustments established in the semi-annual filings are provisional and subject to refund in the event the Board determines that such costs have been imprudently incurred under the PowerAhead program. Upon completion of the base rate case review of the PowerAhead projects, the PowerAhead surcharge associated with those projects will be rolled into base distribution rates when new rates go into effect at the conclusion of the base rate case. The Signatory Parties further agree that the base rate case review of PowerAhead investment costs is not only to ensure the investments are distribution, not transmission, investments. ACE further agrees that it will file a base rate case no later than three years from the effective date of the Board Order approving this Stipulation and the PowerAhead program.

17. Along with its semi-annual filing, the Company agrees to provide the information outlined in Exhibit D, attached hereto. Board Staff and Rate Counsel will have the opportunity to request discovery on the information provided by ACE in its semi-annual PowerAhead filings.

⁷ On March 30, 2017, ACE filed a request to increase base rates, which has been docketed as BPU Docket No. ER17030308.

Additional Provisions

18. Each Signatory Party agrees to use its best efforts to ensure that this Stipulation shall be presented to the Board for approval at the Board's May 31, 2017 public agenda meeting. Each Signatory Party understands that a Board Order adopting this Stipulation will become effective in accordance with N.J.S.A. 48:2-40.

This Stipulation shall be binding on the Signatory Parties upon approval by the 19. Board. This Stipulation shall bind the Signatory Parties in this matter only and shall have no precedential value. This Stipulation contains terms, each of which is interdependent with the others and essential in its own right to the signing of this Stipulation. Each term is vital to the agreement as a whole, since the Signatory Parties expressly and jointly state that they would not have signed the Stipulation had any term been modified in any way. Since the Signatory Parties have compromised in numerous areas, each is entitled to certain procedures in the event that any modifications whatsoever are made to the Stipulation. If, upon consideration of this Stipulation, the Board were to modify any of the terms described above, each Signatory Party must be given the right to be placed in the position it was in before this Stipulation was entered into. It is essential that each Signatory Party be afforded the option, prior to the implementation of any new rate resulting from any modification of this Stipulation, either to modify its own position to accept the proposed change(s) or to resume the proceeding as if no agreement had been reached. This proceeding, under such circumstances, would resume at the point where it was terminated. The Signatory Parties agree that these procedures are fair to all concerned, and therefore, they are made an integral and essential element of this Stipulation. None of the Signatory Parties shall be prohibited from or prejudiced in arguing a different policy or position before the Board in any other proceeding, as such agreements pertain only to this matter and to no other matter.

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument:

ATLANTIC CITY ELECTRIC COMPANY

<u>May 3, 2017</u> Date

By:

Colleen A. Foley, Esq. Saul Ewing LLP Attorney for Petitioner

CHRISTOPHER S. PORRINO ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities

18/ay 5,2017

By:

Veronica Bele/Alex Moreau Deputy Attorney General

STEFANIE A. BRAND, ESQ. DIRECTOR – DIVISION OF RATE COUNSEL

Date

Date

By:

Stefanic A. Brand, Esq. Director, Division of Rate Counsel

ENVIRONMENTAL DEFENSE FUND

By:

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

ATLANTIC CITY ELECTRIC COMPANY

<u>May 3, 2017</u> Date

By:

Colleen A. Foley, Esq. Saul Ewing LLP Attorney for Petitioner

CHRISTOPHER S. PORRINO ATTORNEY GENERAL OF NEW JERSEY Attorney for the Staff of the Board of Public Utilities

By:

Veronica Beke/Alex Moreau Deputy Attorney General

STEFANIE A. BRAND, ESQ. DIRECTOR – DIVISION OF RATE COUNSEL

10/17

Date

By: 1 0 2.

Stefanie A. Brand, Esq. Director, Division of Rate Counsel

ENVIRONMENTAL DEFENSE FUND

By:

Date

21. This Stipulation may be executed in as many counterparts as there are Signatory Parties of this Stipulation, each of which counterparts shall be an original, but all of which shall constitute one and the same instrument.

ATLANTIC CITY ELECTRIC COMPANY

| May 3, 2017 | By: Collen A. Toley |
|-------------|---|
| Date | Colleen A. Foley, Esq. |
| | Saul Ewing LLP |
| | Attorney for Petitioner |
| | CHRISTOPHER S. PORRINO |
| | ATTORNEY GENERAL OF NEW JERSEY |
| | Attorney for the Staff of the Board of Public Utilities |
| | |
| | |
| | Ву: |
| Date | Veronica Beke/Alex Moreau |
| | Deputy Attorney General |
| | STEFANIE & BRAND ESO |
| | DIRECTOR – DIVISION OF RATE COUNSEL |
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| | ENVIRONMENTAL DEFENSE FUND |
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| EFD | < X |
|) .) .! (| By: |
| Date | Raghu Murthy, Esq. |
| | Eastern Environmental Law Center |
| | Attorney for the Environmental Defense Fund |
| | |

EXHIBIT A

PowerAhead Cost Recovery Mechanism Detailed Summary

- A. The PowerAhead cost recovery mechanism shall be calculated as summarized below.
 - a. PowerAhead Investment Costs All qualifying PowerAhead capital expenditures, including actual costs of engineering, design and construction, and property acquisitions, including actual labor, materials, overhead, and capitalized AFUDC associated with the projects ("PowerAhead Investment Costs"), will be recovered through base rate roll-ins for each of the time periods described below. The PowerAhead Investment Costs will be recorded, during construction, in an associated Construction Work In Progress ("CWIP") account or in a Plant In-Service account upon the respective project being deemed used and useful. The Company will follow its current policies and practices with regard to capitalizing costs, including overheads.

Net Investment – Is equal to the PowerAhead Investment Costs related to projects that have been placed into service <u>less</u> the associated accumulated depreciation <u>less</u> applicable accumulated deferred income taxes.

Weighted Average Cost of Capital ("WACC") – ACE agrees that the return on the incremental investments undertaken in the PowerAhead Program shall be at the Board-approved weighted average cost of capital as determined in the Company's most recent base rate case (currently the WACC is 7.64% as determined in Phase I of this proceeding).⁸

The rate base roll-ins will be calculated using the following formula:

Revenue Requirement = ((PowerAhead Rate Base * After Tax WACC) + Depreciation Expense (net of tax) + Tax Adjustments)* Revenue Factor

i. PowerAhead Rate Base – The PowerAhead Rate Base will be calculated as Plant In-Service, including CWIP transferred into service and associated AFUDC, less accumulated depreciation and less applicable accumulated deferred income taxes. AFUDC will be calculated using the same methodology used for current distribution assets consistent with the Company's AFUDC policy, and as permitted by FERC Order 561, which includes compounding AFUDC on a semi-annual basis. The AFUDC rate will include the cost of equity approved in the Company's most recent base rate case.

⁸ Should the Company file, and the Board decide, a base rate case during the five-year term of the PowerAhead program, then the existing amount of in-service PowerAhead projects being recovered in the surcharge would be rolled into base rates, on the effective date of the base rate decision, and the surcharge reset to zero. The next filing of the PowerAhead surcharge would reflect new projects placed in-service under the PowerAhead program, and the surcharge based on the return on common equity, the cost of long-term debt, and the rate design decided by the BPU in the Company's most recently approved base rate case.

- ii. Depreciation Expense Depreciation expense will be calculated as the PowerAhead Investment Costs by asset class multiplied by the associated depreciation rate applied to the same asset in current base rates and then calculated net of tax.
- iii. Tax Adjustments Includes the effects of any flow through items and any tax law changes codified by the Internal Revenue Service, the State of New Jersey or any other taxing authority.
- iv. Revenue Factor The Revenue Factor adjusts the Revenue Requirement Net of Tax for federal and state income taxes and the costs associated with the BPU and Rate Counsel Annual Assessments. The then-current statutory state and federal income tax rates and then-current BPU/Rate Counsel Assessment rates will be utilized.

B. A sample calculation is noted below:

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PowerAhead Revenue Requirement Calculation Example

| (1) Line | (2) | | | | (3) | |
|-------------|--|-----------|----------|-----------|-------------------------|---|
| <u>No.</u> | ltem | <u>\$</u> | | | | |
| 1 | Earnings | | | | | |
| 2 | Book Depreciation Expense | 2.44% | | | \$170,800 | |
| J ▲ | State Tay Depresiation Expanse MACBS | 2 750/ | * | | | |
| 5 | State Tax Depreciation Expense - MACKS | J./ J% | Þ | 262,500 | | |
| 8 | Federal Tax Depreciation Expense - Bonus | 40.00% | ¢ ¢ | 2,800,000 | | |
| .7 | rederar fax Depreciation Expense - MACKS | 3./3% | Þ | 157,500 | | |
| 8 | Deferred State Income Tax | | | | £0 050 | |
| 9 | Deferred Federal Income Tax | | | | \$0,200 \$070 AEC | |
| 10 | State Income Tax | | | | \$312,400 (\$22.625) | |
| 11 | Federal Income Tax | | | | (\$23,023) | |
| 12 | Total Expense | | | | \$101.029 | - |
| 13 | | | | | \$101j020 | |
| | Allowance for Funds Used During | | | | | |
| 14 | Construction | | | | \$10,000 | |
| 15 | | | | | | |
| 16 | Earnings | | | | (\$91,028) | _ |
| 17 | | | | | | • |
| 18 | Rate Base | | | | | |
| 19 | | | | | | |
| 20 | PowerAhead Plant Closings | | | | \$7,000,000 | |
| 21 | Depreciation Reserve | | | | \$170,800 | |
| 22 | Net Plant | | | | \$6,829,200 | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | Deferred State Income Tax | | | | \$0 | , |
| 26 | Deferred Federal Income Tax | | | ٠ | (\$972,456) | * |
| 27 | | | | | | |
| 28 29 | Net Rate Base Adjustment | | | | \$5,856,744 | ſ |
| 30 | <u>Revenue Requirement</u> | | | | | |
| 31 | After Tax Weighted Average Cost of Capital | 7.64% | | | | |
| 32 | Revenue Factor | 1.6955 | | | | |
| 33 | Tax Adjustment (Interest Synchronization) | | | | 67.468 | |
| 34 | Revenue Requirement | | | | \$798,607 | |

* Based on forecasted Federal and New Jersey Net Operating Loss Carryforward positions

C. In order to implement the cost recovery mechanism for the PowerAhead Investments, ACE shall proceed on the schedule set out below following public notice and public comment hearing, recognizing that the prudency of the PowerAhead Investments will be determined in a future base rate proceeding as addressed herein. The schedule below anticipates semi-annual notice, public comment hearings, and rate adjustments to cover all rate changes for the PowerAhead investments: Please note that the dates below assume an April 21, 2017 Order of Approval by the Board, with an effective date of May 1, 2017 and are illustrative only. Actual filing dates will be based on the effective date of the Board's Order of Approval of the PowerAhead program.

a. First Roll-In Period. Revenue Requirements associated with program investments that are placed into service from May 1, 2017 through and including April 30, 2018 [1 year after the effective date of the BPU Order approving this Settlement] shall go into base rates effective July 30, 2018 [90 days after in-service date cut-off]. ACE shall make its initial filing for such rates by March 1, 2018 [60 days before cut-off date], and update such filing for actual data through April 30, 2018 by May 16, 2018.

b. Second Roll-In Period. Provided the \$7 million spending requirement is met during the six month period, Revenue Requirements associated with program investments that are placed into service from May 1, 2018 through and including October 31, 2018 shall go into base rates effective February 1, 2019. ACE shall make its initial filing for such rates by September 1, 2018, and update such filing for actual data through October 31, 2018 by November 16, 2018.

c. Third Roll-In Period. Provided the \$7 million spending requirement is met during the six month period, Revenue Requirements associated with program investments that are placed into service from November 1, 2018 through and including April 30, 2019 shall go into base rates effective August 1, 2019. ACE shall make its initial filing for such rates by March 1, 2019, and update such filing for actual data through April 30, 2019 by May 16, 2019.

d. The filing schedule set out above shall continue for the five-year term of the PowerAhead program. To the extent that any portion of the \$79 million authorized PowerAhead investment amount is not included in the roll-in schedule described above for the five year term of PowerAhead, then the unrecovered amount is eligible for recovery in ACE's next base rate.

EXHIBIT B

The following tables provide additional detail for the Distribution Automation Sub-Program. This information was originally provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, pages 30-33.

| Type of Work | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|------------------------------------|---------|---------|---------|---------|---------|----------|
| Reconductoring | \$300 | \$2,450 | \$1,500 | \$0 | \$1,750 | \$6,000 |
| Substation Upgrades | \$200 | \$1,300 | \$1,500 | \$0 | \$0 | \$3,000 |
| DA Recloser Additions | \$0 | \$250 | \$900 | \$1,650 | \$1,700 | \$4,500 |
| Standalone Recloser Communications | \$730 | \$0 | \$0 | \$350 | \$420 | \$1,500 |
| Total | \$1,230 | \$4,000 | \$3,900 | \$2,000 | \$3,870 | \$15,000 |

Summary of Capital Cost & Estimated Timing of Work

Reconductoring Work

Work to be completed involves 15.5 miles of feeders, impacting approximately 6,500 customers, and is identified more specifically in Confidential Appendix One.

Recloser Additions

Work to be performed includes 71 DA recloser additions, impacting approximately 47,300 customers, and is identified more specifically in Confidential Appendix One.

Communications Added to Standalone Reclosers

Work to be performed includes adding communications to 90 standalone reclosers, impacting approximately 45,000 customers.

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|--------------|---|---------------------|-----------|--|
| All | Add communication and remote control capability to approximately 90 standalone reclosers | \$1,500 | 2017-2021 | Remote visibility and control capability will result in quicker restoration of service to impacted customers. Operators know more precisely the location of the fault and can restore equipment remotely under conditions in which field crews cannot work (such as high winds). |
| and states a | TOTAL | \$1,500 | | |

Substation Upgrades

Work to be completed involves upgrades to three substations bringing ASR functionality to 16 feeders, serving approximately 28,000 customers.

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|------------|--|---------------------|---------------------|---|
| Winslow | Add DA functionality to Winslow substation | \$1,600 | Complete in 2018 | Winslow substation serves nearly 8,000 customers. DA expansion at Winslow would be expected to result in significant reliability improvements for these customers. In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. Winslow is also a logical geographical location for DA because there is capability to tie to DA feeders served out of the surrounding substations. All of Williamstown substation's feeders are to be part of DA schemes in 2017, and Dacosta and Minotola substations' feeders are to be equipped with DA in 2018. |
| Pennsville | Add DA functionality to Churchtown substation | \$400 | Complete in 2019 | Churchtown substation currently serves 5,300 customers. There are plans to retire several older substations in the area and transfer the load to Churchtown, so the customer count will be doubling. DA expansion to Churchtown would be expected to result in significant reliability improvements for these customers. Customers served out of Woodstown substation would also see some benefit due to the creation of ties between the substations' feeders. (Woodstown is expected to gain DA capability in 2019). In 2015, DA resulted in SAIFI improvements of 8.4% and SAIDI improvements of 6.9% for areas equipped with DA. |
| Swedesboro | Add DA capability to Beckett substation | \$1,000 | Complete in 2019 | Beckett substation serves about 7,500 customers. Upgrading Becket substation would enable future DA expansion to its seven feeders. The Beckett area is a logical place for DA expansion since the surrounding feeders served from Woodstown, Mantua, and High Street substations are to be given DA functionality in 2019. |
| | TOTAL | \$3,000 | and the second | |

EXHIBIT C

The following discussion provides additional details regarding the new Harbor Beach Substation. This information was originally provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, pages 42-44.⁹

Project Description: New Harbor Beach Substation

This project involves the construction of a new substation to replace the existing Harbor Beach substation to provide additional capacity to this island area. This work would be incremental to the Company's current Construction Plan and incorporates the following elements:

- Storm surge and flooding mitigation measures,
- High-wind and flying debris protection measures,
- Additional redundancy of supply to customers affected by past storm events, and
- Accommodations for distribution hardening and resiliency plans, as outlined in the following section of this report.

Hardening and Resiliency Measures Proposed:

- 1. Install new equipment above advisory base flood elevations (ABFE) 1 percent flood plain plus two feet,
- 2. Install new 69/12kV transformers to provide redundant supply to customers in case of transformer outages and provide additional capacity to tie over distribution load,
- 3. Install new 12kV switch gear to provide redundant supply to customers in case of distribution feeder outages, and
- 4. Install wind resistant masonry buildings as per FEMA standards for:
 - a. New 12kV switchgear,
 - b. New 69 kV Gas Insulated Switchgear,
 - c. Protective equipment, controls, and auxiliary equipment, and
 - d. Main Transformers.

Additional Details:

The proposed building and new equipment will be installed to the new elevation of ABFE 1 percent plus two feet, providing further protection from flooding waters. This project will also

⁹ Please note that the diagram of the proposed Harbor Beach Substation included below is a revised version of the diagram included in Mr. Sullivan's Direct Testimony.

provide protection from flying material due to the installation of a new concrete enclosed building. The building will be of compartmentalized construction and contain the 69 kV Gas Insulated Switchgear, 69/12kV transformers, 12 kV switchgear, auxiliary equipment, relay protection and controls.

Due to the geographic location of Brigantine on a barrier island, there is no capacity to transfer 12 kV distribution load to alternate mainland substations and limited transformer capacity for transfers between the existing substations. As such, substantial load is at risk should the existing equipment experience a failure. This project would also meet the criteria for feeder firming, allowing a backup transfer of power should any single feeder fail, which is presently not available for every feeder.

This project scope consolidates two substations and reconfigures the existing distribution feeder system to allow load transfer should there be a failure. Two new 69/12 kV, 40 MVA transformers will be installed as part of this project to provide complete firm capacity should an installed transformer fail. Also within the project scope is the installation of new sources of supply. Two new 69 kV sources of supply will have to be installed to support the new Harbor Beach substation. The 69 kV sources of supply will be from the Huron and Ontario substations. The installation of the new 69 kV sources from the mainland, together with the feeder reconfigurations is expected to reduce the customer outage minutes experienced within the area.

A new 69 kV line terminal position will be created on the Huron 69 kV ring bus. The position will be complete with bus work, breaker, line disconnect switches, voltage transformers and required protective relays. Similarly, at the Ontario substation a new 69 kV line terminal position will be created. New communication pathways to the Harbor Beach substation for protective relaying will be created and installed as part of this project. The proposed transmission portion of this project is not included in this submittal.



The replacement substation at Harbor Beach is proposed to be constructed utilizing temporary switchgear that will be located in an adjacent parking lot due to site space restrictions. This will allow demolition of the existing substation equipment and construction of the new 69/12 kV substation within the existing property limits. The temporary switchgear will be removed from the parking lot, which will be restored at the completion of construction. The smaller Brigantine substation and its distribution load will be reconfigured and ultimately served by the new Harbor Beach substation. The existing Brigantine substation will then be demolished, providing a location for a future substation on the island of Brigantine if required at a later date.

EXHIBIT D

Minimum Filing Requirements

- 1) ACE's income statement for the most recent 12 month period, as filed with the Board.
- 2) ACE's balance sheet for the most recent 12 month period, as filed with the Board.
- 3) ACE's capital spending for each of the past five years, broken down by major category (e.g., customer driven, reliability, load and general plant).
- 4) ACE's overall approved PowerAhead capital budget broken down by major categories, both budgeted and actual amounts.
- 5) For each PowerAhead sub-program:
 - a. The original project summary for each sub-program;
 - b. Expenditures incurred to date; and
 - c. Appropriate metric (e.g., relays installed).
- 6) Anticipated sub-program timeline with updates and expected changes.
- 7) A calculation of the proposed rate adjustment based on details related to PowerAhead projects included in Plant in Service.
- 8) A calculation of the associated depreciation expense, based on those projects closed to Plant in Service during the period.
- 9) A list of any and all funds or credits received from the United States government, the State of New Jersey, a county or a municipality, for work related to any of the PowerAhead Program projects, such as relocation, reimbursement, or stimulus money.
 - a. An explanation of the financial treatment associated with the receipt of the government funds or credits.
- 10) A revenue requirement calculation showing the actual capital expenditures for the period for which the filing is made, as well as supporting calculations.

With each semi-annual filing, ACE will provide for each PowerAhead sub-program:

- the estimated quantity of work and the quantity completed to date or, if the project cannot be quantified, the major tasks completed, e.g., design phase, material procurement, permit gathering, phases of construction, etc.;
- the forecasted and actual PowerAhead costs for each sub-program to date for the semiannual reporting period and for the program-to-date;

• the estimated PowerAhead project completion date for each sub-group program.

The project expenditures shall be broken out between material and other costs. This reporting will begin two months after the end of the first full calendar six months following the issuance of a written Board Order authorizing the PowerAhead Program and continue through the PowerAhead Program construction phase and prudency review.

Performance Metrics. For the PowerAhead program, ACE will report to Board Staff and Rate Counsel, on a semi-annual basis and after any Major Event, severe weather event performance at the feeder level, the operating level and system wide, measured against a performance baseline that reflects severe weather event conditions for the prior five years, on a rolling basis, for the applicable operating area and system wide. Feeder level or device level data, as appropriate, will be provided for feeders in which PowerAhead investments were made under the Distribution Automation and Electronic Fusing Sub-programs as detailed herein. Additionally, ACE will provide Staff and Rate Counsel with copies of its quarterly reports filed pursuant to the Board's February 20, 2013 Order in BPU Docket No. EO12070650, as codified at <u>N.J.A.C.</u> 14:5-8.7, regarding non-storm ("blue sky") performance. This material will be provided to Board Staff and Rate Counsel beginning in January 2018 and continue through the construction phase of the PowerAhead Program and prudency review.

ACE shall provide a baseline analysis detailing the selection criteria of feeders for the PowerAhead program based on major event reliability metrics. The analysis should also include justification why the chosen feeders are incremental to the Company's existing reliability improvement programs and base reliability spending.

The reporting requirements and metrics set forth herein will allow the Board to review the performance of the investments:

Structural and Electrical Hardening: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Structural and Electrical Hardening investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Structural and Electrical Hardening investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Barrier Island Feeder Ties: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Barrier Island Feeder Ties investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Barrier Island Feeder Ties investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Harbor Beach Substation: Post construction, Storm Circuit Customer Minutes of Interruption (CMI) and Customer Average Interruption Duration Index (CAIDI) will be measured against a baseline that reflects the average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the applicable group of impacted feeders associated with the Harbor Beach substation investment. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare aggregated Storm Circuit CMI and CAIDI performance of feeders affected by the Harbor Beach substation investments against the 5 year average baseline CMI and CAIDI values.

Distribution Automation: Storm Circuit CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for the impacted feeders associated with the Distribution Automation investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Distribution Automation investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Electronic Fusing: Storm device level CMI and circuit level CAIDI will be measured against a baseline that reflects average device level CMI and circuit level CAIDI performance under Major Event conditions for the 5 years prior to the project completion date for impacted devices replaced with the Electronic Fusing investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm device level CMI and circuit level CAIDI performance of feeders where Electronic Fusing investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

Selective Undergrounding: Storm feeder CMI and CAIDI will be measured against a baseline that reflects average CMI and CAIDI performance under Major Event conditions for the prior 5 years for the applicable feeders associated with the Selective Undergrounding Feeders investments. A Major Event shall be defined as a sustained interruption of electric service resulting from severe weather events which affect at least 10 percent of the customers in an operating area or system wide. ACE will compare Storm Circuit CMI and CAIDI performance of feeders where Selective Undergrounding investments are completed to the 5 year average baseline CMI and CAIDI values under Major Event conditions.

These metrics shall be reported semi-annually. This reporting will begin two months after the end of the first full calendar six months following the issuance of a written Board Order authorizing the PowerAhead Program and continue through the construction phase of the PowerAhead Program and prudency review.

Confidential Appendix One

Please note that the following information is considered confidential, should not be distributed or disseminated, and is the subject of a request to the Board of Public Utilities for confidential treatment.

<u>Structural and Electrical Hardening</u>: Under this sub-program, work will be performed on the following feeders:

Table One-Originally Identified Feeders

| District | Substation | Location | Feeder | Miles | Customers Served | Customer Minutes | | |
|----------|------------|----------|--------|-------|---------------------|------------------|--|--|
| - | REDACTED | | | | | | | |
| - | | | | | | - | | |

Table Two-Supplemental Feeder List

| District | Substation | Location | Feeder | Miles | Customers Served | Customer Minutes |
|----------|------------|----------|--------|-------|---------------------|------------------|
| - | | | | | | - |
| - | | | | | | _ |
| - | | | REDA | CTED | | |
| _ | | | | | | |
| | 1 | -1 | | | | |

<u>Selective Undergrounding</u>: The work to be performed under this sub-program includes undergrounding feeders located

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Barrier Island Feeder Ties: The specific projects included in this sub-program are identified in Table Three below.¹⁰

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| S | ubstation/Location | Construction | COST (thousands) | Justification |
|---|--------------------|--------------|---------------------|---------------|
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| | | IUIAL | \$13,000 | |

Table Three-Barrier Island Feeder Ties

¹⁰ Table Three was provided in the Direct Testimony of Michael J. Sullivan, Attachment 1, page 25, Table 7.

<u>Distribution</u> Automation: The Distribution Automation sub-program includes several components.

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| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|----------|---|--|-----------|------------------|
| | 112 - John I of R. P. | A second s | | |
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| | | | | - |
| | | | | |
| 1 | TOTAL | \$6,006 | | |

Reconductoring work involves 15.5 miles of feeders listed below:

71 Recloser Additions listed below:

9

2

| LOCATION | PROJECT DESCRIPTION (Distribution Automation) | COST (thousands) | TIMEFRAME | JUSTIFICATION |
|----------|--|---------------------|-----------|---------------|
| 1 | | | | 3 |
| - | | | | _ |
| | | | | |
| 1 | | | | |
| | | | | |
| | | | | 3 |
| | | RED | ACTED | - |
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| | | | | |