



April 30, 2019

In The Matter of the Petition of  
Public Service Electric and Gas Company  
for Approval of Electric Base Rate  
Adjustments Pursuant to the Madison 4kV Substation Project  
(M&M 2019 Rate Filing)

BPU Docket No. \_\_\_\_\_

***VIA BPU E-FILING SYSTEM & OVERNIGHT MAIL***

Aida Camacho-Welch, Secretary  
Board of Public Utilities  
44 South Clinton Avenue, 3rd Flr.  
P.O. Box 350  
Trenton, New Jersey 08625-0350

Dear Secretary Camacho-Welch:

Enclosed please find an original and two copies of Public Service Electric and Gas Company's filing in the above-referenced matter.

Please be advised that workpapers are being provided via electronic submission only.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Danielle Lopez", with a long, sweeping flourish extending upwards and to the right.

C      Attached service list (via e-mail)

**BPU**

Joe Costa  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 984-4558  
joe.costa@bpu.nj.gov

**BPU**

Henry Rich  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 341-5760  
henry.rich@bpu.nj.gov

**DAG**

Patricia A. Krogman DAG  
NJ Dept of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3441  
patricia.krogman@dol.lps.state.nj.us

**DAG**

Emma Xiao DAG  
NJ Dept of Law & Public Safety  
Division of Law  
124 Halsey Street, 2nd Floor  
Newark NJ 07101  
emma.xiao@law.njoag.gov

**PSE&G**

Bernard Smalls  
PSEG Services Corporation  
80 Park Plaza-T5  
Newark NJ 07102-4194  
(973) 430-5930  
bernard.smalls@pseg.com

**Rate Counsel**

Stefanie A. Brand  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
sbrand@rpa.state.nj.us

**BPU**

John Masiello  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08635-0350  
john.masiello@bpu.nj.gov

**BPU**

Scott Sumliner  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-4519  
scott.sumliner@bpu.nj.gov

**DAG**

Alex Moreau DAG  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3762  
Alex.Moreau@dol.lps.state.nj.us

**PSE&G**

Michele Falcao  
PSEG Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark NJ 07102  
(973) 430-6119  
michele.falcao@pseg.com

**PSE&G**

Matthew M. Weissman Esq.  
PSEG Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark NJ 07102  
(973) 430-7052  
matthew.weissman@pseg.com

**Rate Counsel**

Lisa Gurkas  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
lgurkas@rpa.state.nj.us

**BPU**

Stacy Peterson  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-4517  
stacy.peterson@bpu.nj.gov

**DAG**

Geoffrey Gersten  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3510  
geoffrey.gersten@dol.lps.state.nj.us

**DAG**

Caroline Vachier DAG  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3709  
caroline.vachier@dol.lps.state.nj.us

**PSE&G**

Danielle Lopez Esq.  
Public Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark NJ 07102  
973-430-6479  
danielle.lopez@pseg.com

**PSE&G**

Caitlyn White  
PSEG Services Corporation  
80 Park Plaza, T-5  
P.O. Box 570  
Newark NJ 07102  
(973)-430-5659  
caitlyn.white@pseg.com

**Rate Counsel**

Kurt Lewandowski Esq.  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
klewando@rpa.state.nj.us

**Rate Counsel**

Brian O. Lipman  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
blipman@rpa.nj.gov

**Rate Counsel**

Felicia Thomas-Friel  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
fthomas@rpa.nj.gov

**Rate Counsel**

Ami Morita  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
amorita@rpa.state.nj.us

**Rate Counsel**

Sarah Steindel  
Division of Rate Counsel  
140 East Front Street, 4th Flr.  
P.O. Box 003  
Trenton NJ 08625  
(609) 984-1460  
ssteinde@rpa.state.nj.us

**STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES**

IN THE MATTER OF THE PETITION OF )  
PUBLIC SERVICE ELECTRIC AND GAS )  
COMPANY FOR APPROVAL OF THE )  
MADISON & MARSHALL SUBSTATION) )  
PROJECT )

PETITION  
BPU DOCKET NO.

\_\_\_\_\_

**VERIFIED PETITION**

Public Service Electric and Gas Company (“PSE&G,” “the Company,” or “Petitioner”), a corporation of the State of New Jersey, having its principal offices at 80 Park Plaza, Newark, New Jersey, respectfully petitions the New Jersey Board of Public Utilities (“Board” or “BPU”) pursuant to *N.J.S.A. 48: 2-21*, or any other statute the Board deems applicable, as follows:

**INTRODUCTION AND OVERVIEW OF THE FILING**

1. Petitioner is a public utility engaged in the distribution of electricity and the provision of electric Basic Generation Service (“BGS”), and distribution of gas and the provision of Basic Gas Supply Service (“BGSS”), for residential, commercial and industrial customers within the State of New Jersey. PSE&G provides service to approximately 2.2 million electric and 1.8 million gas customers in an area having a population in excess of 6.2 million persons and that extends from the Hudson River opposite New York City, southwest to the Delaware River at Trenton, and south to Camden, New Jersey.

2. Petitioner is subject to Board regulation for the purposes of setting its retail distribution rates and to assure safe, adequate, and reliable electric distribution and natural gas distribution service pursuant to N.J.S.A. 48:2-21 *et seq.*

3. PSE&G is filing this Petition seeking Board approval for electric base rate changes

to provide for cost recovery of and on the Madison & Marshall (“M&M”) Substation project and associated cost recovery.

#### **BACKGROUND**

4. On February 20, 2013, Public Service petitioned the Board in BPU Docket Nos. EO13020155 and GO13020156 for approval of the Energy Strong Program (“Energy Strong” or the “Program”) for the recovery of costs to harden and make its electric and gas infrastructure more resilient.

5. The M&M Substations were initially part of the Energy Strong Flood Mitigation Subprogram, which was approved in a Board Order Approving Stipulation of Settlement dated May 21, 2014.

6. Paragraph 2 of this Energy Strong Stipulation provided that PSE&G may change the mitigation method for a station if it concludes that an alternative method would provide the same benefits to customers at a lower cost, or if permitting or other circumstances make it impossible or inappropriate to use the method specified in the engineering reports (“Engineering Reports”) submitted in the Energy Strong proceeding.

7. On December 14, 2015, PSE&G provided notice that it anticipated raising and rebuilding both the Madison and Marshall electric substations at the Madison Substation site, rather than raising and rebuilding both stations at their original sites as provided in the Engineering Reports.

8. After initially raising objection, Rate Counsel agreed that PSE&G may proceed with the project, raising and rebuilding both the Madison and Marshall electric substations at

the Madison Substation site, *See* Agreement Regarding Withdrawal of Objection, filed November 30, 2016, (“M&M Agreement,” attached hereto as Appendix A) at paragraph 5.

9. The parties also agreed that PSE&G may include the costs associated with the raise and rebuild of the Madison and Marshall substations in the filing of its Next Base Case, and that “if there is a clear likelihood that part or all of the Madison Marshall Substation project shall be in-service by the end of six months after the end of the test year in the Next Base Case, then the reasonable and prudent costs of the project shall be reflected in the rates established in that case. If part or all of the project shall be in service after the end of six months after the end of the test year in the Next Base Case, the Next Base Case shall remain open to reflect those reasonable and prudent costs in base rates at a later date. If part or all of the project is not in service one year after the end of the test year in the Next Base Rate Case, those costs will be reviewed and may be recovered, if deemed reasonable and prudent, in the base rate case after the Next Base Rate Case.” *Id.*, at paragraph 6(d).

10. This Petition is being filed in accordance with the provisions of the M&M Agreement.

11. The M&M project went into service in April 2019, more than six months after the end of the test year for the PSE&G 2018 base rate case but less than one year after the end of the test year. As a result, the 2018 base rate case has remained open, and should now reflect the revenue requirement associated with the M&M project.

12. The Energy Strong Order outlined the Minimum Filing Requirements (“MFRs”) for rate recovery petitions. Since the M&M project was initially included in Energy Strong,

the Company has included a matrix setting forth the location of each MFR in Appendix B to this Petition.

#### **REQUEST FOR COST RECOVERY**

13. PSE&G is seeking BPU approval to recover the revenue requirements associated with the M&M Substation capital investment incurred from October 1, 2014 through June 30, 2019. The annualized increase in electric revenue requirement associated with those investment costs is approximately \$7.4 million in revenue and is supported by Attachment 2, Schedule SS-M&M-2 attached hereto. The base rate revenue requirement adjustments and increase calculations have been used as the basis to increase current base rates, and include actual expenditures through March 31, 2019 and projected expenditures through June 30, 2019. The projected amounts for April 1, 2019 through June 30, 2019 will be updated with actual results by July 15, 2019.

14. Consistent with the Energy Strong recovery mechanism, PSE&G proposes the costs be rolled in to rates, including: depreciation/amortization expense providing for the recovery of the invested capital over its useful book life; return on the net investment, where net investment is the capital expenditures less accumulated depreciation/amortization, less associated accumulated deferred income taxes; and the impact of any tax adjustments applicable to the Program. The return on net investment will be based upon the Company's weighted average cost of capital ("WACC") approved by the Board in the 2018 base rate case.

15. Attachment 1 is the testimony of Edward F. Gray, PSE&G's Director of Electric Transmission & Distribution Engineering. Attachment 2 is the testimony of Stephen Swetz,

PSE&G's Senior Director Corporate Rates & Revenue Requirements supporting the revenue requirement and rate calculations.

16. The typical annual bill impacts for a typical residential customer as well as rate class average customers compared to rates as of April 1, 2019 are set forth in the testimony of Mr. Swetz. The forecasted impact on the typical residential electric customer is an increase of approximately 0.26% on an average annual bill or about a \$3.24 increase in the average annual bill.

17. Attachment 3 is a draft Form of Notice of Filing and of Public Hearings (Form of Notice). This Form of Notice will be placed in newspapers having a circulation within the Company's electric service territory upon scheduling of public hearing dates. Public hearings will be held in each geographic area within the Company's service territory, i.e., Northern, Central, and Southern. A Notice will be served on the County Executives and Clerks of all municipalities within the Company's electric service territory upon scheduling of public hearing dates.

18. Notice of this filing and two copies of the Petition, testimony, and schedules will be served upon the Department of Law and Public Safety, 124 Halsey Street, P.O. Box 45029, Newark, New Jersey 07101 and upon the Director, Division of Rate Counsel, 140 East Front Street 4th Floor, Trenton, N.J. 08625. Electronic copies of the Petition, testimony, and schedules will also be sent to the persons identified on the service list provided with this filing.

19. PSE&G requests that the Board find the proposed rates, as calculated in the proof of revenue, Attachment 2, Schedule SS-M&M-5, are just and reasonable and that PSE&G should



be authorized to implement the proposed rates as set forth herein, effective October 1, 2019 upon issuance of a written BPU order.

20. Any final rate relief found by the Board to be just and reasonable may be allocated by the Board for consistency with the provisions of N.J.S.A. 48:2-21 and for other good and legally sufficient reasons, to any class or classes of customers of the Company. Therefore, the average percentage changes in final rates may increase or decrease compared to the proposed rates based upon the Board's decision.

#### **COMMUNICATIONS**

21. Communications and correspondence related to the Petition should be sent as follows:

Matthew M. Weissman, Esq.  
General State Regulatory Counsel  
PSEG Services Corporation  
80 Park Plaza, T5  
P. O. Box 570  
Newark, New Jersey 07102  
Phone: (973) 430-7052  
[matthew.weissman@pseg.com](mailto:matthew.weissman@pseg.com)

Danielle Lopez  
Assistant General Regulatory Counsel  
PSEG Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark, New Jersey 07102  
Phone: (973) 430-6479  
[danielle.lopez@pseg.com](mailto:danielle.lopez@pseg.com)

Michele Falcao  
Regulatory Filings Supervisor  
PSEG Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark, New Jersey 07102  
Phone: (973) 430-6119  
[michele.falcao@pseg.com](mailto:michele.falcao@pseg.com)

Caitlyn White  
Regulatory Case Coordinator  
PSEG Services Corporation  
80 Park Plaza, T5  
P.O. Box 570  
Newark, New Jersey 07102  
Phone: (973) 430-5659  
[caitlyn.white@pseg.com](mailto:caitlyn.white@pseg.com)

### **CONCLUSION AND REQUESTS FOR APPROVAL**

For all the foregoing reasons, PSE&G respectfully requests that the Board issue an Order approving this Petition no later than September, 2019 and specifically finding that:

1. PSE&G is authorized to recover all costs identified herein associated with the Madison & Marshall Substation through June 30, 2019, as such costs are reflected in this Petition and accompanying materials, along with anticipated updates of data; and
2. The Madison & Marshall project as described herein is reasonable and in the public's interest;
3. The cost recovery proposal and mechanism set forth in this Petition will provide for implementation of just and reasonable rates and is approved;
4. The electric rates as calculated in the proof of revenue, Attachments 2, Schedule SS-M&M-4 to this Petition, are just and reasonable and may be implemented for service rendered on and after October 1, 2019; and
5. PSE&G may recover the Madison & Marshall Substation costs, on a full and timely basis, under the cost recovery mechanism set forth herein.

Respectfully submitted,

**PUBLIC SERVICE ELECTRIC  
AND GAS COMPANY**



---

By: Matthew M. Weissman, Esq.

DATED: April 30, 2019

STATE OF NEW JERSEY     )  
COUNTY OF ESSEX         )

I, Michael P. McFadden, of full age, being duly sworn according to law, on his oath  
deposes and says:

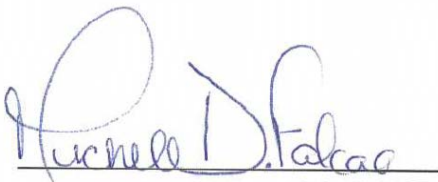

1.       I am Manager of Revenue Requirements of PSEG Services Corporation.
2.       I have read the annexed Petition, and the matters contained therein are true to the  
best of my knowledge and belief.



---

Michael P. McFadden

Sworn to and Subscribed to  
Before me this 30<sup>th</sup> day of  
April, 2019



November 30, 2016

In the Matter of the Petition of  
Public Service Electric and Gas Company  
For Approval of the Energy Strong Program  
(Madison & Marshall)  
BPU Docket Nos. EO13020155 & GO13020156

***VIA ELECTRONIC DELIVERY& OVERNIGHT MAIL***

Irene Kim Asbury, Secretary  
State of New Jersey  
Board of Public Utilities  
44 South Clinton Avenue  
P.O. Box 350  
Trenton, New Jersey 08625-0350

**Re: AGREEMENT REGARDING WITHDRAWAL OF OBJECTION**

Dear Secretary Asbury:

Enclosed for filing are ten copies of the Agreement Regarding Withdrawal of Objection. As the filing entails the withdrawal of an objection by a party, no Board action is required.

Very truly yours,

A handwritten signature in blue ink, reading "Martin C. Rothfelder".

C Attached Service List (E-mail only)

11/30/2016

Public Service Electric and Gas Company  
Energy Strong (Madison & Marshall)  
BPU Docket Nos. EO13020155 & GO13020156

Page 1 of 2

**BPU**

Mark Beyer  
Board of Public Utilities  
44 South Clinton Avenue,  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-2637  
mark.beyer@bpu.nj.gov

**BPU**

Megan Lupo  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
megan.lupo@bpu.nj.gov

**BPU**

Henry Rich  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 341-5760  
henry.rich@bpu.nj.gov

**BPU**

Scott Sumliner  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-4519  
scott.sumliner@bpu.nj.gov

**DAG**

Geoffrey Gersten  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3510  
geoffrey.gersten@dol.lps.state.nj.us

**DAG**

Caroline Vachier DAG  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3709  
caroline.vachier@dol.lps.state.nj.us

**BPU**

Joe Costa  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 984-4558  
joe.costa@bpu.nj.gov

**BPU**

John Masiello  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
john.masiello@bpu.state.nj.us

**BPU**

Bethany Rocque-Romaine Esq.  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-1496  
bethany.rocque-romaine@bpu.nj.gov

**BPU**

Thomas Walker  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
thomas.walker@bpu.nj.gov

**DAG**

Patricia A. Krogman DAG  
NJ Dept of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3441  
patricia.krogman@dol.lps.state.nj.us

**DAG**

Emma Xiao DAG  
NJ Dept of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
Emma.Xiao@dol.lps.state.nj.us

**BPU**

Son Lin Lai  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-2098  
son-lin.lai@bpu.nj.gov

**BPU**

Stacy Peterson  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 292-4517  
stacy.peterson@bpu.nj.gov

**BPU**

Robert Schultheis  
Board of Public Utilities  
44 South Clinton Avenue  
3rd Floor, Suite 314  
P.O. Box 350  
Trenton NJ 08625-0350  
(609) 984-9633  
robert.schultheis@bpu.nj.gov

**DAG**

Geoffrey Gersten  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3510  
geoffrey.gersten@dol.lps.state.nj.us

**DAG**

Alex Moreau DAG  
NJ Dept. of Law & Public Safety  
Division of Law  
124 Halsey Street, 5th Flr.  
P.O. Box 45029  
Newark NJ 07101  
(973) 648-3762  
Alex.Moreau@dol.lps.state.nj.us

11/30/2016

Public Service Electric and Gas Company  
 Energy Strong (Madison & Marshall)  
 BPU Docket Nos. EO13020155 & GO13020156

Page 2 of 2

**PSE&G**

Michele Falcao  
 PSEG Services Corporation  
 80 Park Plaza, T5  
 P.O. Box 570  
 Newark NJ 07102  
 (973) 430-6119  
 michele.falcao@pseg.com

**PSE&G**

Matthew M. Weissman Esq.  
 PSEG Services Corporation  
 80 Park Plaza, T5  
 P.O. Box 570  
 Newark NJ 07102  
 (973) 430-7052  
 matthew.weissman@pseg.com

**Rate Counsel**

Stefanie A. Brand  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 sbrand@rpa.state.nj.us

**Rate Counsel**

Brian O. Lipman  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 blipman@rpa.state.nj.us

**Rate Counsel**

Sarah Steindel  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 ssteinde@rpa.state.nj.us

**Rate Counsel Consultant**

Charles Salamone  
 Cape Power System Consulting, Inc.  
 630 Cumberland Drive  
 Flagler Beach FL 32136  
 (774) 271-0383  
 csalamone@capepowersystems.com

**PSE&G**

Connie E. Lembo  
 PSEG Services Corporation  
 80 Park Plaza, T5  
 P.O. Box 570  
 Newark NJ 07102  
 (973) 430-6273  
 constance.lembo@pseg.com

**PEGASUS-GLOBAL**

Pegasus Global Holdings, Inc.®  
 1750 Emerick Road  
 Cle Elum, WA 98922  
 p.galloway@pegasus-global.com  
 j.clark@pegasus-global.com  
 k.coe@pegasus-global.com  
 h.sobel@pegasus-global.com

**Rate Counsel**

Lisa Gurkas  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 lgurkas@rpa.state.nj.us

**Rate Counsel**

Ami Morita  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 amorita@rpa.state.nj.us

**Rate Counsel**

Felicia Thomas-Friel  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 fthomas@rpa.state.nj.us

**PSE&G**

Martin C. Rothfelder Esq.  
 PSEG Services Corporation  
 80 Park Plaza, T5  
 P.O. Box 570  
 Newark NJ 07102  
 (973) 430-6479  
 martin.rothfelder@pseg.com

**Rate Counsel**

Kurt Lewandowski Esq.  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 klewando@rpa.state.nj.us

**Rate Counsel**

Diane Schulze Esq.  
 Division of Rate Counsel  
 140 East Front Street, 4th Flr.  
 P.O. Box 003  
 Trenton NJ 08625  
 (609) 984-1460  
 dschulze@rpa.state.nj.us

**Rate Counsel Consultant**

Max Chang  
 Synapse Energy Economics, Inc.  
 485 Massachusetts Ave., Suite 2  
 Cambridge MA 02139  
 (617) 661-3248  
 mchang@synapse-energy.com

STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF  
PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY FOR APPROVAL OF THE  
ENERGY STRONG PROGRAM

BPU DOCKET NOS.  
EO13020155 & GO13020156

**AGREEMENT REGARDING WITHDRAWAL OF OBJECTION**

**APPEARANCES:**

**Martin C. Rothfelder, Esq.**, Associate General Regulatory Counsel for the Petitioner, Public Service Electric and Gas Company

**Ami Morita, Esq.**, Managing Attorney - Electric, **Brian Lipman, Esq.**, Litigation Manager, **Felicia Thomas-Friel, Esq.**, Managing Attorney – Gas, **Diane Schulze, Sarah Steindel and Kurt Lewandowski, Esq.**, Assistant Deputy Rate Counsels, New Jersey Division of Rate Counsel (Stefanie A. Brand, Director)

**Patricia Krogman, Alex Moreau, and Emma Xiao**, Deputy Attorneys General, for the Staff of the New Jersey Board of Public Utilities (Christopher S. Porrino, Attorney General of New Jersey)

The New Jersey Division of Rate Counsel (Rate Counsel), the Staff of the New Jersey Board of Public Utilities (Board Staff), and Public Service Electric and Gas Company (PSE&G), stipulate and agree as follows:

1. The PSE&G Energy Strong Program was approved in a Board “Order Approving Stipulation of Settlement” dated May 21, 2014 in BPU Docket Nos. EO13020155 and GO13020156 (Energy Strong Order) that adopted a Stipulation (Energy Strong Stipulation) among all the parties to that docket.

2. The Energy Strong Program that the Board approved involves up to \$1.22 billion of capital spending in five sub-programs, and provided for a cost recovery mechanism limited to \$1.0 billion of the program investment. Generally, the Energy Strong investments are

anticipated to be made over a three year (36-month) period, but an additional two years are provided for the Electric Station Flood Mitigation subprogram, a subprogram that was specified in the Energy Strong Stipulation as a \$620 million subprogram.

3. The Energy Strong Stipulation provided that under the Electric Station Flood Mitigation subprogram the Company would mitigate the 29 switching/substations listed in the stipulation using the method recommended by the Engineering Reports provided to the Parties in this proceeding on or about November 15, 2013.

4. Paragraph 2 of the Energy Strong Stipulation provides that PSE&G may change the mitigation method for a station if it concludes that an alternate method would provide the same benefits to customers at a lower cost, or if permitting or other circumstances make it impossible or inappropriate to use the method specified in the Engineering Reports. Any change in the mitigation method for a station will not be made without 15 days prior written and electronic notification to Board Staff (Director, Division of Energy or designee) and Rate Counsel providing them with the opportunity to object within that time period. If there is no objection by Board Staff or Rate Counsel within 15 days of receipt of the electronic notice, the Company may move forward with the change.

5. On December 14, 2015, PSE&G provided notice that it anticipates raising and rebuilding both the Madison and Marshall electric substations at the Madison Substation site, rather than raising and rebuilding both stations at their original sites as provided in the Engineering Reports. Via letter dated December 22, 2015, the Office of Rate Counsel objected to this change. Under this Agreement, Rate Counsel withdraws its objection to the December 14, 2015 noticed change in the Madison and Marshall projects.



6. Rate Counsel and PSE&G agree that PSE&G may proceed with the project, raising and rebuilding both the Madison and Marshall electric substations at the Madison Substation site, and that the following terms and conditions shall apply to that project:

- a. PSE&G shall not undertake flood mitigation of the Madison and Marshall substations through the Energy Strong program and the costs of such station shall not be placed in any Energy Strong Adjustment Mechanism (ESAM) during the balance of the Energy Strong program approved via the Board's Energy Strong Order.
- b. PSE&G will pursue the proposed raise and rebuild of the Madison and Marshall substations at the site of the Madison station.
- c. The rebuild of the Madison and Marshall sub-stations are projects that are "major in nature and consequence" as those terms are used in *In the Matter of Elizabethtown Water Company Rate Case*, Decision on Motion for Decision on Test Year and Appropriate Time Period for Adjustments, BPU Docket 8504330 (May 23, 1985).
- d. PSE&G may include the costs associated with the raise and rebuild of the Madison and Marshall substations in the filing of its Next Base Case as defined in paragraph 38 of the Energy Strong Stipulation (case to be filed no later than November 1, 2017). The issue of the prudence and reasonableness of the costs of the Madison and Marshall substation project will be determined by the Board in the Next Base Rate case, or any subsequent base rate case. If there is a clear likelihood that part or all of the Madison Marshall Substation project shall be in-service by the end of six months after the end of the test year in the Next Base Case, then the reasonable and prudent costs of the project shall be reflected in the rates established in that case. If part or all of the project shall be in service after the end of six months after the end of the test year in the Next Base Case, the Next Base Case shall remain open to reflect those reasonable and prudent costs in base rates at a later date. If the Next Base Case remains open for this purpose, PSE&G and Rate Counsel agree to support a reasonably timely resolution of that rate adjustment matter consistent with the time frames used in other infrastructure related rate adjustments. If part or all of the project is not in service one year after the end of the test year in the Next Base Rate Case, those costs will be reviewed and may be recovered , if deemed reasonable and prudent, in the base rate case after the Next Base Rate Case.
- e. PSE&G shall cooperate with the Energy Strong Monitor in its review of this project in the same manner as if it was part of the Energy Strong program, as long as the Monitor is available under identical or similar terms as in the Energy Strong program.

7. Board Staff agrees to recommend Board action in the Next Base Case, consistent with paragraph 6 but cannot and does not bind the Board to the foregoing.

8. Notwithstanding the provisions in paragraph 22 of the Energy Strong Stipulation, the funds originally allocated to the Madison and Marshall substations in the Energy Strong should be reserved for projects consistent with Energy Strong, agreed upon by PSE&G, Board Staff, and Rate Counsel, and approved by the Board prior to the commencement of construction of the project.

9. The Signatories do not anticipate any Board action on this Agreement and consider this Agreement to be binding on them.

10. It is specifically understood and agreed that this Agreement represents a negotiated agreement and, except as otherwise expressly provided for herein:

a. By executing this Agreement, no Party waives any rights it possesses under any prior Stipulation or Agreement, except where the terms of this Agreement supersede such prior Stipulation or Agreement.

b. The contents of this Agreement shall not in any way be considered, cited or used by any of the undersigned Parties as an indication of any Party's position on any related or other issue litigated in any other proceeding or forum, except to enforce the terms of this Agreement.

PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

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

BY: \_\_\_\_\_

Martin C. Rothfelder, Esq.

BY: \_\_\_\_\_

Alex Moreau  
Deputy Attorney General

DATED: \_\_\_\_\_

11/29/16

DATED: \_\_\_\_\_

7. Board Staff agrees to recommend Board action in the Next Base Case, consistent with paragraph 6 but cannot and does not bind the Board to the foregoing.

8. Notwithstanding the provisions in paragraph 22 of the Energy Strong Stipulation, the funds originally allocated to the Madison and Marshall substations in the Energy Strong should be reserved for projects consistent with Energy Strong, agreed upon by PSE&G, Board Staff, and Rate Counsel, and approved by the Board prior to the commencement of construction of the project.

9. The Signatories do not anticipate any Board action on this Agreement and consider this Agreement to be binding on them.

10. It is specifically understood and agreed that this Agreement represents a negotiated agreement and, except as otherwise expressly provided for herein:

a. By executing this Agreement, no Party waives any rights it possesses under any prior Stipulation or Agreement, except where the terms of this Agreement supersede such prior Stipulation or Agreement.

b. The contents of this Agreement shall not in any way be considered, cited or used by any of the undersigned Parties as an indication of any Party's position on any related or other issue litigated in any other proceeding or forum, except to enforce the terms of this Agreement.


PUBLIC SERVICE ELECTRIC AND GAS  
COMPANY

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

BY:

  
Martin C. Rothfelder, Esq.

BY:

  
Alex Moreau  
Deputy Attorney General

DATED:

11/29/2016

DATED:

11/29/2016

NEW JERSEY DIVISION OF RATE COUNSEL  
STEFANIE A. BRAND, DIRECTOR

BY:   
Ami Morita, Esq.  
Managing Attorney - Electric

DATED: 11/30/16

**APPENDIX B**

<b>PUBLIC SERVICE ELECTRIC AND GAS Minimum Filing Requirements – Madison &amp; Marshall (M&amp;M) Substations</b>	
<b>MINIMUM FILING REQUIREMENTS</b>	<b>LOCATION IN FILING</b>
<b>I. General Filing Requirements</b>	
1. Income Statement for the most recent 12 month period, as filed with the BPU.	Attachment 4
2. Balance Sheet for the most recent 12 month period, as filed with the BPU.	Attachment 5
3. The approved Madison & Marshall capital budget broken down by major categories, both budgeted and actual amounts.	Attachment 1, Schedule EFG-M&M-2
4. For each Madison & Marshall subprogram: a. The original project summary; b. Expenditures incurred to date. c. Appropriate metric (e.g., miles of main replaced, relays installed, etc.)	Attachment 1, Schedule EFG-M&M-2
5. Madison & Marshall timeline with updates and expected changes.	Attachment 1, Schedule EFG-M&M-2
6. Calculation of the proposed rate adjustment to Madison & Marshall projects included in Plant in Service.	Attachment 2, Schedule SS-M&M-5
7. Calculation of the associated depreciation expense, based on those projects closed to Plant in Service during the period	Attachment 2, Schedule SS-M&M-2
8. 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 Madison & Marshall projects, such as relocation, reimbursement, or stimulus money including an explanation of the financial treatment associated with the receipt of the government funds or credits.	N/A
9. Revenue requirement calculation showing the actual capital expenditures for the period for which the filing is made, as well as supporting calculations.	Attachment 2, Schedule SS-M&M-2

**STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES**

**In The Matter of the Petition of  
Public Service Electric and Gas Company  
for Approval of Electric Base Rate  
Adjustments Pursuant to the Madison 4kV Substation  
Project**

**BPU Docket No. \_\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**EDWARD F GRAY**

**DIRECTOR – TRANSMISSION AND DISTRIBUTION  
ENGINEERING**

**April 30, 2019**

1                   **PUBLIC SERVICE ELECTRIC AND GAS COMPANY**  
2                   **REBUTTAL TESTIMONY**  
3                   **OF**  
4                   **EDWARD F. GRAY**  
5           **DIRECTOR – TRANSMISSION AND DISTRIBUTION ENGINEERING**  
6                   **MADISON 4KV SUBSTATION PROJECT**  
7

8   **I.     INTRODUCTION**

9   **Q.     Please state your name and title.**

10   A.     My name is Edward F. Gray, and I am the Director of Transmission and Distribution  
11   Engineering for Public Service Electric and Gas Company (PSE&G, or the Company), the  
12   Petitioner in this matter. My credentials are set forth in the attached Attachment 1, Schedule  
13   EFG-M&M-1.

14   **Q.     What is the purpose of your testimony?**

15   A.     This testimony provides information on the status of Madison and Marshall (M&M)  
16   Substation executed outside of the Energy Strong Program as defined in the Agreement  
17   Regarding Withdrawal of Objection (Agreement) signed by Rate Counsel, the Board of Public  
18   Utilities (BPU) Staff and PSE&G dated November 30, 2016.

19                   **OVERVIEW OF MADISON 4KV PROJECT**

20   **Q.     Please describe the Madison 4kV Project.**

21   A.     On February 20, 2013, Public Service petitioned the Board in BPU Docket Nos.  
22   EO13020155 and GO13020156 for approval of the Energy Strong Program (Energy Strong or  
23   the Program) for the recovery of costs to harden and make its electric and gas infrastructure  
24   more resilient. The M&M Substations were originally part of Energy Strong and initially  
25   proposed the raising and rebuilding of both stations at their respective locations, as provided in

1 the Engineering Reports submitted in the Energy Strong proceeding. In December of 2015, the  
2 Company provided notice to the parties that it changed the mitigation method initially proposed  
3 and instead decided to consolidate the 4kV facilities for both of the M&M stations at the  
4 Madison Substation site. The parties in the Energy Strong matter entered into an Agreement in  
5 November, 2016 (the "Agreement") whereby Rate Counsel withdrew its objection to this  
6 project change and agreed that PSE&G could raise and rebuild the M&M stations at the  
7 Madison site. The scope of work includes installing a new 4kV switchgear above flood  
8 elevations at Madison Street Substation and re-routing the existing 4kV circuits from Marshall  
9 Street to this new switchgear. The project scope also includes the removal and retirement of all  
10 facilities located at the Marshall Substation. The agreement authorized that no costs for the  
11 M&M Substations would be included in Energy Strong but could be included in the PSE&G's  
12 "Next Base Rate Case," which was the Company's 2018 base rate case filed on January 12,  
13 2018 Docket Nos. ER18010029 and GR18010030. The Agreement stated any reasonable  
14 and prudent costs associated with the substations that were in service by June 30, 2019 could be  
15 put into base rates established in the Base Rate Case. The Agreement also provided that "if  
16 there is a clear likelihood that part or all of the Madison Marshall Substation project shall be in-  
17 service by the end of six months after the end of the test year in the Next Base Case, then the  
18 reasonable and prudent costs of the project shall be reflected in the rates established in that  
19 case." Pursuant to paragraph 6 d. of the agreement, "If part or all of the M&M project shall be in  
20 service after the end of six months after the end of the test year in the Next Base Case, the Next  
21 Base Case shall remain open to reflect those reasonable and prudent costs in base rates at a later  
22 date. If the Next Base Case remains open for this purpose, PSE&G and Rate Counsel agree to



1 support a reasonably timely resolution of that rate adjustment matter consistent with the time  
2 frames used in other infrastructure related rate adjustments.” Additionally, if part or all of the  
3 project is not in service one year after the end of the test year in the Next Base Rate Case, those  
4 costs will be reviewed and may be recovered, if deemed reasonable and prudent, in the base rate  
5 case after the Next Base Rate Case. Therefore, any reasonable and prudent costs associated with  
6 the project that are not in-service by June 30, 2019 would be included in PSE&G’s next base  
7 rate case. The project status, including both cost and schedule updates, have been reviewed with  
8 both Rate Counsel and BPU Staff on a quarterly basis through reports and meetings run by the  
9 Energy Strong Independent Monitor, Pegasus Global Holdings Inc. See Attachment 1, Schedule  
10 EFG-M&M-2.

11 **Q. Can you provide details on the implementation of the project to date and**  
12 **particularly the projects in service that are a part of this rate filing?**

13 A. Yes. All the 4kV substation equipment was placed into service in April 2019. All the  
14 manhole and conduit work required to carry the underground portions of the 4kV circuits was  
15 also placed in service as well. All the Madison circuits and 2 of the 12 Marshall circuits are  
16 currently being supplied by the new station equipment at Madison and the associated costs are  
17 considered “in-service” for this rate filing. The rate impacts described in this filing are only for  
18 recovery of costs associated with plant that is anticipated to be in service by June 30, 2019,  
19 including a contingency reserve as part of the forecasted figures through June 30, 2019 that will  
20 be updated with actual results in July 2019 updated filing. As such, no forecasted figures will  
21 be part of the M&M revenue requirements. However, the full removal and retirement of  
22 Marshall Street substation is expected by March 2021, expenditures of which are not included in

1 this filing. Attachment 1, Schedule EFG-M&M-2 provides the last Monitor Report detailing the  
2 status of the M&M project through December 31, 2018, including the timeline for completion  
3 and actual expenditures compared to budget. Attachment 1, Schedule EFG-M&M-3 provides  
4 the monthly cash flow for the roll-in for this program.

5 **Q. Does this complete your testimony at this time?**

6 A. Yes, it does.

**CREDENTIALS  
OF  
EDWARD F GRAY  
DIRECTOR-TRANSMISSION AND DISTRIBUTION ENGINEERING**

My name is Edward F. Gray and I am employed by Public Service Electric and Gas. I am the Director – Transmission and Distribution Engineering where I am responsible for engineering standards, reliability and maintenance programs for Electric Transmission and Distribution.

## EDUCATIONAL BACKGROUND

I graduated from Rensselaer Polytechnic Institute with a Bachelor of Science degree in Civil Engineering. I also earned a Master's in Civil Engineering from Rutgers University and a Master's in Management from New Jersey Institute of Technology. I am a Licensed Professional Engineer in the State of New Jersey.

## WORK EXPERIENCE

I have over 30 years' experience in Engineering and Asset Management at PSE&G. I have had various positions at PSE&G in Substation Engineering, System development for Electric and Gas work management, New Business Policy, Solar Interconnections, Resource Planning and Financial Management. I am presently the Director – Transmission and Distribution Engineering with oversight of electric engineering standards, reliability and maintenance programs.

**ATTACHMENT 1**  
**SCHEDULE EFG-M&M-1**  
**PAGE 2 OF 2**

1           I have been actively involved in Electric programs implemented since  
2 2009. I was the program lead for Electric Distribution for both Capital Economic  
3 Stimulus Infrastructure Investment Programs responsible for the project implementation  
4 including cost and scheduling for each sub-program. For both programs developed  
5 discovery responses and was involved in various settlement and review meetings with  
6 BPU Staff and Rate Council. I was directly involved in my current position in the  
7 development of the Energy Strong program. I was actively involved in the preparation of  
8 testimony, project estimates, discovery responses and settlement meetings during the  
9 project approval. After approval, I was directly involved with project implementation on  
10 engineering and design of projects as well as working with the Independent Monitor on  
11 various process and data requests. I was also directly involved in the development of the  
12 currently proposed Energy Strong II program. I am actively involved in the preparation  
13 of testimony, project estimates, discovery responses and settlement meetings during the  
14 project approval process.

15           In addition to these programs I have been involved with various items with  
16 Board Staff including storm cost recovery filings and the PVSC substation petition as  
17 well as other items related to Smart Growth and solar policy.

# MADISON 4kV SUBSTATION PROJECT

## INDEPENDENT MONITOR

### 2018 ANNUAL REPORT



PREPARED AND SUBMITTED BY  
PEGASUS GLOBAL HOLDINGS, INC.®  
25 MARCH 2019

INDEPENDENT MONITOR  
MADISON 4kV PROJECT – 2018 ANNUAL REPORT

## Table of Contents

I. Introduction.....	1
II. Background.....	2
III. Current Status .....	2
IV. Findings and Observations.....	4

## List of Acronyms/Abbreviations

Board of Public Utilities .....	BPU
City of Hoboken.....	City
Delivery Projects & Construction .....	DP&C
Federal Emergency Management Agency.....	FEMA
Independent Monitor .....	IM
Issued for Construction .....	IFC
Issued for Review .....	IFR
Madison 4kV Substation Project.....	Madison Project
Pegasus-Global Holdings, Inc. ....	Pegasus-Global
Public Service Electric and Gas Company .....	PSE&G
Purchase Order .....	PO
Utility Review Board .....	URB

INDEPENDENT MONITOR  
MADISON 4kV PROJECT – 2018 ANNUAL REPORT

## I. Introduction

Pegasus-Global Holdings, Inc. (Pegasus-Global) was engaged by Public Service Electric and Gas Company (PSE&G) to provide independent monitoring services for PSE&G's Energy Strong Program. Under the Stipulation approved by the May 21, 2014 Order, PSE&G was required to hire a monitor to:

*“[R]eview and report to Board Staff and Rate Counsel on the impact of the Energy Strong Program on overall system performance during severe weather events; cost effectiveness and efficiency; appropriate cost assignment; and other information deemed appropriate by the Company, Board Staff and Rate Counsel.”*

The independent monitor (IM) scope of work revolves around three primary tasks:

- 1) Review and report on the impact of the Energy Strong Program on overall system performance during severe weather events;
- 2) Review and report on cost effectiveness and efficiency; and,
- 3) Review and report on appropriate cost assignment.

In a November 30, 2016 agreement, Rate Counsel, the Board of Public Utilities (BPU) Staff, and PSE&G reached an agreement that allows PSE&G to proceed with the project of raising and rebuilding both the Madison and Marshall electric substations at the Madison Substation site outside of the Energy Strong Program. As such, going forward this project will be formally referred to as the Madison 4kV Substation Project (Madison Project<sup>1</sup>). Among other things, the agreement contains several terms and conditions, including:

- PSE&G shall not undertake flood mitigation of the Madison and Marshall substations through the Energy Strong Program but may include the costs associated with the raise and rebuild of the Madison and Marshall substations in the filing of its next base case.
- PSE&G shall cooperate with the Energy Strong Monitor, the IM, in its review of this project in the same manner as if it was part of the Energy Strong Program, as long as the Monitor is available under identical or similar terms as in the Energy Strong Program.

This IM Madison 4kV Substation Project 2018 Annual Report is intended to convey the independent monitoring activities of the IM that have taken place during 2018 on the Madison Project, with heightened focus on the fourth quarter of 2018 status and activities. To the extent information is available after December 31, 2018 through the date of this report that will assist PSE&G, BPU, Staff, and Rate Counsel it has been included herein.

---

<sup>1</sup> For the purposes of this report, the project is generally referred to as the Madison Project, which is meant explicitly as the Madison 4kV Substation Project and does not make reference to the Madison 69kV Project that PSE&G is also executing.

INDEPENDENT MONITOR  
MADISON 4kV PROJECT – 2018 ANNUAL REPORT

## II. Background<sup>2</sup>

A history of the Madison and Marshall substations can be found in prior IM reports on the Energy Strong Program.<sup>3</sup>

As of the end of 2018, there has been no change in the anticipated scope of work for the Madison Project. As previously described in the IM 2017 Second Quarter Madison Project Report,<sup>4</sup> this project will result in the installation of a new 4kV sheltered aisle switchgear at the Madison 4kV Substation that conforms to the Federal Emergency Management Agency (FEMA) flood zone advisory base flood elevation plus two feet flood mitigation as required by the City of Hoboken (City). Outside plant underground and overhead infrastructure will be constructed to transfer the Marshall Street substation load to the new Madison Street 4kV substation. The completion of this project will allow for the transfer of the load from the Marshall Street substation to the Madison Street 4kV substation while increasing the overall resiliency and reliability of the new Madison Street 4kV substation infrastructure.

The Madison Project, as with other similar substation projects within the Energy Strong Program, is being performed by the Delivery Projects & Construction (DP&C) group within PSE&G and thus is subject to the same processes and procedures DP&C uses for those types of projects, including defining the scope of the project, preparing purchase orders, developing the project's key plan and its project execution plan, issuing drawings, obtaining all required permits, starting and managing construction, and commissioning and startup.

A history of the Madison Project property evaluation, remediation, and transfer status leading up to this 2018 Annual Report can be found in prior IM reports on the Madison Project.<sup>5</sup>

## III. Current Status

**Table 1 – Madison Project Milestone Dates as of December 31, 2018** presents the milestone schedule dates of the Madison Project based on the status of the project as of the end of the of 2018.

*Table 1 – Madison Project Milestone Dates as of December 31, 2018*

Madison Project Milestone Dates			
Milestone	Original Date	Current Date	Status
Scope Locked	11/23/2016	11/23/2016	Complete
Kick-Off	3/2/2017	3/2/2017	Complete
Utility Review Board (URB) Approval for 2017	3/21/2017	3/21/2017	Complete
Issue Switchgear Purchase Order (PO)	6/1/2017	5/8/2017	Complete
Issue Capacitor Bank PO	6/1/2017	5/8/2017	Complete
Issue Remaining Major Equipment POs	6/1/2017	5/8/2017	Complete
Issue Purchase Order for Structural Steel	12/1/2017	2/12/2018	Complete

<sup>2</sup> Rate Counsel, BPU Staff, and PSE&G reached a settlement on November 30, 2016, that noted an agreement that PSE&G may proceed with the Madison Project outside the Energy Strong Program, raising and rebuilding both the Madison and Marshall electric substations at the Madison substation site, subject to certain terms and conditions.

<sup>3</sup> IM 2015 Annual Report, pages 44-48; IM 2016 First Quarter Report, pages 40-43; IM 2016 Revised Second Quarter Report, pages 45-47; IM 2016 Third Quarter Report, pages 37-38; IM 2016 Annual Report, page 46

<sup>4</sup> IM 2017 Second Quarter Madison Project Report, page 2

<sup>5</sup> See IM 2017 Second Quarter Madison Project Report, pages 2-3; IM 2017 Third Quarter Madison Project Report, pages 2-3; IM 2018 First Quarter Madison Project Report, pages 2-3; IM 2018 Second Quarter Madison Project Report, pages 2-3



INDEPENDENT MONITOR  
MADISON 4kV PROJECT – 2018 ANNUAL REPORT

Madison Project Milestone Dates			
Milestone	Original Date	Current Date	Status
Civil Construction Start	12/8/2017	4/10/2018	Complete**
Complete 70% Cost Estimate	12/29/2017	1/8/2018	Complete
Inside Plant Construction Start	1/2/2018	4/10/2018	Complete**
Major Equipment Delivery - Switchgear	2/28/2018	7/31/2018	Complete**
Major Equipment Delivery – Capacitor Banks	2/28/2018	11/1/2018	Complete**
Drawings – Final Issue for Review (IFR)	3/1/2018	5/21/2018	Complete**
Electrical Construction Start	3/1/2018	6/18/2018	Complete**
Drawings – Final Issue for Construction (IFC)	6/30/2018	6/28/2018	Complete
Inside Plant Civil Construction Substantially Complete	8/1/2018	10/26/2018	Complete**
Outside Plant Construction Complete	11/30/2018	2/1/2019	Revised – On Target**
Startup Testing and Commissioning	11/30/2018	2/1/2019	Revised – On Target**
Partial In-Service	12/31/2018	5/31/2019	Revised – On Target**
Full In-Service*	12/31/2018	3/31/2020	Revised – On Target**
<p><i>*-The new Madison 4kV Substation will be considered in service by PSE&amp;G's definition when it is energized and carrying load, scheduled for December 2018. Additional load will be added through May 2019. At that point, the additional capacity created by the completion of the Madison 69kV Project, scheduled in December 2019, will be required to transfer any further load onto the new Madison 4kV switchgear in the new Madison 4kV Substation. The final cutover from Marshall, or the Energy Strong definition of "Full In-Service", is therefore March 2020. At that point, all current loads from both the Marshall Street and Madison Street substations will be carried by the new switchgear.</i></p> <p><i>**These milestones were revised from the original contemplated date based on the land acquisition and soil remediation efforts taking longer than initially planned.<sup>6</sup></i></p>			

Activities during the fourth quarter of 2018 included setting of switchgear, feeder rows, and the capacitor bank, the completion of inside plant steel erection, and the pulling of control cables between switchgears. Two notable milestones achieved during the fourth quarter of 2018, as indicated on **Table 1**, were: 1) substantial completion of inside plant civil construction on October 26, 2018; and 2) the delivery of capacitor banks on November 1, 2018.

Work taking place early in 2019 includes commencement of startup testing and commissioning, which began on January 14, 2019, and the completion of outside plant construction that is now forecasted for completion on March 15, 2019. As shown in **Table 1**, the completion of outside plant construction was forecasted at the end of 2018 to be achieved on February 1, 2019, but additional underground duct bank pushed that milestone out to early March 2019 (with no perceived impact to the in-service dates and minimal cost impacts).

**Table 2 – Madison Project Financial Summary as of December 31, 2018** presents a summary of the financial status of the Madison Project, including total spend, current estimate, and quarterly forecast and actual costs based on the status of the project as of the end of 2018.

**Table 2 – Madison Project Financial Summary as of December 31, 2018**

Madison Project Financial Summary	
Item	Amount in Thousands
Project Spend to Date	\$47,804
2018 URB Approval	\$31,215
2018 Actual Spend	\$27,882
Q4 2018 Actuals	\$7,153

<sup>6</sup> See IM 2017 Second Quarter Madison Project Report, pages 2-3; IM 2017 Third Quarter Madison Project Report, pages 2-4; IM 2017 Fourth Quarter Madison Project Report, pages 2-4; IM 2018 First Quarter Madison Project Report, pages 2-4; IM 2018 Second Quarter Madison Project Report, pages 2-3

INDEPENDENT MONITOR  
MADISON 4kV PROJECT – 2018 ANNUAL REPORT

Q4 2018 Forecast	\$7,041		
Project Cost Estimate	<i>Base</i>	<i>Risk &amp; Contingency</i>	<i>Total</i>
	\$51,835	\$16,695	\$68,800

As identified in **Table 1**, during the fourth quarter of 2018 the actual spend on the Madison Project was approximately \$7.2 million, approximately \$0.11 million above the forecast. The fourth quarter variance was primarily the result of increased legal fees and relay tech costs on the project, which was largely offset by less underground material used than was forecasted. Total project spend as of the end of 2018 is approximately \$47.8 million, which is approximately 69% of the project's total budget.

## IV. Findings and Observations

- Following the completion of soil remediation activities earlier in 2018, the Madison Project progress continued to advance essentially largely as planned, with outside plant construction forecasted to be completed during the first quarter of 2019, leading to the start of testing and commissioning. During the fourth quarter of 2018, there was no change to the forecasted in-service dates of May 31, 2019 (partial) and March 31, 2020 (full).
- Since the Madison Project is not under the Energy Strong Program it does not have the Energy Strong Stipulation constraints with regard to cost and schedule. However, PSE&G has developed a cost estimate and a schedule that is being monitored by the IM as if they were Stipulation requirements. At this time, the IM sees no issues that would prevent the Madison Project from being completed within the revised milestone date and on budget.

**PSE&G Energy Strong Program II**  
**Electric Summary Cash Flows**

ATTACHMENT 1  
Schedule EFG-M&M-3  
Page 1 of 3

Cash Flows (\$000s)	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Program Year - 2014</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 1	\$ 4	\$ 7
COR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 1	\$ 4	\$ 7
<b>Program Year - 2015</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 4	\$ 5	\$ 6	\$ 8	\$ 14	\$ 14	\$ 5	\$ 6	\$ 9	\$ 192	\$ 166	\$ (89)	\$ 341
COR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 4	\$ 5	\$ 6	\$ 8	\$ 14	\$ 14	\$ 5	\$ 6	\$ 9	\$ 192	\$ 166	\$ (89)	\$ 341
<b>Program Year - 2016</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 16	\$ 22	\$ 28	\$ 43	\$ 33	\$ 72	\$ 10	\$ 27	\$ 16	\$ 32	\$ 7	\$ 4	\$ 311
COR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 16	\$ 22	\$ 28	\$ 43	\$ 33	\$ 72	\$ 10	\$ 27	\$ 16	\$ 32	\$ 7	\$ 4	\$ 311
<b>Program Year - 2017</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 8	\$ 6	\$ 7	\$ (359)	\$ 336	\$ 706	\$ 2,567	\$ 1,806	\$ 2,993	\$ 3,750	\$ 4,974	\$ 2,672	\$ 19,465
COR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ 2	\$ 4	\$ 9	\$ 1	\$ 16
<b>Total</b>	\$ 8	\$ 6	\$ 7	\$ (359)	\$ 336	\$ 706	\$ 2,567	\$ 1,806	\$ 2,994	\$ 3,754	\$ 4,983	\$ 2,672	\$ 19,480
<b>Program Year - 2018</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 700	\$ 2,096	\$ 1,999	\$ 3,889	\$ 2,916	\$ 1,923	\$ 4,661	\$ 3,916	\$ 2,503	\$ 2,648	\$ 2,863	\$ 1,333	\$ 31,446
COR	\$ 3	\$ 1	\$ -	\$ -	\$ 1	\$ 4	\$ 79	\$ 311	\$ 50	\$ 102	\$ 43	\$ 40	\$ 634
<b>Total</b>	\$ 703	\$ 2,096	\$ 1,999	\$ 3,889	\$ 2,917	\$ 1,927	\$ 4,740	\$ 4,227	\$ 2,553	\$ 2,750	\$ 2,906	\$ 1,373	\$ 32,080
<b>Program Year - 2019</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ 627	\$ 1,576	\$ 4,265	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,468
CWIP Spending	\$ 1,539	\$ 2,162	\$ 1,808	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,509
COR	\$ 36	\$ 13	\$ 4	\$ 18	\$ 45	\$ 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 124
<b>Total</b>	\$ 1,576	\$ 2,174	\$ 1,813	\$ 645	\$ 1,621	\$ 4,272	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,102
<b>Totals</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ 627	\$ 1,576	\$ 4,265	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,468
CWIP Spending	\$ 2,267	\$ 4,291	\$ 3,849	\$ 3,581	\$ 3,299	\$ 2,716	\$ 7,242	\$ 5,755	\$ 5,521	\$ 6,623	\$ 8,011	\$ 3,924	\$ 57,079
COR	\$ 39	\$ 13	\$ 4	\$ 18	\$ 46	\$ 12	\$ 79	\$ 311	\$ 52	\$ 106	\$ 52	\$ 40	\$ 774
<b>Total</b>	\$ 2,306	\$ 4,304	\$ 3,853	\$ 4,226	\$ 4,921	\$ 6,992	\$ 7,322	\$ 6,067	\$ 5,573	\$ 6,729	\$ 8,063	\$ 3,964	\$ 64,321

\* Land classification as CWIP Spending for presentation purposes only, not subject to AFUDC treatment offered to CWIP Projects eligible for AFUDC treatment.

**PSE&G Energy Strong Program II**  
**Electric Substation Subprogram Cash Flows**

ATTACHMENT 1  
Schedule EFG-M&M-3  
Page 2 of 3

Cash Flows (\$000s)	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Program Year - 2014</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 1	\$ 4	\$ 7
<u>COR</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ 4</b>	<b>\$ 7</b>
<b>Program Year - 2015</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 4	\$ 5	\$ 6	\$ 8	\$ 14	\$ 14	\$ 5	\$ 6	\$ 9	\$ 192	\$ 166	\$ (89)	\$ 341
<u>COR</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total</b>	<b>\$ 4</b>	<b>\$ 5</b>	<b>\$ 6</b>	<b>\$ 8</b>	<b>\$ 14</b>	<b>\$ 14</b>	<b>\$ 5</b>	<b>\$ 6</b>	<b>\$ 9</b>	<b>\$ 192</b>	<b>\$ 166</b>	<b>\$ (89)</b>	<b>\$ 341</b>
<b>Program Year - 2016</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 16	\$ 22	\$ 28	\$ 43	\$ 33	\$ 72	\$ 10	\$ 27	\$ 16	\$ 32	\$ 7	\$ 4	\$ 311
<u>COR</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total</b>	<b>\$ 16</b>	<b>\$ 22</b>	<b>\$ 28</b>	<b>\$ 43</b>	<b>\$ 33</b>	<b>\$ 72</b>	<b>\$ 10</b>	<b>\$ 27</b>	<b>\$ 16</b>	<b>\$ 32</b>	<b>\$ 7</b>	<b>\$ 4</b>	<b>\$ 311</b>
<b>Program Year - 2017</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 8	\$ 6	\$ 7	\$ (363)	\$ 329	\$ 700	\$ 2,550	\$ 1,792	\$ 2,987	\$ 3,698	\$ 4,909	\$ 2,626	\$ 19,248
<u>COR</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 0</u>	<u>\$ 2</u>	<u>\$ 4</u>	<u>\$ 9</u>	<u>\$ 1</u>	<u>\$ 16</u>
<b>Total</b>	<b>\$ 8</b>	<b>\$ 6</b>	<b>\$ 7</b>	<b>\$ (363)</b>	<b>\$ 329</b>	<b>\$ 700</b>	<b>\$ 2,550</b>	<b>\$ 1,792</b>	<b>\$ 2,989</b>	<b>\$ 3,702</b>	<b>\$ 4,918</b>	<b>\$ 2,627</b>	<b>\$ 19,264</b>
<b>Program Year - 2018</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 690	\$ 701	\$ 1,936	\$ 3,892	\$ 2,912	\$ 1,928	\$ 4,540	\$ 3,903	\$ 2,500	\$ 2,634	\$ 2,863	\$ 1,472	\$ 29,970
<u>COR</u>	<u>\$ 3</u>	<u>\$ 1</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1</u>	<u>\$ 4</u>	<u>\$ 79</u>	<u>\$ 311</u>	<u>\$ 50</u>	<u>\$ 102</u>	<u>\$ 43</u>	<u>\$ 40</u>	<u>\$ 634</u>
<b>Total</b>	<b>\$ 692</b>	<b>\$ 701</b>	<b>\$ 1,936</b>	<b>\$ 3,892</b>	<b>\$ 2,912</b>	<b>\$ 1,932</b>	<b>\$ 4,620</b>	<b>\$ 4,213</b>	<b>\$ 2,550</b>	<b>\$ 2,736</b>	<b>\$ 2,906</b>	<b>\$ 1,511</b>	<b>\$ 30,604</b>
<b>Program Year - 2019</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ 627	\$ 1,576	\$ 4,265	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,468
CWIP Spending	\$ 1,539	\$ 2,161	\$ 1,808	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,508
<u>COR</u>	<u>\$ 36</u>	<u>\$ 13</u>	<u>\$ 4</u>	<u>\$ 18</u>	<u>\$ 45</u>	<u>\$ 8</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 124</u>
<b>Total</b>	<b>\$ 1,576</b>	<b>\$ 2,174</b>	<b>\$ 1,813</b>	<b>\$ 645</b>	<b>\$ 1,621</b>	<b>\$ 4,272</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 12,101</b>
<b>Totals</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ 627	\$ 1,576	\$ 4,265	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,468
CWIP Spending	\$ 2,256	\$ 2,895	\$ 3,786	\$ 3,581	\$ 3,288	\$ 2,715	\$ 7,105	\$ 5,728	\$ 5,513	\$ 6,556	\$ 7,947	\$ 4,017	\$ 55,386
<u>COR</u>	<u>\$ 39</u>	<u>\$ 13</u>	<u>\$ 4</u>	<u>\$ 18</u>	<u>\$ 46</u>	<u>\$ 12</u>	<u>\$ 79</u>	<u>\$ 311</u>	<u>\$ 52</u>	<u>\$ 106</u>	<u>\$ 52</u>	<u>\$ 40</u>	<u>\$ 774</u>
<b>Total</b>	<b>\$ 2,295</b>	<b>\$ 2,908</b>	<b>\$ 3,790</b>	<b>\$ 4,226</b>	<b>\$ 4,910</b>	<b>\$ 6,991</b>	<b>\$ 7,184</b>	<b>\$ 6,040</b>	<b>\$ 5,565</b>	<b>\$ 6,663</b>	<b>\$ 7,999</b>	<b>\$ 4,057</b>	<b>\$ 62,627</b>

**PSE&G Energy Strong Program II**  
**Electric Substation Subprogram Cash Flows**

ATTACHMENT 1  
Schedule EFG-M&M-3  
Page 3 of 3

Cash Flows (\$000s)	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Program Year - 2014</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Program Year - 2015</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Program Year - 2016</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Program Year - 2017</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ -	\$ -	\$ -	\$ 4	\$ 7	\$ 6	\$ 17	\$ 14	\$ 5	\$ 52	\$ 65	\$ 46	\$ 217
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ 4	\$ 7	\$ 6	\$ 17	\$ 14	\$ 5	\$ 52	\$ 65	\$ 46	\$ 217
<b>Program Year - 2018</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 11	\$ 1,395	\$ 63	\$ (4)	\$ 4	\$ (5)	\$ 120	\$ 13	\$ 3	\$ 14	\$ -	\$ (139)	\$ 1,476
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 11	\$ 1,395	\$ 63	\$ (4)	\$ 4	\$ (5)	\$ 120	\$ 13	\$ 3	\$ 14	\$ -	\$ (139)	\$ 1,476
<b>Program Year - 2019</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 0	\$ 1	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 0	\$ 1	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1
<b>Totals</b>													
Direct In-Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWIP Spending	\$ 11	\$ 1,396	\$ 63	\$ 0	\$ 11	\$ 1	\$ 138	\$ 27	\$ 8	\$ 66	\$ 65	\$ (93)	\$ 1,693
<u>COR</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 11	\$ 1,396	\$ 63	\$ 0	\$ 11	\$ 1	\$ 138	\$ 27	\$ 8	\$ 66	\$ 65	\$ (93)	\$ 1,693

\* Land classification as CWIP Spending for presentation purposes only, not subject to AFUDC treatment offered to CWIP Projects eligible for AFUDC treatment.

**STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES**

**In The Matter of the Petition of  
Public Service Electric and Gas Company  
for Approval of Electric Base Rate  
Adjustments Pursuant to the Madison 4kV Substation  
Project**

**BPU Docket No. \_\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**STEPHEN SWETZ**

**SR. DIRECTOR – CORPORATE RATES  
AND REVENUE REQUIREMENTS**

**April 30, 2019**

1                   **PUBLIC SERVICE ELECTRIC AND GAS COMPANY**  
2                   **DIRECT TESTIMONY**  
3                   **OF**  
4                   **STEPHEN SWETZ**  
5                   **SENIOR DIRECTOR – CORPORATE RATES AND REVENUE REQUIREMENTS**

6   **Q.     Please state your name, affiliation and business address.**

7   A.     My name is Stephen Swetz, and I am the Senior Director – Corporate Rates and  
8   Revenue Requirements for PSEG Services Corporation. My principal place of business is 80  
9   Park Plaza, Newark, New Jersey 07102. My credentials are set forth in the attached  
10   Attachment 2, Schedule SS-M&M-1.

11   **Q.     Please describe your responsibilities as the Senior Director – Corporate Rates**  
12   **and Revenue Requirements for PSEG Services Corporation.**

13   A.     As Senior Director - Corporate Rates and Revenue Requirements, my primary duties  
14   are to plan, develop and direct Public Service Electric and Gas Company's (PSE&G or the  
15   Company) calculation of electric and gas revenue requirements for the Company's base rates  
16   as well as those for all cost recovery clauses. I also direct the retail pricing strategies, retail  
17   rate design, embedded and marginal cost studies, and development and interpretation of tariff  
18   provisions.

19   **Q.     What is the purpose of your direct testimony in this proceeding?**

20   A.     My testimony provides details of the calculation for the revenue requirement  
21   associated with the Madison and Marshall (M&M) Substation, the associated cost recovery  
22   methodology, and rate design for the M&M Petition filed with the New Jersey Board of  
23   Public Utilities (BPU or the Board). This testimony also provides detailed schedules setting

## ATTACHMENT 2

1    forth the projected revenue requirement, rates and bill impacts associated with the M&M  
2    capital investment in the M&M substation expected to be incurred through June 30, 2019.

3    **Q.     Please briefly discuss the genesis of the M&M cost recovery filing.**

4    A.     The filing reflects PSE&G's recovery of and on the Madison and Marshall Substation  
5    capital investment that was incurred from October 1, 2014 through June 30, 2019. The  
6    substations were initially part of the Energy Strong Program (ES Program) approved by the  
7    Board in Docket Nos. EO13020155 & GO13020156 on May 21, 2014. However, due to a  
8    scope change related to the raise and rebuild of the M&M Substations, the investments were  
9    to be recovered outside of ES Program.

10        This filing is being made pursuant to the Agreement Regarding Withdrawal of  
11    Objection (Agreement), dated November 30, 2016. As stated on paragraph 6d of the  
12    Agreement, "If part or all of the M&M project shall be in service after the end of six months  
13    after the end of the test year in the Next Base Case, the Next Base Case shall remain open to  
14    reflect those reasonable and prudent costs in base rates at a later date. If the Next Base Case  
15    remains open for this purpose, PSE&G and Rate Counsel agree to support a reasonably  
16    timely resolution of that rate adjustment matter consistent with the time frames used in other  
17    infrastructure related rate adjustments." The M&M project was transferred into service in  
18    April 2019, more than six months after the end of the Company's 2018 base rate case test  
19    year but less than one year after the test year.



## ATTACHMENT 2

1 **Q. Please briefly describe PSE&G's proposed M&M cost recovery methodology.**

2 A. PSE&G's cost recovery proposal for the M&M Substations is consistent with the  
3 cost recovery mechanism for the electric portion of ES. The details of the costs to be  
4 recovered, as well as the mechanism to recover such costs, are set forth in this testimony.

5 **Q. How does PSE&G propose to calculate the revenue requirements?**

6 A. PSE&G proposes to calculate the revenue requirements associated with the M&M  
7 Substations costs using the following formula:

8 
$$\text{Revenue Requirements} = ((\text{After Tax Cost of Capital} * \text{Rate Base}) + \text{Net of}$$
  
9 
$$\text{Tax Amortization and/or Depreciation} + \text{Tax Adjustment}) * \text{Revenue Factor}$$

10 This calculation is the same as the revenue requirements calculation in PSE&G's ES  
11 Program. Given the M&M project is in-service and substantially complete, the Company is  
12 proposing to recover the revenue requirements through this rate adjustment filing as further  
13 described below.

14 **Q. Please describe the components and defined terms in PSE&G's proposed**  
15 **revenue requirement calculation.**

16 A. The following is a description of each term proposed in PSE&G's revenue  
17 requirement calculation.

18 The term "Cost of Capital" is the weighted average cost of capital (WACC) for the  
19 M&M Substations. Per the ES Order, the WACC for the Energy Strong Rate Adjustment  
20 Mechanisms (ESAMs) was 7.24%, or 6.32% on an after-tax basis, which is based on a  
21 Return on Equity of 9.75% and a cost of debt of 4.60%. As a result of the Tax Cuts and Jobs  
22 Act and the approval of the Company's 2018 base rate case, the WACC proposed for the

## ATTACHMENT 2

1 M&M Substations rate adjustment is 6.99%, or 6.48% on an after-tax basis, which is based  
2 on a Return on Equity of 9.60% and a cost of debt of 3.96%. Attachment 2, Schedule SS-  
3 M&M-3 shows the calculation of the current After-Tax WACC utilized in the revenue  
4 requirement calculation.

5 The term “Rate Base” refers to Gross Plant less the associated accumulated  
6 depreciation and/or amortization and less Accumulated Deferred Income Taxes (ADIT).  
7 Gross Plant is equal to all Plant In-Service, Construction Work in Progress (CWIP) that is  
8 transferred into Service, property acquisition, and Allowance of Funds Used during  
9 Construction (AFUDC) – both debt and equity components. Gross Plant also includes the  
10 land purchase required to upgrade the Madison station.

11 The book recovery of the M&M Substations will be based on the Board approved  
12 depreciation rates in effect as a result from PSE&G’s 2018 Base Rate Case proceeding. The  
13 only asset classes associated with the M&M Substations are Station Equipment and Land.  
14 Station Equipment is depreciated at a rate of 2.05% while land is not depreciated.

15 ADIT is calculated as Book Depreciation (Tax Basis) less Tax Depreciation,  
16 multiplied by the Company’s effective corporate tax rate, which is currently 28.11%. The  
17 Station Equipment is depreciated for tax purposes over the 20 year Modified Accelerated  
18 Cost Recovery System (MARCS). Cost of Removal expenditures are fully depreciated (i.e.  
19 100%) in the year incurred for tax purposes. The “Net of Tax Depreciation and/or  
20 Amortization” allows for recovery of the Company’s investment in the substation assets over  
21 its useful book life. PSE&G proposes to depreciate the M&M substations in accordance with  
22 the Company’s BPU approved depreciation rates. As the M&M Substations are CWIP

## ATTACHMENT 2

1 projects that accrue AFUDC because they are not yet in service, there is no tax deduction for  
2 the equity portion of the capitalized AFUDC. As a result, the net of tax depreciation expense  
3 is calculated at the depreciation expense associated with the Gross Plant (defined above),  
4 excluding the equity portion of AFUDC, multiplied by one minus the current tax rate. Since  
5 the equity portion of AFUDC will not be included in the tax basis of the Program assets, the  
6 equity portion must be grossed-up for taxes in order for the Company to earn its allowed rate  
7 of return.

8 The term “Tax Adjustment” refers to any applicable tax items that may impact the  
9 revenue requirement calculation for the Program. For the M&M Substations, like that of the  
10 ES Program, the tax adjustment forecasted for the program includes the flow through of cost  
11 of removal expenditures on pre-1981 assets. The tax expense for electric cost of removal  
12 expenditures associated with pre-1981 assets are currently flowed through to ratepayers over  
13 a five year amortization period rather than normalized over the life of the asset as is the tax  
14 treatment for post-1981 electric cost of removal expenditures. The tax flow-through  
15 methodology for pre-1981 electric cost of removal expenditures is applied to M&M  
16 Substation’s cost of removal expenditures on pre-1981 assets to be consistent with the  
17 treatment of base rate assets. The Tax Adjustment for the M&M revenue requirement is  
18 calculated as the Cost of Removal expenditures multiplied by the percentage of electric pre-  
19 1981 asset retirements for the year and divided by five for the five-year amortization period.  
20 For forecasting purposes, the percentage of electric assets with a vintage before 1981 is  
21 estimated at 11.36%, which is based on 2018 retirements.

## ATTACHMENT 2

1           The “Revenue Factor” adjusts the Revenue Requirement Net of Tax for federal and  
2 state income taxes and the BPU and Rate Counsel (RC) Annual Assessments Fees. The  
3 BPU/RC Assessment Expenses consist of payments, based upon a percentage of revenues  
4 collected (updated annually), to the State based on PSE&G’s electric operating revenue. The  
5 Company has utilized the respective BPU and RC assessment rates based on the 2019 fiscal  
6 year assessment.

7   **Q.     Please describe the type of expenditures to be included in Net Rate Base.**

8   A.     The M&M filing includes requests for recovery in base rates of all capital  
9 expenditures associated with the M&M substations, including actual costs of engineering,  
10 design and construction, cost of removal (net of salvage) and property acquisition costs,  
11 actual labor, materials, overhead, and capitalized AFUDC associated with the projects (the  
12 “Capital Investment Costs”). Capital Investment Costs were recorded, during construction,  
13 in an associated CWIP account upon the respective project being deemed used and useful.

14   **Q.     Were the M&M expenditures eligible for AFUDC?**

15   A.     Yes, as most of the capital investments meet the Company’s criteria for accrual of  
16 AFUDC, those capital investments were AFUDC eligible. AFUDC is a component of  
17 construction costs representing the net cost of borrowed funds and an equity return rate used  
18 during the period of construction. Under the Company’s current policy, only projects that  
19 have both costs exceeding \$5,000 and a construction period longer than 60 days are eligible  
20 for accruing AFUDC.

## ATTACHMENT 2

1       The property procurement under this Program is not eligible to accrue AFUDC  
2 because AFUDC is a component of construction costs. However, the vast majority of  
3 M&M's projects required more than 60 days of construction and therefore accrued AFUDC.

4       **Q.     How was AFUDC calculated on eligible projects?**

5       A.     The Company accrues AFUDC on eligible projects at a rate that is calculated utilizing  
6 the "full FERC method" as set forth in FERC Order 561. AFUDC is accrued monthly and  
7 added to CWIP until the project is placed into service<sup>1</sup>.

8       **Q.     Will the Company utilize AFUDC once the projects are placed into service?**

9       A.     No, PSE&G does not accrue any additional AFUDC on projects once they are placed  
10 into service.

11       **Q.     What is the source of the capital expenditures you use to calculate the revenue**  
12 **requirement?**

13       A.     The monthly cash flow for the substations was provided by Mr. Edward Gray. See  
14 Attachment 1, Schedule EFG-M&M-3.

15       **Q.     Is there a schedule showing the calculation of the revenue requirements?**

16       A.     Yes. See Attachment 2, Schedule SS-M&M-2 for the calculation of the M&M  
17 Substations revenue requirement based on actual investment through March 31, 2019 and  
18 forecasted investment from April 1, 2019 through June 30, 2019 as shown in Attachment 1,  
19 Schedule EFG-M&M-3.

---

<sup>1</sup> Construction Work in Progress (CWIP) is an account into which the costs are recorded that are directly associated with constructing an asset which is not yet in-service.

## ATTACHMENT 2

1 **Q. What is the electric revenue requirement for the rate adjustment?**

2 A. The electric revenue requirement for the base rate adjustment is expected to be for  
3 plant in-service from Board approval through June 30, 2019, and is currently forecasted to be  
4 \$7.4 million. See Attachment 2, Schedule SS-M&M-2.

5 **Q. What rate design is the Company proposing to use for this base rate**  
6 **adjustment?**

7 A. The detailed calculations supporting the electric rate design for the forecasted base  
8 rate adjustment is shown in Attachment 2, Schedule SS-M&M-5. The rate design for the base  
9 rate adjustments shall use the rate design methodology and billing determinants approved by  
10 the Board in PSE&G's 2018 base rate case. The rates as a result of the base rate adjustment  
11 are shown in Attachment 2, Schedule SS-M&M-5.

12 **Q. What are the annual rate impacts to the typical residential customer?**

13 A. Based upon the forecasted rates shown in Attachment 2, Schedule SS-M&M-5, the  
14 typical annual bill impacts for a typical residential customer as well as rate class average  
15 customers compared to rates as of April 18, 2019 are set forth in Attachment 2, Schedule SS-  
16 M&M-6.<sup>2</sup> Based on the estimated base rate adjustment revenue requirement provided in  
17 Attachment 2, Schedule SS-M&M-2, the annual impact of the proposed rates to the typical  
18 residential electric customer who uses 740 kWh in a summer month and 6,920 kWh annually  
19 is an increase of \$3.24 or approximately 0.26%.

---

<sup>2</sup>The bill impacts assume that customers receive commodity service from PSE&G under the applicable Basic Generation Service (BGS).

## ATTACHMENT 2

1   **Q.     Will the Company hold public comment hearings?**

2   A.     Yes. A proposed form of public notice of filing and public hearings, including the  
3   forecasted rates and bill impacts attributable to the proposed implementation of the Program  
4   are set forth in Attachment 3 to the Petition.

5   **Q.     Does this conclude your testimony?**

6   A.     Yes, it does.

## **ATTACHMENT 2**

### **SCHEDULE INDEX**

Attachment 2, Schedule SS-M&M-1	Credentials of Stephen Swetz
Attachment 2, Schedule SS-M&M-2	Revenue Requirements Calculation
Attachment 2, Schedule SS-M&M-3	Weighted Average Cost of Capital (WACC)
Attachment 2, Schedule SS-M&M-4	Revenue Factor Calculation
Attachment 2, Schedule SS-M&M-5	Proof of Revenue
Attachment 2, Schedule SS-M&M-6	Bill Impacts



1                                   **CREDENTIALS**  
2                                   **OF**  
3                                   **STEPHEN SWETZ**  
4           **SR. DIRECTOR-CORPORATE RATES AND REVENUE REQUIREMENTS**  
5

6                   My name is Stephen Swetz and I am employed by PSEG Services  
7 Corporation. I am the Sr. Director - Corporate Rates and Revenue Requirements where  
8 my main responsibility is to contribute to the development and implementation of electric  
9 and gas rates for Public Service Electric and Gas Company (PSE&G, the Company).

10   **WORK EXPERIENCE**

11                   I have over 30 years of experience in Rates, Financial Analysis and  
12 Operations for three Fortune 500 companies. Since 1991, I have worked in various  
13 positions within PSEG. I have spent most of my career contributing to the development  
14 and implementation of PSE&G electric and gas rates, revenue requirements, pricing and  
15 corporate planning with over 20 years of direct experience in Northeastern retail and  
16 wholesale electric and gas markets.

17                   As Sr. Director of the Corporate Rates and Revenue Requirements  
18 department, I have submitted pre-filed direct cost recovery testimony as well as oral  
19 testimony to the New Jersey Board of Public Utilities and the New Jersey Office of  
20 Administrative Law for base rate cases, as well as a number of clauses including  
21 infrastructure investments, renewable energy, and energy efficiency programs. A list of  
22 my prior testimonies can be found on pages 3 and 4 of this document. I have also

1 contributed to other filings including unbundling electric rates and Off-Tariff Rate  
2 Agreements. I have had a leadership role in various economic analyses, asset valuations,  
3 rate design, pricing efforts and cost of service studies.

4 I am an active member of the American Gas Association's Rate and  
5 Strategic Issues Committee, the Edison Electric Institute's Rates and Regulatory Affairs  
6 Committee and the New Jersey Utility Association (NJUA) Finance and Regulatory  
7 Committee.

8 **EDUCATIONAL BACKGROUND**

9 I hold a B.S. in Mechanical Engineering from Worcester Polytechnic  
10 Institute and an MBA from Fairleigh Dickinson University.

# LIST OF PRIOR TESTIMONIES

## ATTACHMENT 2

SCHEDULE SS-M&M-1

PAGE 3 OF 4

Company	Utility	Docket	Testimony	Date	Case / Topic
Public Service Electric & Gas Company	G	GR19040522	written	Apr-19	Gas System Modernization Program (GSMP) - Final Roll-In
Public Service Electric & Gas Company	E	ER19040523	written	Apr-19	Gas System Modernization Program (GSMP) - Final Roll-In
Public Service Electric & Gas Company	E/G	EO18101113 - GO18101112	written	Dec-18	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR18121258	written	Nov-18	Clean Energy Future - Energy Efficiency Program Approval
Public Service Electric & Gas Company	G	GR18070831	written	Jul-18	Remediation Adjustment Charge-RAC 26
Public Service Electric & Gas Company	E/G	ER18070688 - GR18070689	written	Jun-18	Gas System Modernization Program (GSMP) - Third Roll-In
Public Service Electric & Gas Company	E	ER18060681	written	Jun-18	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR18060675	written	Jun-18	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO18060629 - GO18060630	written	Jun-18	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	G	GR18060605	written	Jun-18	Energy Strong II / Revenue Requirements & Rate Design
Public Service Electric & Gas Company	E/G	ER18040358 - GR18040359	written	Mar-18	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER18030231	written	Mar-18	Energy Strong / Revenue Requirements & Rate Design - Eighth Roll-in
Public Service Electric & Gas Company	E/G	GR18020093	written	Feb-18	Tax Cuts and Job Acts of 2017
Public Service Electric & Gas Company	E/G	ER18010029 and GR18010030	written	Jan-18	Remediation Adjustment Charge-RAC 25
Public Service Electric & Gas Company	E	ER17101027	written	Sep-17	Base Rate Proceeding / Cost of Service & Rate Design
Public Service Electric & Gas Company	G	GR17070776	written	Jul-17	Energy Strong / Revenue Requirements & Rate Design - Seventh Roll-in
Public Service Electric & Gas Company	G	GR17070775	written	Jul-17	Gas System Modernization Program II (GSMP II)
Public Service Electric & Gas Company	G	GR17060720	written	Jul-17	Gas System Modernization Program (GSMP) - Second Roll-In
Public Service Electric & Gas Company	E/G	ER17070724 - GR17070725	written	Jul-17	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E	ER17070723	written	Jul-17	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR17060593	written	Jun-17	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER17030324 - GR17030325	written	Mar-17	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO14080897	written	Mar-17	Energy Strong / Revenue Requirements & Rate Design - Sixth Roll-in
Public Service Electric & Gas Company	E	ER17020136	written	Feb-17	Energy Efficiency 2017 Program
Public Service Electric & Gas Company	E/G	GR16111064	written	Nov-16	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E	ER16090918	written	Sep-16	Remediation Adjustment Charge-RAC 24
Public Service Electric & Gas Company	E	EO16080788	written	Aug-16	Energy Strong / Revenue Requirements & Rate Design - Fifth Roll-in
Public Service Electric & Gas Company	E	ER16080785	written	Aug-16	Construction of Mason St Substation
Public Service Electric & Gas Company	G	GR16070711	written	Jul-16	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	G	GR16070617	written	Jul-16	Gas System Modernization Program (GSMP) - First Roll-In
Public Service Electric & Gas Company	E/G	ER16070613 - GR16070614	written	Jul-16	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E	ER16070616	written	Jul-16	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR16060484	written	Jun-16	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E	EO16050412	written	May-16	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER16030272 - GR16030273	written	Mar-16	Solar 4 All Extension II (S4AllExt II) / Revenue Requirements & Rate Design
Public Service Electric & Gas Company	E/G	GR15111294	written	Nov-15	Energy Strong / Revenue Requirements & Rate Design - Fourth Roll-in
Public Service Electric & Gas Company	E	ER15101180	written	Sep-15	Remediation Adjustment Charge-RAC 23
Public Service Electric & Gas Company	E/G	ER15070757-GR15070758	written	Jul-15	Energy Strong / Revenue Requirements & Rate Design - Third Roll-in
Public Service Electric & Gas Company	E	ER15060754	written	Jul-15	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR15060748	written	Jul-15	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR15060646	written	Jun-15	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	ER15050558	written	May-15	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E	ER15050558	written	May-15	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER15030389-GR15030390	written	Mar-15	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	G	GR15030272	written	Feb-15	Energy Strong / Revenue Requirements & Rate Design - Second Roll-in
Public Service Electric & Gas Company	E/G	GR14121411	written	Dec-14	Gas System Modernization Program (GSMP)
Public Service Electric & Gas Company	E/G	ER14091074	written	Sep-14	Remediation Adjustment Charge-RAC 22
Public Service Electric & Gas Company	E/G	EO14080897	written	Aug-14	Energy Strong / Revenue Requirements & Rate Design - First Roll-in
Public Service Electric & Gas Company	G	ER14070656	written	Jul-14	EEE Ext II
Public Service Electric & Gas Company	E/G	ER14070651-GR14070652	written	Jul-14	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E	ER14070650	written	Jul-14	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR14050511	written	May-14	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR14040375	written	Apr-14	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER13070603-GR13070604	written	Jun-13	Remediation Adjustment Charge-RAC 21
Public Service Electric & Gas Company	E	ER13070605	written	Jul-13	Green Programs Recovery Charge (GPRC)-Including DR, EEE, EEE Ext, CA, S4All, SLII / Cost Recovery
Public Service Electric & Gas Company	G	GR13070615	written	Jun-13	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR13060445	written	May-13	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	EO13020155-GO13020156	written/oral	Mar-13	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	G	GO12030188	written/oral	Mar-13	Energy Strong / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	ER12070599	written	Jul-12	Appliance Service / Tariff Support
Public Service Electric & Gas Company	E/G	ER12070606-GR12070605	written	Jul-12	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery

## LIST OF PRIOR TESTIMONIES

SCHEDULE SS-M&amp;M-1

PAGE 4 OF 4

Company	Utility	Docket	Testimony	Date	
Public Service Electric & Gas Company	E	EO12080721	written/oral	Jul-12	RGGI Recovery Charges (RRC)-Including DR, EEE, EEE Ext, CA, \$4All, SLII / Cost Recovery
Public Service Electric & Gas Company	E	EO12080721	written/oral	Jul-12	Solar Loan III (SLIII) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	G	GR12060489	written	Jun-12	Solar 4 All Extension(\$4Allext) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	G	GR12060583	written	Jun-12	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER12030207	written	Mar-12	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E	ER12030207	written	Mar-12	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	G	GR11060338	written	Jun-11	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	G	GR11060395	written	Jun-11	Margin Adjustment Charge (MAC) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO11010030	written	Jan-11	Weather Normalization Charge / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	ER10100737	written	Oct-10	Economic Energy Efficiency Extension (EEEExt) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	ER10080550	written	Aug-10	RGGI Recovery Charges (RRC)-Including DR, EEE, CA, \$4All, SLII / Cost Recovery
Public Service Electric & Gas Company	E	ER10080550	written	Aug-10	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR09050422	written/oral	Mar-10	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E	ER10030220	written	Mar-10	Base Rate Proceeding / Cost of Service & Rate Design
Public Service Electric & Gas Company	E	EO09030249	written	Mar-09	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO09010056	written	Feb-09	Solar Loan II(SLII) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO09020125	written	Feb-09	Economic Energy Efficiency(EEE) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO08080544	written	Aug-08	Solar 4 All (\$4All) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	ER10100737	written	Jun-08	Demand Response (DR) / Revenue Requirements & Rate Design - Program Approval

**Marshall & Madison - Electric Substations**  
**Electric Roll-in**  
**Roll-in Filing**  
in (\$000)

Schedule SS-M&M-2

**Rate Effective Date** 10/1/2019  
Plant In Service as of Date 6/30/2019  
Rate Base Balance as of Date 9/30/2019

**RATE BASE CALCULATION**

	<b>Total</b>	<b>Notes</b>
1 Gross Plant	\$67,276	= ln 16
2 Accumulated Depreciation	\$172	= ln 19
3 Net Plant	\$67,448	= ln 1 + ln 2
4 Accumulated Deferred Taxes	-\$493	= See "Dep-" Wkps Row 616
5 Rate Base	\$66,955	= ln 3 + ln 4
6 Rate of Return - After Tax (Schedule WACC)	6.48%	See Schedule SS-M&M-3
7 Return Requirement (After Tax)	\$4,340	= ln 5 * ln 6
8 Depreciation Exp, net	\$986	= ln 25
9 Tax Adjustment	-\$4	= ln 32
10 Revenue Factor	1.395	See Schedule SS-M&M-4
<b>11 Roll-in Revenue Requirement</b>	<b>\$7,424</b>	= (ln 7 + ln 8 + ln 9) * ln 10

**SUPPORT**

**Gross Plant**

12 Plant in-service	\$6,468	= See "Dep-" Wkps Row 594
13 CWIP Transferred into Service	\$55,386	= See "Dep-" Wkps Row 595
14 Land	\$1,693	= Input Tab Row 180
15 AFUDC on CWIP Transferred Into Service - Debt	\$1,176	= See "Dep-" Wkps Row 596
16 AFUDC on CWIP Transferred Into Service - Equity	\$2,553	= See "Dep-" Wkps Row 597
<b>17 Total Gross Plant</b>	<b>\$67,276</b>	= ln 12 + ln 13 + ln 14 + ln 15 + ln 16

**Accumulated Depreciation**

18 Accumulated Depreciation	-\$602	= See "Dep-" Wkps Row 603
19 Cost of Removal	\$774	= See "Dep-" Wkps Row 598
<b>20 Net Accumulated Depreciation</b>	<b>\$172</b>	= ln 18 + ln 19

**Depreciation Expense (Net of Tax)**

21 Depreciable Plant (xAFUDC-E)	\$63,029	= ln 12 + ln 13 + ln 15
22 AFUDC-E	\$2,553	= ln 16
23 Depreciation Rate	2.06%	= See "Dep-" Wkps Row 598
24 Depreciation Expense	\$1,351	= (ln 21 + ln 22) * ln 23
25 Tax @ 28.11%	\$365	= ln 21 * ln 23 * Tax Rate
<b>26 Depreciation Expense (Net of Tax)</b>	<b>\$986</b>	= ln 24 - ln 25

**Marshall & Madison - Electric Substations**  
**Weighted Average Cost of Capital (WACC)**

Schedule SS-M&M-3

	<b><u>Percent</u></b>	<b><u>Embedded Cost</u></b>	<b><u>Weighted Cost</u></b>	<b><u>Pre-Tax Weighted Cost</u></b>	<b><u>After Tax Weighted Cost</u></b>
Common Equity	54.00%	9.60%	5.18%	7.21%	5.18%
Customer Deposits	0.47%	0.87%	0.00%	0.00%	0.00%
Other Capital	<u>45.53%</u>	3.96%	<u>1.80%</u>	<u>1.80%</u>	<u>1.30%</u>
Total	100.00%		<u><u>6.99%</u></u>	<u><u>9.02%</u></u>	<u><u>6.48%</u></u>
Federal Income Tax	21.00%				
State NJ Business Incm Tax	<u>9.00%</u>				
Tax Rate	28.11%				

**Marshall & Madison - Electric Substations**  
**Revenue Factor Calculation**

Schedule SS-M&M-4

	<b><u>ELECTRIC</u></b>	<b><u>GAS</u></b>	
Revenue Increase	100.0000	100.0000	
Uncollectible Rate		1.6000	From 2018 Base Rate Case
BPU Assessment Rate	0.2311	0.2311	2019 BPU Assessment
Rate Counsel Assessment Rate	<u>0.0553</u>	<u>0.0553</u>	2019 RC Assessment
Income before State of NJ Bus. Tax	99.7136	98.1136	
State of NJ Bus. Income Tax @ 9.00%	<u>8.9742</u>	<u>8.8302</u>	
Income Before Federal Income Taxes	90.7394	89.2834	
Federal Income Taxes @ 21%	<u>19.0553</u>	<u>18.7495</u>	
Return	<u>71.6841</u>	<u>70.5339</u>	
Revenue Factor	<u><b>1.3950</b></u>	<u><b>1.4178</b></u>	

### **Electric Revenue Requirement Allocation Explanation of Format**

Pages 2 through 5 presented in Schedule SS-M&M-5 are the four relevant pages from the complete cost of service and revenue requirement allocation methodology based on the 2018 Base Rate Case Settlement, approved by the Board on October 29, 2018. Page 2 Part 1 shows the “Final” revenue requirement allocation to each rates class and its associated functions as defined in the 2018 PSE&G Base Rate Case (Rate Case). Part 2 allocates the Madison & Marshall Revenue Increase in accordance with the Rate Case Board Order. Pages 3 and 4 provide the interclass revenue allocations based upon the rate rules approved in the Rate Case. Page 5 provides the service charge calculations for each rate class by which are calculated in accordance with the Rate Case Board Order.

### **Electric Rate Design (Proof of Revenue by Rate Class) Explanation of Format**

The summary provides by rate schedule, the Annualized Weather Normalized (all customers assumed to be on BGS) revenue based on current tariff rates and the proposed rate change.

The pages presented in Schedule SS-M&M-5 are the selected applicable columns of the relevant pages from the complete rate change workpapers from the Company's 2018 Electric Base Rate Case and have been appropriately modified per my testimony to reflect the Madison & Marshall Substation projects.

### **Annualized Weather Normalized (all customers assumed to be on BGS) and the Proposed Detailed Rate Design.**

In the detailed rate design pages, all the components are separated into Delivery and Supply. In addition to the Distribution components of Delivery, also included in the schedule are lines for Societal Benefits Charge, Non-Utility Generation Charge, Zero Emission Certificate Recovery Charge, Solar Pilot Recovery Charge, Green Programs Recovery Charge, Tax Adjustment Credit, Miscellaneous items, and Unbilled Revenue.

Column (1) shows the annualized weather normalized billing units. Column (2) shows present Delivery rates (without Sales and Use Tax, SUT) effective April 18, 2019.

The Supply-BGS rates in the Column (2) reflect the rates in effect as of April 18, 2019 and for CIEP energy, reflect the class average hourly rates from January 1, 2018 to December 31, 2018. Column (3) presents annualized revenue assuming all customers are provided service under their applicable BGS provision. Column (4) repeats the billing units of Column (1). Column (5) shows the proposed rates without SUT that result in the proposed revenues shown in Column (6). Columns (7) and (8) show the proposed base rate revenue increase, in thousands of dollars and percent increase, respectively, for each of the billing unit blocks. The proposed tariff charges (with and without SUT) are provided on pages 26 and 27 of this schedule.



### Step 1: Initial Sync

[illegible]

16	Total Rev R
----	-------------

		Streetlighting	Access	Local Delivery	System Delivery	Cust Svs	Measurement	Total	
21	RS	\$	0	\$ 29,276,188	\$ 296,821,183	\$ 180,334,903	\$ 80,860,566	\$ 58,565,889	\$ 645,858,729
22	RHS	\$	0	\$ 227,267	\$ 2,944,645	\$ 842,167	\$ 470,313	\$ 307,665	\$ 4,792,057
23	RLM	\$	0	\$ 299,277	\$ 3,936,789	\$ 3,097,552	\$ 543,807	\$ 410,832	\$ 8,288,257
24	WH	\$	0	\$ 1,917	\$ 2,417	\$ 0	\$ 42,428	\$ 76,962	\$ 123,725
25	WHS	\$	0	\$ 28	\$ 22	\$ 0	\$ 550	\$ 1,101	\$ 1,700
26	HS	\$	0	\$ 0	\$ 373,175	\$ 187,251	\$ 39,386	\$ 26,007	\$ 625,820
27	BPL	\$	43,197,026	\$ 0	\$ 2,071,443	\$ 0	\$ 151,269	\$ 0	\$ 45,419,738
28	BPL-POF	\$	277,921	\$ 0	\$ 96,363	\$ 0	\$ 3,428	\$ 0	\$ 377,713
29	PSAL	\$	13,992,547	\$ 0	\$ 990,135	\$ 0	\$ 792,439	\$ 0	\$ 15,775,121
30	GLP	\$	0	\$ 14,731,439	\$ 96,118,437	\$ 87,977,232	\$ 14,652,409	\$ 11,539,484	\$ 225,019,002
31	LPL-S	\$	0	\$ 998,972	\$ 84,204,617	\$ 92,301,400	\$ 3,071,536	\$ 12,176,694	\$ 192,753,218
32	LPL-P	\$	0	\$ 88,251	\$ 13,435,550	\$ 22,894,859	\$ 272,041	\$ 1,309,318	\$ 38,000,019
33	HTS-S	\$	0	\$ 52,234	\$ 18,041,758	\$ 12,690,239	\$ 70,323	\$ 745,070	\$ 31,599,625
34	HTS-HV	\$	0	\$ 43,713	\$ 34,210	\$ 0	\$ 5,401	\$ 66,691	\$ 150,015
35	Total	\$	57,467,494	\$ 45,719,286	\$ 519,070,744	\$ 400,325,603	\$ 100,975,898	\$ 85,225,714	\$ 1,208,784,738

[illegible]

**SS-M&M-5****Attachment 2  
Page 3 of 27****Inter Class Revenue Increase Allocations**

## Calculation of Increase Limits

<u>line #</u>		(in \$1,000)	Notes:
1	Requested Revenue Increase to be recovered from rate schedule charges =	\$ 7,424	Schedule SS-M&M-2
2	Present Distribution Revenue =	\$ 1,201,360	Page 4, col 3, line 21
3	Present Total Customer Bills (all on BGS) =	\$ 5,781,744	Page 4, col 5, line 21
4	Average Distribution Increase =	0.618%	= Line 1 / Line 2
5	Average Total Bill Increase =	0.128%	= Line 1 / Line 3
6	Lower Distribution increase limit =	0.309% in Distribution charges	= 0.5 * Line 4
7	Upper Distribution increase limit #1 =	1.082% in Distribution charges	= 1.75 * Line 4
8	Upper Bill increase limit #2 =	0.256% in Bill Increase	= 2.0 * Line 5
all rounded to 0.001%			

**SS-M&M-5**
**Attachment 2**
**Page 4 of 27**
**Inter Class Revenue Increase Calculations**

Calculation of Increases

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Proposed Distribution Revenue Requirement (from COS)	Present Distribution Revenue	Unlimited COS Distribution Charge \$ Increase	Present Total Bill Revenue (all on BGS)	Unlimited Distribution Charge Increase	Limited Final Distribution Charge Increase	Proposed Total Bill Increase	Proposed Distribution Revenue Increase
line #	Rate Schedule	(in \$1,000)	(in \$1,000)	(in \$1,000)	(in \$1,000)	(%)	(%)	(%)	(in \$1,000)
1	RS	\$ 645,859	\$ 558,035	\$ 87,824	\$ 2,200,941	15.738%	0.991%	0.251%	\$ 5,528
2	RHS	\$ 4,792	\$ 4,110	\$ 682	\$ 16,819	16.595%	1.045%	0.256%	\$ 43
3	RLM	\$ 8,288	\$ 7,317	\$ 971	\$ 35,961	13.274%	0.836%	0.170%	\$ 61
4	WH *	\$ 123.725	\$ 50.174	\$ 73.551	\$ 113.376	146.591%	0.578%	0.256%	\$ 0.290
5	WHS *	\$ 1.700	\$ 0.148	\$ 1.552	\$ (0.353)	1048.709%	1.082%	0.567%	\$ 0.002
6	HS	\$ 626	\$ 724	\$ (98)	\$ 2,518	-13.561%	0.309%	0.079%	\$ 2
7	BPL	\$ 45,420	\$ 56,015		\$ 72,390				
8	Distribution Only	\$ 2,223	\$ 1,899	\$ 324		17.046%	0.330%	0.008%	\$ 6
9	Luminaires and Poles	\$ 43,197	\$ 54,116	\$ (10,919)		0.000%	0.000%	0.000%	\$ -
10	BPL-POF *	\$ 377.713	\$ 319.930		\$ 1,142.924				
11	Distribution Only	\$ 99.792	\$ 96.930	\$ 2.862		2.952%	0.309%	0.026%	\$ 0.300
12	Luminaires and Poles	\$ 277.921	\$ 223.000	\$ 54.921		0.000%	0.000%	0.000%	\$ -
13	PSAL	\$ 15,775	\$ 27,790		\$ 36,742				
14	Distribution Only	\$ 1,783	\$ 1,083	\$ 700		64.596%	0.338%	0.011%	\$ 4
15	Luminaires and Poles	\$ 13,993	\$ 26,707	\$ (12,714)		0.000%	0.000%	0.000%	\$ -
16	GLP	\$ 225,019	\$ 258,940	\$ (33,921)	\$ 1,230,161	-13.100%	0.309%	0.065%	\$ 800
17	LPL-S	\$ 192,753	\$ 218,893	\$ (26,140)	\$ 1,363,906	-11.942%	0.309%	0.050%	\$ 676
18	LPL-P	\$ 38,000	\$ 38,129	\$ (129)	\$ 347,239	-0.338%	0.309%	0.034%	\$ 118
19	HTS-S	\$ 31,600	\$ 28,754	\$ 2,846	\$ 437,794	9.896%	0.623%	0.041%	\$ 179
20	HTS-HV	\$ 150	\$ 2,283	\$ (2,133)	\$ 36,017	-93.429%	0.309%	0.019%	\$ 7
21	Total	\$ 1,208,785	\$ 1,201,360	\$ 7,424	\$ 5,781,744	0.618%	0.618%	0.128%	\$ 7,425

\* WH, WHS and &amp; BPL-POF shown to 3 decimal points

Notes:

 Page 2,  
Step 2, col 8

 SS-M&M-5  
workpapers

= (2) - (3)

 SS-M&M-5  
workpapers

= (4) / (3)

 calculated  
on limits

= (9) / (5)

= (3) \* (7)

**SS-M&M-5**
**Attachment 2**
**Page 5 of 27**
**Service Charge Calculations**

Service charges are comprised of revenue requirements for the Distribution Access and Measurement segments related to Minimum Size Facilities, plus the Revenue Requirements for the Customer Service segment.

line #	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Average Distribution Increase = 0.618% page 3, Line 4								
	Rate Schedule	Access Segment Revenue Requirement	Measurement Segment Revenue Requirement	Customer Service Segment Revenue Requirements	Rev Req to be recovered through Service Charge	# of Customers	Cost Based Monthly Service Charge (\$/month)	Current Monthly Service Charge (\$/month)	Proposed Limited Monthly Service Charge (\$/month)
2	RS	\$ 29,276,188	\$ 58,565,889	\$ 80,860,566	\$ 168,702,644	1,868,649	\$ 7.52	\$ 4.64	\$ 4.64 see Note 1
3	RHS	\$ 227,267	\$ 307,665	\$ 470,313	\$ 1,005,245	9,233	\$ 9.07	\$ 4.64	\$ 4.64 see Note 1
4	RLM	\$ 299,277	\$ 410,832	\$ 543,807	\$ 1,253,916	12,158	\$ 8.59	\$ 13.07	\$ 13.07 see Note 2
5	WH	no service charge							
6	WHS	\$ 28	\$ 1,101	\$ 550	\$ 1,678	18	\$ 7.79	\$ 0.58	\$ 0.59 see Note 2
7	HS	\$ 0	\$ 26,007	\$ 39,386	\$ 65,394	1,091	\$ 4.99	\$ 3.48	\$ 3.51 see Note 2
8	BPL	no service charge							
9	BPL-POF	no service charge							
10	PSAL	no service charge							
11	GLP	\$ 14,731,439	\$ 1,309,318	\$ 14,652,409		261,946			
12	GLP Metered					256,116	\$ 9.77	\$ 4.43	\$ 4.47 see Note 3
13	GLP Unmetered					5,766	\$ 9.35	\$ 2.05	\$ 2.07 see Note 4
14	GLP-NU					64			\$ 347.77 set equal to LPL-S
15	LPL-S	\$ 998,972	\$ 12,176,694	\$ 3,071,536	\$ 16,247,201	8,645	\$ 156.61	\$ 347.77	\$ 347.77 see Note 2
16	LPL-P	\$ 88,251	\$ 1,309,318	\$ 272,041	\$ 1,669,609	754	\$ 184.59	\$ 347.77	\$ 347.77 see Note 2
17	LPL-P <100 kW						\$ 154.10	\$ 20.02	\$ 20.21 see Note 5
18	HTS-S	\$ 52,234	\$ 745,070	\$ 70,323	\$ 867,628	193	\$ 374.12	\$ 1,911.39	\$ 1,911.39 see Note 2
19	HTS-HV	\$ 43,713	\$ 66,691	\$ 5,401	\$ 115,805	14	\$ 698.02	\$ 1,720.25	\$ 1,720.25 see Note 2

Source: for Cols 2, 3 and 4 from Page 2, = (2) + (3) + (4) 2018 Rate Case = (5) / (6) / 12 From Tariff based on  
Cols 3, 6 & 7 from Step 2 SS-E8 R-2, methodology  
Step 2, Col 1 described

- Notes: 1 Agreed upon in Settlement  
2 Move toward cost limited at no decrease from current service charge and no increase greater than 1.5 times the overall average distribution % increase.  
3 Access and Customer Service Rev Req per total GLP Customer plus Measurement Rev Req divided by the number of metered customers divided by 12; limits the same as Note 2  
4 Access and Customer Service Rev Req per total GLP Customer divided by 12; limits the same as Note 2  
5 Calculated at the GLP Access Segment per customer plus the GLP Customer Service Segment Revenue Requirements per customer plus the LPL-P Measurement Segment per customer divided by 12; limits the same as Note 2

**ELECTRIC PROOF OF REVENUE  
SUMMARY  
ELECTRIC RATE INCREASE  
Madison and Marshall**  
(kWhrs & Revenue in Thousands)

Rate Schedule			Annualized		Proposed		Increase	
			Weather Normalized					
			kWhrs	Revenue	kWhrs	Revenue	Revenue	Percent
			(1)	(2)	(3)	(4)	(5)	(6)
1	Residential	RS	12,934,045	\$2,200,941	12,934,045	\$2,206,469	\$5,528	0.25
2	Residential Heating	RHS	126,581	16,819	126,581	16,862	43	0.26
3	Residential Load Management	RLM	211,824	35,961	211,824	36,022	61	0.17
4	Water Heating	WH	1,086	113.376	1,086	113.666	0.290	0.26
5	Water Heating Storage	WHS	16	-0.353	16	-0.351	0.002	0.57
6								
7	Building Heating	HS	16,145	2,518	16,145	2,520	2	0.08
8	General Lighting and Power	GLP	7,764,699	1,230,161	7,764,699	1,230,961	800	0.07
9	Large Power & Lighting-Sec	LPL-S	11,276,802	1,363,906	11,276,802	1,364,582	676	0.05
10	Large Power & Lighting-Pri	LPL-P	3,235,414	347,239	3,235,414	347,357	118	0.03
11	High Tension-Subtr.	HTS-S	4,566,472	437,794	4,566,472	437,973	179	0.04
12	High Tension-HV	HTS-HV	417,997	36,017	417,997	36,024	7	0.02
13								
14	Body Politic Lighting	BPL	282,858	72,390	282,858	72,396	6	0.01
15	Body Politic Lighting-POF	BPL-POF	14,450	1,142.924	14,450	1,143.224	0.300	0.03
16	Private Street & Area Lighting	PSAL	<u>151,732</u>	<u>36,742</u>	<u>151,732</u>	<u>36,746</u>	<u>4</u>	0.01
17								
18								
19	Totals		41,000,121	\$5,781,744	41,000,121	\$5,789,169	\$7,425	0.13

Notes: All customers assumed to be on BGS.  
WH, WHS & BPL-POF revenues shown to 3 decimals.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE RS  
RESIDENTIAL SERVICE  
Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Delivery</b>								
1 Service Charge	22,423.79	4.64	\$104,046	22,423.79	4.64	\$104,046	\$0	0.00
2 Distribution 0-600 June - September	3,528,124	0.037239	131,384	3,528,124	0.038262	134,993	3,609	2.75
3 Distribution 0-600 October - May	5,657,900	0.033344	188,657	5,657,900	0.033344	188,657	0	0.00
4 Distribution over 600 June - September	1,931,618	0.041060	79,312	1,931,618	0.042083	81,288	1,976	2.49
5 Distribution over 600 October - May	1,816,403	0.033344	60,566	1,816,403	0.033344	60,566	0	0.00
6 SBC	12,934,045	0.007169	92,724	12,934,045	0.007169	92,724	0	0.00
7 NGC	12,934,045	(0.000137)	(1,772)	12,934,045	(0.000137)	(1,772)	0	0.00
8 STC-TBC	12,934,045	0.000000	0	12,934,045	0.000000	0	0	0.00
9 STC-MTC-Tax	12,934,045	0.000000	0	12,934,045	0.000000	0	0	0.00
10 ZECRC	12,934,045	0.004000	51,736	12,934,045	0.004000	51,736	0	0.00
11 Solar Pilot Recovery Charge	12,934,045	0.000136	1,759	12,934,045	0.000136	1,759	0	0.00
12 Green Programs Recovery Charge	12,934,045	0.001408	18,211	12,934,045	0.001408	18,211	0	0.00
13 Tax Adjustment Credit	12,934,045	(0.004423)	(57,207)	12,934,045	(0.004423)	(57,207)	0	0.00
14 Green Enabling Mechanism	12,934,045	0.000000	0	12,934,045	0.000000	0	0	0.00
15 Facilities Chg.			0			0	0	0.00
16 Minimum			0			0	0	0.00
17 Miscellaneous			(240)			(241)	(1)	0.42
18 Delivery Subtotal	12,934,045		\$669,176	12,934,045		\$674,760	\$5,584	0.83
19 Unbilled Delivery			<u>(6,755)</u>			<u>(6,811)</u>	<u>(56)</u>	0.83
20 Delivery Subtotal w unbilled			\$662,421			\$667,949	\$5,528	0.83
21								
<b>Supply-BGS</b>								
23 BGS 0-600 June - September	3,528,124	0.118339	\$417,515	3,528,124	0.118339	\$417,515	\$0	0.00
24 BGS 0-600 October - May	5,657,900	0.118364	669,692	5,657,900	0.118364	669,692	0	0.00
25 BGS over 600 June - September	1,931,618	0.127435	246,156	1,931,618	0.127435	246,156	0	0.00
26 BGS over 600 October - May	1,816,403	0.118364	214,997	1,816,403	0.118364	214,997	0	0.00
27 BGS Reconciliation-RSCP	12,934,045	0.000000	0	12,934,045	0.000000	0	0	0.00
28 Miscellaneous			(1)			(1)	0	0.00
29 Supply subtotal	12,934,045		<u>\$1,548,359</u>	12,934,045		<u>\$1,548,359</u>	\$0	0.00
30 Unbilled Supply			<u>(9,839)</u>			<u>(9,839)</u>	<u>0</u>	0.00
31 Supply Subtotal w unbilled			<u>\$1,538,520</u>			<u>\$1,538,520</u>	\$0	0.00
32								
33 Total Delivery + Supply	12,934,045		<u>\$2,200,941</u>	12,934,045		<u>\$2,206,469</u>	<u>\$5,528</u>	0.25

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE RHS**  
**RESIDENTIAL HEATING SERVICE**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Delivery</b>								
1 Service Charge	110.79	4.64	\$514	110.79	4.64	\$514	\$0	0.00
2 Distribution 0-600 June - September	19,973	0.048037	959	19,973	0.048628	971	12	1.25
3 Distribution 0-600 October - May	41,979	0.032539	1,366	41,979	0.032800	1,377	11	0.81
4 Distribution over 600 June - September	10,227	0.052937	541	10,227	0.053528	547	6	1.11
5 Distribution over 600 October - May	54,402	0.014939	813	54,402	0.015200	827	14	1.72
6 SBC	126,581	0.007169	907	126,581	0.007169	907	0	0.00
7 NGC	126,581	(0.000137)	(17)	126,581	(0.000137)	(17)	0	0.00
8 STC-TBC	126,581	0.000000	0	126,581	0.000000	0	0	0.00
9 STC-MTC-Tax	126,581	0.000000	0	126,581	0.000000	0	0	0.00
10 Zero Emission Certificate Recovery Charge	126,581	0.004000	506	126,581	0.004000	506	0	0.00
11 Solar Pilot Recovery Charge	126,581	0.000136	17	126,581	0.000136	17	0	0.00
12 Green Programs Recovery Charge	126,581	0.001408	178	126,581	0.001408	178	0	0.00
13 Tax Adjustment Credit	126,581	(0.003974)	(503)	126,581	(0.003974)	(503)	0	0.00
14 Green Enabling Mechanism	126,581	0.000000	0	126,581	0.000000	0	0	0.00
15 Facilities Chg.			0			0	0	0.00
16 Minimum			0			0	0	0.00
17 Miscellaneous			(2)			(1)	1	(50.00)
18 Delivery Subtotal	126,581		\$5,279	126,581		\$5,323	\$44	0.83
19 Unbilled Delivery			(102)			(103)	(1)	0.98
20 Delivery Subtotal w unbilled			\$5,177			\$5,220	\$43	0.83
21								
<b>Supply-BGS</b>								
23 BGS 0-600 June - September	19,973	0.088738	\$1,772	19,973	0.088738	\$1,772	\$0	0.00
24 BGS 0-600 October - May	41,979	0.093343	3,918	41,979	0.093343	3,918	0	0.00
25 BGS over 600 June - September	10,227	0.100900	1,032	10,227	0.100900	1,032	0	0.00
26 BGS over 600 October - May	54,402	0.093343	5,078	54,402	0.093343	5,078	0	0.00
27 BGS Reconciliation-RSCP	126,581	0.000000	0	126,581	0.000000	0	0	0.00
28 Miscellaneous			0			0	0	0.00
29 Supply subtotal	126,581		\$11,800	126,581		\$11,800	\$0	0.00
30 Unbilled Supply			(158)			(158)	0	0.00
31 Supply subtotal w unbilled			\$11,642			\$11,642	\$0	0.00
32								
33 Total Delivery + Supply	126,581		\$16,819	126,581		\$16,862	\$43	0.26
34								
35								
36								
37 Notes:								
38								

All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE RLM**  
**RESIDENTIAL LOAD MANAGEMENT SERVICE**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	<u>Units</u> (1)	<u>Rate</u> (2)	<u>Revenue</u> (3=1*2)	<u>Units</u> (4)	<u>Rate</u> (5)	<u>Revenue</u> (6=4*5)	<u>Revenue</u> (7=6-3)	<u>Percent</u> (8=7/3)
<b><u>Delivery</u></b>								
1 Service Charge	145.90	13.07	\$1,907	145.899	13.07	\$1,907	\$0	0.00
2 Distribution June - September On Peak	43,971	0.069819	3,070	43,971	0.070569	3,103	33	1.07
3 Distribution June - September Off Peak	48,084	0.014566	700	48,084	0.014733	708	8	1.14
4 Distribution October - May On Peak	51,653	0.014566	752	51,653	0.014733	761	9	1.20
5 Distribution October - May Off Peak	68,116	0.014566	992	68,116	0.014733	1,004	12	1.21
6 SBC	211,824	0.007169	1,519	211,824	0.007169	1,519	0	0.00
7 NGC	211,824	(0.000137)	(29)	211,824	(0.000137)	(29)	0	0.00
8 STC-TBC	211,824	0.000000	0	211,824	0.000000	0	0	0.00
9 STC-MTC-Tax	211,824	0.000000	0	211,824	0.000000	0	0	0.00
10 Zero Emission Certificate Recovery Charge	211,824	0.004000	847	211,824	0.004000	847	0	0.00
11 Solar Pilot Recovery Charge	211,824	0.000136	29	211,824	0.000136	29	0	0.00
12 Green Programs Recovery Charge	211,824	0.001408	298	211,824	0.001408	298	0	0.00
13 Tax Adjustment Credit	211,824	(0.003418)	(724)	211,824	(0.003418)	(724)	0	0.00
14 Green Enabling Mechanism	211,824	0.000000	0	211,824	0.000000	0	0	0.00
15 Facilities Chg.			0			0	0	0.00
16 Minimum			0			0	0	0.00
17 Miscellaneous			(9)			(9)	0	0.00
18 Delivery Subtotal	211,824		\$9,352	211,824		\$9,414	\$62	0.66
19 Unbilled Delivery			(119)			(120)	(1)	0.84
20 Delivery Subtotal w unbilled			\$9,233			\$9,294	\$61	0.66
21								
<b><u>Supply-BGS</u></b>								
23 BGS June - September On Peak	43,971	0.220455	\$9,694	43,971	0.220455	\$9,694	\$0	0.00
24 BGS June - September Off Peak	48,084	0.053727	2,583	48,084	0.053727	2,583	0	0.00
25 BGS October - May On Peak	51,653	0.207628	10,725	51,653	0.207628	10,725	0	0.00
26 BGS October - May Off Peak	68,116	0.058816	4,006	68,116	0.058816	4,006	0	0.00
27 BGS Reconciliation-RSCP	211,824	0.000000	0	211,824	0.000000	0	0	0.00
28 Miscellaneous			0			0	0	0.00
29 Supply subtotal	211,824		<u>\$27,008</u>	211,824		<u>\$27,008</u>	\$0	0.00
30 Unbilled Supply			(280)			(280)	0	0.00
31 Supply subtotal w unbilled			<u>\$26,728</u>			<u>\$26,728</u>	\$0	0.00
32								
33 Total Delivery + Supply	211,824		<u>\$35,961</u>	211,824		<u>\$36,022</u>	<u>\$61</u>	0.17
34								
35								
36								
37								
38								

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019



**RATE SCHEDULE WH**  
**WATER HEATING SERVICE**  
**Madison and Marshall**  
 (Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	<u>Units</u> (1)	<u>Rate</u> (2)	<u>Revenue</u> (3=1*2)	<u>Units</u> (4)	<u>Rate</u> (5)	<u>Revenue</u> (6=4*5)	<u>Revenue</u> (7=6-3)	<u>Percent</u> (8=7/3)
<b><u>Delivery</u></b>								
1 Distribution Sum	329.000	0.047122	\$15.503	329.000	0.047389	\$15.591	\$0.088	0.57
2 Distribution Win	757	0.047122	\$35.671	757	0.047389	\$35.873	\$0.202	0.57
3 SBC	1,086	0.007169	\$7.786	1,086	0.007169	\$7.786	\$0.000	0.00
4 NGC	1,086	(0.000091)	-\$0.099	1,086	(0.000091)	-\$0.099	\$0.000	0.00
5 STC-TBC	1,086	0.000000	\$0.000	1,086	0.000000	\$0.000	\$0.000	0.00
6 STC-MTC-Tax	1,086	0.000000	\$0.000	1,086	0.000000	\$0.000	\$0.000	0.00
7 Zero Emission Certificate Recovery Charge	1,086	0.004000	\$4.344	1,086	0.004000	\$4.344	\$0.000	0.00
8 Solar Pilot Recovery Charge	1,086	0.000136	\$0.148	1,086	0.000136	\$0.148	\$0.000	0.00
9 Green Programs Recovery Charge	1,086	0.001408	\$1.529	1,086	0.001408	\$1.529	\$0.000	0.00
10 Tax Adjustment Credit	1,086	(0.002762)	-\$3.000	1,086	(0.002762)	-\$3.000	\$0.000	0.00
11 Green Enabling Mechanism	1,086	0.000000	\$0.000	1,086	0.000000	\$0.000	\$0.000	0.00
12 Facilities Chg.			\$0.000			\$0.000	\$0.000	0.00
13 Minimum			\$0.000			\$0.000	\$0.000	0.00
14 Miscellaneous			\$0.000			\$0.005	\$0.005	0.00
15 Delivery Subtotal	1,086		\$61.882	1,086		\$62.177	\$0.295	0.48
16 Unbilled Delivery			<u>-\$1.049</u>			<u>-\$1.054</u>	<u>-\$0.005</u>	0.48
17 Delivery Subtotal w unbilled			\$60.833			\$61.123	\$0.290	0.48
18								
<b><u>Supply-BGS</u></b>								
20 BGS Summer	329	0.046813	\$15.401	329	0.046813	\$15.401	\$0.000	0.00
21 BGS Winter	757	0.049065	\$37.142	757	0.049065	\$37.142	\$0.000	0.00
22 BGS Reconciliation-RSCP	1,086	0.000000	\$0.000	1,086	0.000000	\$0.000	\$0.000	0.00
23 Miscellaneous			\$0.000			\$0.000	\$0.000	0.00
24 Supply subtotal	1,086		\$52.543	1,086		\$52.543	\$0.000	0.00
25 Unbilled Supply			<u>\$0.000</u>			<u>\$0.000</u>	<u>\$0.000</u>	0.00
26 Supply subtotal w unbilled			\$52.543			\$52.543	\$0.000	0.00
27								
28 Total Delivery + Supply	1,086		<u>\$113.376</u>	1,086		<u>\$113.666</u>	<u>\$0.290</u>	0.26
29								
30								
31								
32								
33								
34								

Notes: All customers assumed to be on BGS.  
 WH, WHS & BPL-POF revenues shown to 3 decimals.  
 Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE WHS**  
**WATER HEATING STORAGE SERVICE**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b><u>Delivery</u></b>								
1 Service Charge	0.215	0.58	\$0.125	0.215	0.59	\$0.127	\$0.002	1.60
2 Distribution June - September	3.646	0.001580	0.006	3.646	0.001615	0.006	0.000	0.00
3 Distribution October - May	12.454	0.001580	0.020	12.454	0.001615	0.020	0.000	0.00
4 SBC	16.100	0.007169	0.115	16.100	0.007169	0.115	0.000	0.00
5 NGC	16.100	(0.000091)	(0.001)	16.100	(0.000091)	(0.001)	0.000	0.00
6 STC-TBC	16.100	0.000000	0.000	16.100	0.000000	0.000	0.000	0.00
7 STC-MTC-Tax	16.100	0.000000	0.000	16.100	0.000000	0.000	0.000	0.00
8 Zero Emission Certificate Recovery Cha	16.100	0.004000	0.064	16.100	0.004000	0.064	0.000	0.00
9 Solar Pilot Recovery Charge	16.100	0.000136	0.002	16.100	0.000136	0.002	0.000	0.00
10 Green Programs Recovery Charge	16.100	0.001408	0.023	16.100	0.001408	0.023	0.000	0.00
11 Tax Adjustment Credit	16.100	-0.093168	-1.500	16.100	-0.093168	-1.500	0.000	0.00
12 Green Enabling Mechanism	16.100	0.000000	0.000	16.100	0.000000	0.000	0.000	0.00
13 Facilities Chg.			0.000			0.000	0.000	0.00
14 Minimum			0.000			0.000	0.000	0.00
15 Miscellaneous			0.000			0.000	0.000	0.00
16 Delivery Subtotal	16		-\$1.146	16		-\$1.144	\$0.002	-0.17
17 Unbilled Delivery			<u>0.023</u>			<u>0.023</u>	<u>0.000</u>	0.00
18 Delivery Subtotal w unbilled			-\$1.123			-\$1.121	\$0.002	-0.18
19								
20 <b><u>Supply-BGS</u></b>								
21 BGS- June - September	3.646	0.046520	\$0.170	3.646	0.046520	\$0.170	\$0.000	0.00
22 BGS- October - May	12.454	0.049245	0.613	12.454	0.049245	0.613	0.000	0.00
23 BGS Reconciliation-RSCP	16.100	0.000000	0.000	16.100	0.000000	0.000	0.000	0.00
24 Miscellaneous			0.000			0.000	0.000	0.00
25 Supply subtotal	16.100		0.783	16.100		0.783	\$0.000	0.00
26 Unbilled Supply			<u>(0.013)</u>			<u>(0.013)</u>	<u>0.000</u>	0.00
27 Supply subtotal w unbilled			\$0.770			\$0.770	\$0.000	0.00
28								
29 Total Delivery + Supply	16.100		<u>-\$0.353</u>	16.100		<u>-\$0.351</u>	<u>\$0.002</u>	-0.57
30								
31								
32								
33								
34								
35								

Notes: All customers assumed to be on BGS.  
WH, WHS & BPL-POF revenues shown to 3 decimals.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

		Annualized			Proposed			Difference	
		Weather Normalized							
	<u>Delivery</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Percent</u>
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
1	Service Charge	13.093	3.48	\$46	13.093	3.51	\$46	\$0	0.00
2	Distribution June - September	3,469	0.095993	333	3,469	0.096281	334	1	0.30
3	Distribution October - May	12,676	0.028716	364	12,676	0.028795	365	1	0.28
4	SBC	16,145	0.007169	116	16,145	0.007169	116	0	0.00
5	NGC	16,145	(0.000091)	(1)	16,145	(0.000091)	(1)	0	0.00
6	STC-TBC	16,145	0.000000	0	16,145	0.000000	0	0	0.00
7	STC-MTC-Tax	16,145	0.000000	0	16,145	0.000000	0	0	0.00
8	Zero Emission Certificate Recovery Charge	16,145	0.004000	65	16,145	0.004000	65	0	0.00
9	Solar Pilot Recovery Charge	16,145	0.000136	2	16,145	0.000136	2	0	0.00
10	Green Programs Recovery Charge	16,145	0.001408	23	16,145	0.001408	23	0	0.00
11	Tax Adjustment Credit	16,145	-0.001734	-28	16,145	-0.001734	-28	0	0.00
12	Green Enabling Mechanism	16,145	0.000000	0	16,145	0.000000	0	0	0.00
13	Facilities Chg.			0			0	0	0.00
14	Minimum			0			0	0	0.00
15	Miscellaneous			(1)			(1)	0	0.00
16	Delivery Subtotal	16,145		\$919	16,145		\$921	\$2	0.22
17	Unbilled Delivery			(22)			(22)	0	0.00
18	Delivery Subtotal w unbilled			\$897			\$899	\$2	0.22
19									
20	<u>Supply-BGS</u>								
21	BGS- June - September	3,469	0.103597	\$359	3,469	0.103597	\$359	\$0	0.00
22	BGS- October - May	12,676	0.101675	1289	12,676	0.101675	1289	0	0.00
23	BGS Reconciliation-RSCP	16,145	0.000000	0	16,145	0.000000	0	0	0.00
24	Miscellaneous			0			0	0	0.00
25	Supply subtotal	16,145		\$1,648	16,145		\$1,648	\$0	0.00
26	Unbilled Supply			(27)			(27)	0	0.00
27	Supply subtotal w unbilled			\$1,621			\$1,621	\$0	0.00
28									
29	Total Delivery + Supply	16,145		<u>\$2,518</u>	16,145		<u>\$2,520</u>	<u>\$2</u>	0.08

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE GLP**  
**GENERAL LIGHTING AND POWER SERVICE**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b><u>Delivery</u></b>								
1 Service Charge	3,042.260	4.43	\$13,477	3,042.260	4.47	\$13,599	\$122	0.91
2 Service Charge-unmetered	100.329	2.05	206	100.329	2.07	208	2	0.97
3 Service Charge-Night Use	0.767	347.77	267	0.767	347.77	267	0	0.00
4 Distrib. KW Annual	28,477	3.6834	104,892	28,477	3.6935	105,180	288	0.27
5 Distrib. KW Summer	10,394	9.2370	96,009	10,394	9.2623	96,272	263	0.27
6 Distribution kWhr, June-September	2,784,306	0.003011	8,384	2,784,306	0.003019	8,406	22	0.26
7 Distribution kWhr, October-May	4,958,973	0.007686	38,115	4,958,973	0.007707	38,219	104	0.27
8 Distribution kWhr, Night use, June-September	7,441	0.007686	57	7,441	0.007707	57	0	0.00
9 Distribution kWhr, Night use, October-May	13,979	0.007686	107	13,979	0.007707	108	1	0.93
10 SBC	7,764,699	0.007169	55,665	7,764,699	0.007169	55,665	0	0.00
11 NGC	7,764,699	(0.000091)	(707)	7,764,699	(0.000091)	(707)	0	0.00
12 STC-TBC	7,764,699	0.000000	0	7,764,699	0.000000	0	0	0.00
13 STC-MTC-Tax	7,764,699	0.000000	0	7,764,699	0.000000	0	0	0.00
14 Zero Emission Certificate Recovery Charge	7,764,699	0.004000	31,059	7,764,699	0.004000	31,059	0	0.00
15 Solar Pilot Recovery Charge	7,764,699	0.000136	1,056	7,764,699	0.000136	1,056	0	0.00
16 Green Programs Recovery Charge	7,764,699	0.001408	10,933	7,764,699	0.001408	10,933	0	0.00
17 Tax Adjustment Credit	7,764,699	-0.001269	-9,853	7,764,699	-0.001269	-9,853	0	0.00
18 Green Enabling Mechanism	7,764,699	0.000000	0	7,764,699	0.000000	0	0	0.00
19 Duplicate Svc (Same Sub/Different Sub)		\$2.22/\$3.20	5		\$2.22/\$3.20	5	0	0.00
20 Facilities Chg.		1.45%	63		1.45%	63	0	0.00
21 Minimum			42			42	0	0.00
22 Distrib. Miscellaneous			<u>(1,726)</u>			<u>(1,725)</u>	<u>1</u>	-0.06
23 Delivery subtotal	0		\$348,051	0		\$348,854	\$803	0.23
24 Unbilled Delivery			<u>(1,283)</u>			<u>(1,286)</u>	<u>(3)</u>	0.23
25 Delivery subtotal w unbilled			\$346,768			\$347,568	\$800	0.23

		Annualized			Proposed			Difference	
		Weather Normalized							
		Units	Rate	Revenue	Units	Rate	Revenue	Revenue	Percent
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
	<b>Supply-BGS</b>								
1	Generation Capacity Obl June-September	10,134	5.1628	\$52,320	10,134	5.1628	\$52,320	\$0	0.00
2	Generation Capacity Obl October-May	20,198	5.1628	104,278	20,198	5.1628	104,278	0	0.00
3	Transmission Capacity Obl	26,597	10.8603	288,851	26,597	10.8603	288,851	0	0.00
4	BGS kWhr June - September not night use	2,784,306	0.055377	154,187	2,784,306	0.055377	154,187	0	0.00
5	BGS kWhr October - May not night use	4,958,973	0.057101	283,162	4,958,973	0.057101	283,162	0	0.00
6	BGS kWhr June - September night use	7,441	0.039483	294	7,441	0.039483	294	0	0.00
7	BGS kWhr October - May night use	13,979	0.044122	617	13,979	0.044122	617	0	0.00
8	BGS Reconciliation-RSCP	7,764,699	0.000000	0	7,764,699	0.000000	0	0	0.00
9	BGS Miscellaneous			(145)			(145)	0	0.00
10	Supply subtotal	7,764,699		\$883,564	7,764,699		\$883,564	\$0	0.00
11	Unbilled Supply			(171)			(171)	0	0.00
12	Supply Subtotal w Unbilled			\$883,393			\$883,393	\$0	0.00
13									
14	Total Delivery + Supply	7,764,699		\$1,230,161	7,764,699		\$1,230,961	\$800	0.07

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE LPL-Sec**  
**LARGE POWER & LIGHTING SERVICE-SECONDARY**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	<u>Delivery</u>	<u>Annualized Weather Normalized</u>			<u>Proposed</u>			<u>Difference</u>	
		<u>Units</u> (1)	<u>Rate</u> (2)	<u>Revenue</u> (3=1*2)	<u>Units</u> (4)	<u>Rate</u> (5)	<u>Revenue</u> (6=4*5)	<u>Revenue</u> (7=6-3)	<u>Percent</u> (8=7/3)
1	Service Charge	103,740	347.77	\$36,078	103,740	347.77	\$36,078	\$0	0.00
2	Distrib. KW Annual	28,389	3.5156	99,804	28,389	3.5285	100,171	367	0.37
3	Distrib. KW June - September	10,139	8.3638	84,801	10,139	8.3946	85,113	312	0.37
4	Distribution kWhr On Peak June-September	1,986,049	0.000000	0	1,986,049	0.000000	0	0	0.00
5	Distribution kWhr Off Peak June-September	2,006,262	0.000000	0	2,006,262	0.000000	0	0	0.00
6	Distribution kWhr On Peak October-May	3,504,143	0.000000	0	3,504,143	0.000000	0	0	0.00
7	Distribution kWhr Off Peak October-May	3,780,348	0.000000	0	3,780,348	0.000000	0	0	0.00
8	SBC	11,276,802	0.007169	80,843	11,276,802	0.007169	80,843	0	0.00
9	NGC	11,276,802	(0.000091)	(1,026)	11,276,802	(0.000091)	(1,026)	0	0.00
10	STC-TBC	11,276,802	0.000000	0	11,276,802	0.000000	0	0	0.00
11	STC-MTC-Tax	11,276,802	0.000000	0	11,276,802	0.000000	0	0	0.00
12	Zero Emission Certificate Recovery Charge	11,276,802	0.004000	45,107	11,276,802	0.004000	45,107	0	0.00
13	Solar Pilot Recovery Charge	11,276,802	0.000136	1,534	11,276,802	0.000136	1,534	0	0.00
14	CIEP Standby Fee	4,018,143	0.000150	603	4,018,143	0.000150	603	0	0.00
15	Green Programs Recovery Charge	11,276,802	0.001408	15,878	11,276,802	0.001408	15,878	0	0.00
16	Tax Adjustment Credit	11,276,802	-0.000744	-8,390	11,276,802	-0.000744	-8,390	0	0.00
17	Green Enabling Mechanism	11,276,802	0.000000	0	11,276,802	0.000000	0	0	0.00
18	Duplicate Svc (Same Sub/Different Sub)		\$2.22/\$3.20	128		\$2.22/\$3.20	128	0	0.00
19	Facilities Chg.		1.45%	247		1.45%	247	0	0.00
20	Minimum			0			0	0	0.00
21	Dist. Miscellaneous			(1,202)			(1,202)	0	0.00
22	Delivery subtotal	11,276,802		\$354,405	11,276,802		\$355,084	\$679	0.19
23	Unbilled Delivery			(1,551)			(1,554)	(3)	0.19
24	Delivery subtotal w unbilled			\$352,854			\$353,530	\$676	0.19

**RATE SCHEDULE LPL-Sec**  
**LARGE POWER & LIGHTING SERVICE-SECONDARY**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Supply-BGS</b>								
<b>0-499</b>								
1 Generation Capacity Obl - June-September	6,439	5.1628	\$33,243	6,439	5.1628	\$33,243	\$0	0.00
2 Generation Capacity Obl - October-May	12,996	5.1628	67,096	12,996	5.1628	67,096	0	0.00
3 Transmission Capacity Obl	16,672	10.8603	181,063	16,672	10.8603	181,063	0	0.00
4 BGS kWhr June-September On Peak	1,302,213	0.065862	85,766	1,302,213	0.065862	85,766	0	0.00
5 BGS kWhr June-September Off Peak	1,315,466	0.039483	51,939	1,315,466	0.039483	51,939	0	0.00
6 BGS kWhr October-May On Peak	2,297,596	0.064870	149,045	2,297,596	0.064870	149,045	0	0.00
7 BGS kWhr October-May Off Peak	2,478,699	0.044122	109,365	2,478,699	0.044122	109,365	0	0.00
<b>500+</b>								
9 Generation Capacity Obl - June-September	3,422	8.7587	29,972	3,422	8.7587	29,972	0	0.00
10 Generation Capacity Obl - October-May	6,784	8.7587	59,419	6,784	8.7587	59,419	0	0.00
11 Transmission Capacity Obl	8,643	10.8603	93,866	8,643	10.8603	93,866	0	0.00
12 BGS kWhr June-September	1,374,632	0.039012	53,627	1,374,632	0.039012	53,627	0	0.00
13 Spare	0	0.039012	0	0	0.039012	0	0	0.00
14 BGS kWhr October-May	2,508,196	0.047416	118,929	2,508,196	0.047416	118,929	0	0.00
15 Spare	0	0.047416	0	0	0.047416	0	0	0.00
16								
17 BGS Reconciliation-RSCP	7,393,974	0.000000	0	7,393,974	0.000000	0	0	0.00
18 BGS Reconciliation-CIEP	3,882,828	0.000000	0	3,882,828	0.000000	0	0	0.00
19 BGS Miscellaneous			(102)			(102)	0	0.00
20 Supply subtotal	11,276,802		\$1,033,228	11,276,802		\$1,033,228	\$0	0.00
21 Unbilled Supply			(22,176)			(22,176)	0	0.00
22 Supply w Unbilled			\$1,011,052			\$1,011,052	\$0	0.00
23								
24 Total Delivery + Supply	11,276,802		<u>\$1,363,906</u>	11,276,802		<u>\$1,364,582</u>	<u>\$676</u>	0.05
25								
26								
27								
28								
29								
30								

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE LPL-Pri**  
**LARGE POWER & LIGHTING SERVICE-PRIMARY**  
**Madison and Marshall**  
 (Units & Revenue inThousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Delivery</b>								
1 Service Charge	8.672	347.77	\$3,016	8.672	347.77	\$3,016	\$0	0.00
2 Service Charge-Alternate	0.373	20.02	7	0.373	20.21	8	1	14.29
3 Distrib. KW Annual	7,243	1.6389	11,871	7,243	1.6444	11,910	39	0.33
4 Distrib. KW June - September	2,493	9.0979	22,681	2,493	9.1287	22,758	77	0.34
5 Distribution kWhr On Peak June-September	543,764	0.000000	0	543,764	0.000000	0	0	0.00
6 Distribution kWhr Off Peak June-September	627,198	0.000000	0	627,198	0.000000	0	0	0.00
7 Distribution kWhr On Peak October-May	938,452	0.000000	0	938,452	0.000000	0	0	0.00
8 Distribution kWhr Off Peak October-May	1,126,000	0.000000	0	1,126,000	0.000000	0	0	0.00
9 SBC	3,235,414	0.007033	22,755	3,235,414	0.007033	22,755	0	0.00
10 NGC	3,235,414	(0.000089)	(288)	3,235,414	(0.000089)	(288)	0	0.00
11 STC-TBC	3,235,414	0.000000	0	3,235,414	0.000000	0	0	0.00
12 STC-MTC-Tax	3,235,414	0.000000	0	3,235,414	0.000000	0	0	0.00
13 Zero Emission Certificate Recovery Charge	3,235,414	0.004000	12,942	3,235,414	0.004000	12,942	0	0.00
14 Solar Pilot Recovery Charge	3,235,414	0.000136	440	3,235,414	0.000136	440	0	0.00
15 CIEP Standby Fee	3,235,414	0.000150	485	3,235,414	0.000150	485	0	0.00
16 Green Programs Recovery Charge	3,235,414	0.001408	4,555	3,235,414	0.001408	4,555	0	0.00
17 Tax Adjustment Credit	3,235,414	-0.000452	-1,462	3,235,414	-0.000452	-1,462	0	0.00
18 Green Enabling Mechanism	3,235,414	0.000000	0	3,235,414	0.000000	0	0	0.00
19 Duplicate Svc (Same Sub/Different Sub)		\$2.22/\$3.20	557		\$2.22/\$3.20	557	0	0.00
20 Facilities Chg.		1.45%	439		1.45%	439	0	0.00
21 Minimum			7			7	0	0.00
22 Dist. Miscellaneous			(304)			(303)	1	-0.33
23 Delivery subtotal	3,235,414		\$77,701	3,235,414		\$77,819	\$118	0.15
24 Unbilled Delivery			(294)			(294)	0	0.00
25 Delivery subtotal w unbilled			\$77,407			\$77,525	\$118	0.15



**RATE SCHEDULE LPL-Pri**  
**LARGE POWER & LIGHTING SERVICE-PRIMARY**  
**Madison and Marshall**  
(Units & Revenue inThousands)

		<b>Annualized Weather Normalized</b>			<b>Proposed</b>			<b>Difference</b>	
		<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Percent</u>
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
<b>Supply-BGS</b>									
1	Generation Capacity Obl June-September	2,368	8.7587	\$20,741	2,368	8.7587	\$20,741	\$0	0.00
2	Generation Capacity Obl October-May	4,724	8.7587	41,376	4,724	8.7587	41,376	0	0.00
3	Transmission Capacity Obl	6,170	10.8603	67,008	6,170	10.8603	67,008	0	0.00
4	BGS kWhr June-September On Peak	543,764	0.037154	20,203	543,764	0.037154	20,203	0	0.00
5	BGS kWhr June-September Off Peak	627,198	0.037154	23,303	627,198	0.037154	23,303	0	0.00
6	BGS kWhr October-May On Peak	938,452	0.045354	42,563	938,452	0.045354	42,563	0	0.00
7	BGS kWhr October-May Off Peak	1,126,000	0.045354	51,069	1,126,000	0.045354	51,069	0	0.00
8	BGS Reconciliation-CIEP	3,235,414	0.000000	0	3,235,414	0.000000	0	0	0.00
9	BGS Miscellaneous			0			0	0	0.00
10	Supply subtotal	3,235,414		\$266,263	3,235,414		\$266,263	\$0	0.00
11	Unbilled Supply			<u>3,569</u>			<u>3,569</u>	<u>0</u>	0.00
12	Supply w Unbilled			\$269,832			\$269,832	\$0	0.00
13									
14	Total Delivery + Supply	3,235,414		<u>\$347,239</u>	3,235,414		<u>\$347,357</u>	<u>\$118</u>	0.03

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE HTS-SUBTR.**  
**HIGH TENSION SERVICE-SUBTRANSMISSION**  
**Madison and Marshall**  
 (Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Delivery</b>								
1 Service Charge	2,319	1,911.39	\$4,433	2,319	1,911.39	\$4,433	\$0	0.00
2 Distrib. KW Annual	11,987	1.0646	12,761	11,987	1.0725	12,856	95	0.74
3 Distrib. KW June - September	2,962	3.8482	11,398	2,962	3.8769	11,483	85	0.75
4 Distribution kWhr On Peak	1,616,031	0.000000	0	1,616,031	0.000000	0	0	0.00
5 Spare	0	0.000000	0	0	0.000000	0	0	0.00
6 Distribution kWhr On Peak	2,950,441	0.000000	0	2,950,441	0.000000	0	0	0.00
7 Spare	0	0.000000	0	0	0.000000	0	0	0.00
8 SBC	4,566,472	0.006967	31,815	4,566,472	0.006967	31,815	0	0.00
9 NGC	4,566,472	(0.000088)	(402)	4,566,472	(0.000088)	(402)	0	0.00
10 STC-TBC	4,566,472	0.000000	0	4,566,472	0.000000	0	0	0.00
11 STC-MTC-Tax	4,566,472	0.000000	0	4,566,472	0.000000	0	0	0.00
12 Zero Emission Certificate Recovery Charge	4,566,472	0.004000	18,266	4,566,472	0.004000	18,266	0	0.00
13 Solar Pilot Recovery Charge	4,566,472	0.000136	621	4,566,472	0.000136	621	0	0.00
14 CIEP Standby Fee	4,566,472	0.000150	685	4,566,472	0.000150	685	0	0.00
15 Green Programs Recovery Charge	4,566,472	0.001408	6,430	4,566,472	0.001408	6,430	0	0.00
16 Tax Adjustment Credit	4,566,472	-0.000465	-2,123	4,566,472	-0.000465	-2,123	0	0.00
17 Green Enabling Mechanism	4,566,472	0.000000	0	4,566,472	0.000000	0	0	0.00
18 Duplicate Svc (Same Sub/Different Sub)		\$1.83/\$2.20	105		\$1.83/\$2.20	105	0	0.00
19 Facilities Chg.		1.45%	686		1.45%	686	0	0.00
20 Minimum			0			0	0	0.00
21 Dist. Miscellaneous			(527)			(527)	0	0.00
22 Delivery subtotal	4,566,472		\$84,148	4,566,472		\$84,328	\$180	0.21
23 Unbilled Delivery			(300)			(301)	(1)	0.33
24 Delivery subtotal w unbilled			\$83,848			\$84,027	\$179	0.21

**RATE SCHEDULE HTS-SUBTR.  
HIGH TENSION SERVICE-SUBTRANSMISSION  
Madison and Marshall**  
(Units & Revenue in Thousands)

		<b>Annualized Weather Normalized</b>			<b>Proposed</b>			<b>Difference</b>	
		<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Percent</u>
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
<b>Supply-BGS</b>									
1	Generation Capacity Obl June-September	2,724	8.7587	\$23,859	2,724	8.7587	\$23,859	\$0	0.00
2	Generation Capacity Obl October-May	5,423	8.7587	47,498	5,423	8.7587	47,498	0	0.00
3	Transmission Capacity Obl	7,276	10.8603	79,020	7,276	10.8603	79,020	0	0.00
4	BGS kWhr June-September	1,616,031	0.036671	59,261	1,616,031	0.036671	59,261	0	0.00
5	Spare	0	0.036671	0	0	0.036671	0	0	0.00
6	BGS kWhr October-May	2,950,441	0.044162	130,297	2,950,441	0.044162	130,297	0	0.00
7	Spare	0	0.044162	0	0	0.044162	0	0	0.00
8	BGS Reconciliation-CIEP	4,566,472	0.000000	0	4,566,472	0.000000	0	0	0.00
9	BGS Miscellaneous			(24)			(24)	0	0.00
10	Supply subtotal	4,566,472		\$339,911	4,566,472		\$339,911	\$0	0.00
11	Unbilled Supply			<u>14,035</u>			<u>14,035</u>	<u>0</u>	0.00
12	Supply w Unbilled			\$353,946			\$353,946	\$0	0.00
13									
14	Total Delivery + Supply	4,566,472		<u>\$437,794</u>	4,566,472		<u>\$437,973</u>	<u>\$179</u>	0.04
15									
16									
17									
18									
19									
20									

Notes: All customers assumed to be on BGS.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE HTS-HV**  
**HIGH TENSION SERVICE-HIGH VOLTAGE**  
**Madison and Marshall**  
(Units & Revenue inThousands)

		<b>Annualized Weather Normalized</b>			<b>Proposed</b>			<b>Difference</b>	
		<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Percent</u>
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
	<b><u>Delivery</u></b>								
1	Service Charge	0.166	1,720.25	\$286	0.166	1,720.25	\$286	\$0	0.00
2	Distrib. KW Annual	3,286	0.6145	2,019	3,286	0.6166	2,026	7	0.35
3	Distrib. KW June - September	0	0.000000	0	0	0.000000	0	0	0.00
4	Distribution kWhr June - September	148,652	0.000000	0	148,652	0.000000	0	0	0.00
5	Spare	0	0.000000	0	0	0.000000	0	0	0.00
6	Distribution kWhr October - May	269,345	0.000000	0	269,345	0.000000	0	0	0.00
7	Spare	0	0.000000	0	0	0.000000	0	0	0.00
8	SBC	417,997	0.006908	2,888	417,997	0.006908	2,888	0	0.00
9	NGC	417,997	(0.000087)	(36)	417,997	(0.000087)	(36)	0	0.00
10	STC-TBC	417,997	0.000000	0	417,997	0.000000	0	0	0.00
11	STC-MTC-Tax	417,997	0.000000	0	417,997	0.000000	0	0	0.00
12	Zero Emission Certificate Recovery Charge	417,997	0.004000	1,672	417,997	0.004000	1,672	0	0.00
13	Solar Pilot Recovery Charge	417,997	0.000136	57	417,997	0.000136	57	0	0.00
14	CIEP Standby Fee	417,997	0.000150	63	417,997	0.000150	63	0	0.00
15	Green Programs Recovery Charge	417,997	0.001408	589	417,997	0.001408	589	0	0.00
16	Tax Adjustment Credit	417,997	-0.000211	-88	417,997	-0.000211	-88	0	0.00
17	Green Enabling Mechanism	417,997	0.000000	0	417,997	0.000000	0	0	0.00
18	Facilities Chg.			33			33	0	0.00
19	Minimum			0			0	0	0.00
20	Dist. Miscellaneous			(79)			(79)	0	0.00
21	Delivery subtotal	417,997		\$7,404	417,997		\$7,411	\$7	0.09
22	Unbilled Delivery			82			82	0	0.00
23	Delivery subtotal w unbilled			\$7,486			\$7,493	\$7	0.09

**RATE SCHEDULE HTS-HV**  
**HIGH TENSION SERVICE-HIGH VOLTAGE**  
**Madison and Marshall**  
 (Units & Revenue in Thousands)

		<b>Annualized Weather Normalized</b>			<b>Proposed</b>			<b>Difference</b>	
		<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Units</u>	<u>Rate</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Percent</u>
		(1)	(2)	(3=1*2)	(4)	(5)	(6=4*5)	(7=6-3)	(8=7/3)
<b><u>Supply-BGS</u></b>									
1	Generation Capacity Obl June-September	208	8.7587	\$1,822	208	8.7587	\$1,822	\$0	0.00
2	Generation Capacity Obl October-May	452	8.7587	3,959	452	8.7587	3,959	0	0.00
3	Transmission Capacity Obl	561	10.8603	6,093	561	10.8603	6,093	0	0.00
4	BGS kWhr June-September	148,652	0.030708	4,565	148,652	0.030708	4,565	0	0.00
5	Spare	0	0.030708	0	0	0.030708	0	0	0.00
6	BGS kWhr October-May	269,345	0.044893	12,092	269,345	0.044893	12,092	0	0.00
7	Spare	0	0.044893	0	0	0.044893	0	0	0.00
8	BGS Reconciliation-CIEP	417,997	0.000000	0	417,997	0.000000	0	0	0.00
9	BGS Miscellaneous			0			0	0	0.00
10	Supply subtotal	417,997		\$28,531	417,997		\$28,531	\$0	0.00
11	Unbilled Supply			0			0	0	0.00
12	Supply w Unbilled			\$28,531			\$28,531	\$0	0.00
13									
14	Total Delivery + Supply	417,997		<u>\$36,017</u>	417,997		<u>\$36,024</u>	<u>\$7</u>	0.02

Notes: All customers assumed to be on BGS.  
 Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE BPL**  
**BODY POLITIC LIGHTING SERVICE**  
**Madison and Marshall**  
 (Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b><u>Delivery</u></b>								
1 High Pressure Sodium	2,266.536	0	\$ 25,814	2,266.536	0	\$ 25,814	\$0	0.00
2 Metal Halide	281.316	0	6,365	281.316	0	6,365	0	0.00
3 Filament	153.684	0	577	153.684	0	577	0	0.00
4 Mercury Vapor	1,702.464	0	18,768	1,702.464	0	18,768	0	0.00
5 Fluorescent	0.204	0	3	0.204	0	3	0	0.00
6								
7 Distribution June-September	72,030	0.006713	\$484	72,030	0.006735	\$485	1	0.21
8 Distribution October-May	210,828	0.006713	1,415	210,828	0.006735	1,420	5	0.35
9 SBC	282,858	0.007169	2,028	282,858	0.007169	2,028	0	0.00
10 NGC	282,858	(0.000091)	(26)	282,858	(0.000091)	(26)	0	0.00
11 STC-TBC	282,858	0.000000	0	282,858	0.000000	0	0	0.00
12 STC-MTC-Tax	282,858	0.000000	0	282,858	0.000000	0	0	0.00
13 Zero Emission Certificate Recovery Char	282,858	0.004000	1,131	282,858	0.004000	1,131	0	0.00
14 Solar Pilot Recovery Charge	282,858	0.000136	38	282,858	0.000136	38	0	0.00
15 Green Programs Recovery Charge	282,858	0.001408	398	282,858	0.001408	398	0	0.00
16 Tax Adjustment Credit	282,858	0.000000	0	282,858	0.000000	0	0	0.00
17 Green Enabling Mechanism	282,858	0.000000	0	282,858	0.000000	0	0	0.00
18								
19 Pole Charges	555.636		2,237	555.636		2,237	0	0.00
20 Minimum			0			0	0	0.00
21 Miscellaneous			352			352	0	0.00
22 Delivery Subtotal			\$59,584			\$59,590	\$6	0.01
23 Unbilled Delivery			0			0	0	0.00
24 Delivery Subtotal w unbilled			\$59,584			\$59,590	\$6	0.01
25								
26 <b><u>Supply-BGS</u></b>								
27 BGS June-September	72,030	0.041926	3,020	72,030	0.041926	3,020	0	0.00
28 BGS October-May	210,828	0.046908	9,890	210,828	0.046908	9,890	0	0.00
29 BGS Reconciliation-RSCP	282,858	0.000000	0	282,858	0.000000	0	0	0.00
30 Miscellaneous			(104)			(104)	0	0.00
31 Supply subtotal			\$12,806			\$12,806	\$0	0.00
32 Unbilled Supply			0			0	0	0.00
33 Supply subtotal w unbilled			\$12,806			\$12,806	\$0	0.00
34								
35 Total Delivery + Supply	282,858		\$72,390	282,858		\$72,396	\$6	0.01

Notes: All customers assumed to be on BGS.  
 Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE BPL-POF**  
**BODY POLITIC LIGHTING SERVICE-POF**  
**Madison and Marshall**  
(Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b>Delivery</b>								
1 High Pressure Sodium	125.460	0	\$ 181.000	125.460	0	\$ 181.000	\$0.000	0.00
2 Metal Halide	1.476	0	\$ 5.000	1.476	0	\$ 5.000	\$0.000	0.00
3 Filament	5.916	0	\$ 22.000	5.916	0	\$ 22.000	\$0.000	0.00
4 Mercury Vapor	4.236	0	\$ 4.000	4.236	0	\$ 4.000	\$0.000	0.00
5 Fluorescent	0.024	0	\$ -	0.024	0	\$ -	\$0.000	0.00
6								
7 Distribution June-September	4,259	0.006708	\$ 28.569	4,259	0.006729	\$ 28.659	\$0.090	0.32
8 Distribution October-May	10,191	0.006708	\$ 68.361	10,191	0.006729	\$ 68.575	\$0.214	0.31
9 SBC	14,450	0.007169	\$ 103.592	14,450	0.007169	\$ 103.592	\$0.000	0.00
10 NGC	14,450	(0.000091)	\$ (1.315)	14,450	(0.000091)	\$ (1.315)	\$0.000	0.00
11 STC-TBC	14,450	0.000000	\$ -	14,450	0.000000	\$ -	\$0.000	0.00
12 STC-MTC-Tax	14,450	0.000000	\$ -	14,450	0.000000	\$ -	\$0.000	0.00
13 Zero Emission Certificate Recovery Cha	14,450	0.004000	\$ 57.800	14,450	0.004000	\$ 57.800	\$0.000	0.00
14 Solar Pilot Recovery Charge	14,450	0.000136	\$ 1.965	14,450	0.000136	\$ 1.965	\$0.000	0.00
15 Green Programs Recovery Charge	14,450	0.001408	\$ 20.346	14,450	0.001408	\$ 20.346	\$0.000	0.00
16 Tax Adjustment Credit	14,450	-0.001107	\$ (15.996)	14,450	-0.001107	\$ (15.996)	\$0.000	0.00
17 Green Enabling Mechanism	14,450	0.000000	\$ -	14,450	0.000000	\$ -	\$0.000	0.00
18								
19 Pole Charges			\$ -			\$ -	\$0.000	0.00
20 Minimum			\$ -			\$ -	\$0.000	0.00
21 Miscellaneous			\$ 11.000			\$ 10.996	-\$0.004	(0.04)
22 Delivery Subtotal			\$ 486.322			\$ 486.622	\$0.300	0.06
23 Unbilled Delivery			\$ -			\$ -	\$0.000	0.00
24 Delivery Subtotal w unbilled			\$ 486.322			\$ 486.622	\$0.300	0.06
25								
26 <b>Supply-BGS</b>								
27 BGS June-September	4,259	0.041926	\$ 178.563	4,259	0.041926	\$ 178.563	\$0.000	0.00
28 BGS October-May	10,191	0.046908	\$ 478.039	10,191	0.046908	\$ 478.039	\$0.000	0.00
29 BGS Reconciliation-RSCP	14,450	0.000000	\$ -	14,450	0.000000	\$ -	\$0.000	0.00
30 Miscellaneous			\$ -			\$ -	\$0.000	0.00
31 Supply subtotal			\$ 656.602			\$ 656.602	\$0.000	0.00
32 Unbilled Supply			\$ -			\$ -	\$0.000	0.00
33 Supply subtotal w unbilled			\$ 656.602			\$ 656.602	\$0.000	0.00
34								
35 Total Delivery + Supply	14,450		\$ 1,142.924	14,450		\$ 1,143.224	\$0.300	0.03
36								
37								
38								
39								
40								
41								

Notes: All customers assumed to be on BGS.  
WH, WHS & BPL-POF revenues shown to 3 decimals.  
Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019

**RATE SCHEDULE PSAL**  
**PRIVATE STREET AND AREA LIGHTING SERVICE**  
**Madison and Marshall**  
 (Units & Revenue in Thousands)

	Annualized Weather Normalized			Proposed			Difference	
	Units (1)	Rate (2)	Revenue (3=1*2)	Units (4)	Rate (5)	Revenue (6=4*5)	Revenue (7=6-3)	Percent (8=7/3)
<b><u>Delivery</u></b>								
1 High Pressure Sodium	818.700	0	\$ 15,407	818.700	0	\$ 15,407	\$0	0.00
2 Metal Halide	231.864	0	6,308	231.864	0	6,308	0	0.00
3 Filament	0.792	0	4	0.792	0	4	0	0.00
4 Mercury Vapor	102.132	0	1,509	102.132	0	1,509	0	0.00
5 Fluorescent	0.012	0	-	0.012	0	-	0	0.00
6								
7 Distribution June-September	41,200	0.007152	\$295	41,200	0.007184	\$296	1	0.34
8 Distribution October-May	110,532	0.007152	791	110,532	0.007184	794	3	0.38
9 SBC	151,732	0.007169	1,088	151,732	0.007169	1,088	0	0.00
10 NGC	151,732	(0.000091)	(14)	151,732	(0.000091)	(14)	0	0.00
11 STC-TBC	151,732	0.000000	0	151,732	0.000000	0	0	0.00
12 STC-MTC-Tax	151,732	0.000000	0	151,732	0.000000	0	0	0.00
13 Zero Emission Certificate Recovery Char	151,732	0.004000	607	151,732	0.004000	607	0	0.00
14 Solar Pilot Recovery Charge	151,732	0.000136	21	151,732	0.000136	21	0	0.00
15 Green Programs Recovery Charge	151,732	0.001408	214	151,732	0.001408	214	0	0.00
16 Tax Adjustment Credit	151,732	0.000000	0	151,732	0.000000	0	0	0.00
17 Green Enabling Mechanism	151,732	0.000000	0	151,732	0.000000	0	0	0.00
18								
19 Pole Charges	427.500		3,510	427.500		3,510	0	0.00
20 Minimum			0			0	0	0.00
21 Miscellaneous			53			53	0	0.00
22 Delivery Subtotal			\$29,793			\$29,797	\$4	0.01
23 Unbilled Delivery			(93)			(93)	0	0.00
24 Delivery Subtotal w unbilled			\$29,700			\$29,704	\$4	0.01
25								
26 <b><u>Supply-BGS</u></b>								
27 BGS June-September	41,200	0.041926	1,727	41,200	0.041926	1,727	0	0.00
28 BGS October-May	110,532	0.046908	5,185	110,532	0.046908	5,185	0	0.00
29 BGS Reconciliation-RSCP	151,732	0.000000	0	151,732	0.000000	0	0	0.00
30 Miscellaneous			190			190	0	0.00
31 Supply subtotal			\$7,102			\$7,102	\$0	0.00
32 Unbilled Supply			(60)			(60)	0	0.00
33 Supply subtotal w unbilled			\$7,042			\$7,042	\$0	0.00
34								
35 Total Delivery + Supply	151,732		<u>\$36,742</u>	151,732		<u>\$36,746</u>	<u>\$4</u>	0.01
36								
37								
38								
39								
40								

Notes: All customers assumed to be on BGS.  
 Annualized Weather Normalized Revenue reflects Delivery rates in effect 4/18/2019



		Present		Proposed		
		Charge	Charge	Charge	Charge	
		w/out SUT	including SUT	w/out SUT	including SUT	Difference w/out SUT
<b><u>Rate Schedules</u></b>						
RS	Service Charge	\$4.64	\$4.95	\$4.64	\$4.95	\$0.00
	Distribution 0-600 Sum	\$0.037239	\$0.039706	\$0.038262	\$0.040797	\$0.001023
	Distribution 0-600 Win	\$0.033344	\$0.035553	\$0.033344	\$0.035553	\$0.000000
	Distribution over 600 Sum	\$0.041060	\$0.043780	\$0.042083	\$0.044871	\$0.001023
	Distribution over 600 Win	\$0.033344	\$0.035553	\$0.033344	\$0.035553	\$0.000000
RHS	Service Charge	\$4.64	\$4.95	\$4.64	\$4.95	\$0.00
	Distribution 0-600 Sum	\$0.048037	\$0.051219	\$0.048628	\$0.051850	\$0.000591
	Distribution 0-600 Win	\$0.032539	\$0.034695	\$0.032800	\$0.034973	\$0.000261
	Distribution over 600 Sum	\$0.052937	\$0.056444	\$0.053528	\$0.057074	\$0.000591
	Distribution over 600 Win	\$0.014939	\$0.015929	\$0.015200	\$0.016207	\$0.000261
	Common Use	\$0.052937	\$0.056444	\$0.053528	\$0.057074	\$0.000591
RLM	Service Charge	\$13.07	\$13.94	\$13.07	\$13.94	\$0.00
	Distrib. kWhr Summer On	\$0.069819	\$0.074445	\$0.070569	\$0.075244	\$0.000750
	Distrib. kWhr Summer Off	\$0.014566	\$0.015531	\$0.014733	\$0.015709	\$0.000167
	Distrib. kWhr Winter On	\$0.014566	\$0.015531	\$0.014733	\$0.015709	\$0.000167
	Distrib. kWhr Winter Off	\$0.014566	\$0.015531	\$0.014733	\$0.015709	\$0.000167
WH	Distribution	\$0.047122	\$0.050244	\$0.047389	\$0.050529	\$0.000267
WHS	Service Charge	\$0.58	\$0.62	\$0.59	\$0.63	\$0.01
	Distribution	\$0.001580	\$0.001685	\$0.001615	\$0.001722	\$0.000035
HS	Service Charge	\$3.48	\$3.71	\$3.51	\$3.74	\$0.03
	Distribution June-September	\$0.095993	\$0.102353	\$0.096281	\$0.102660	\$0.000288
	Distribution October-May	\$0.028716	\$0.030618	\$0.028795	\$0.030703	\$0.000079
GLP	Service Charge	\$4.43	\$4.72	\$4.47	\$4.77	\$0.04
	Service Charge-unmetered	\$2.05	\$2.19	\$2.07	\$2.21	\$0.02
	Service Charge-Night Use	\$347.77	\$370.81	\$347.77	\$370.81	\$0.00
	Distrib. KW Annual	\$3.6834	\$3.9274	\$3.6935	\$3.9382	\$0.0101
	Distrib. KW Summer	\$9.2370	\$9.8490	\$9.2623	\$9.8759	\$0.0253
	Distribution kWhr, June-September	\$0.003011	\$0.003210	\$0.003019	\$0.003219	\$0.000008
	Distribution kWhr, October-May	\$0.007686	\$0.008195	\$0.007707	\$0.008218	\$0.000021
	Distribution kWhr, Night use, June-September	\$0.007686	\$0.008195	\$0.007707	\$0.008218	\$0.000021
	Distribution kWhr, Night use, October-May	\$0.007686	\$0.008195	\$0.007707	\$0.008218	\$0.000021

		<u>Present</u>		<u>Proposed</u>		<u>Difference w/out SUT</u>
		<u>Charge w/out SUT</u>	<u>Charge including SUT</u>	<u>Charge w/out SUT</u>	<u>Charge including SUT</u>	
<b><u>Rate Schedules</u></b>						
LPL-Secondary	Service Charge	\$347.77	\$370.81	\$347.77	\$370.81	\$0.00
	Distrib. KW Annual	\$3.5156	\$3.7485	\$3.5285	\$3.7623	\$0.0129
	Distrib. KW Summer	\$8.3638	\$8.9179	\$8.3946	\$8.9507	\$0.0308
	Distribution kWhr	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000
LPL-Primary	Service Charge	\$347.77	\$370.81	\$347.77	\$370.81	\$0.00
	Service Charge-Alternate	\$20.02	\$21.35	\$20.21	\$21.55	\$0.19
	Distrib. KW Annual	\$1.6389	\$1.7475	\$1.6444	\$1.7533	\$0.0055
	Distrib. KW Summer	\$9.0979	\$9.7006	\$9.1287	\$9.7335	\$0.0308
	Distribution kWhr	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000
HTS-Subtransmission	Service Charge	\$1,911.39	\$2,038.02	\$1,911.39	\$2,038.02	\$0.00
	Distrib. KW Annual	\$1.0646	\$1.1351	\$1.0725	\$1.1436	\$0.0079
	Distrib. KW Summer	\$3.8482	\$4.1031	\$3.8769	\$4.1337	\$0.0287
	Distribution kWhr	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000
HTS-HV	Service Charge	\$1,720.25	\$1,834.22	\$1,720.25	\$1,834.22	\$0.00
	Distrib. KW Annual	\$0.6145	\$0.6552	\$0.6166	\$0.6574	\$0.0021
	Distribution kWhr	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000
BPL	Distribution Sum	\$0.006713	\$0.007158	\$0.006735	\$0.007181	\$0.000022
	Distribution Winter	\$0.006713	\$0.007158	\$0.006735	\$0.007181	\$0.000022
BPL-POF	Distribution Sum	\$0.006708	\$0.007152	\$0.006729	\$0.007175	\$0.000021
	Distribution Winter	\$0.006708	\$0.007152	\$0.006729	\$0.007175	\$0.000021
PSAL	Distribution Sum	\$0.007152	\$0.007626	\$0.007184	\$0.007660	\$0.000032
	Distribution Winter	\$0.007152	\$0.007626	\$0.007184	\$0.007660	\$0.000032

## TYPICAL RESIDENTIAL ELECTRIC BILL IMPACTS

The effect of the proposed change in the Madison & Marshall substations (M&M) on typical residential electric bills, if approved by the Board, is illustrated below:

<b>Residential Electric Service</b>					
If Your Monthly Summer kWhr Use Is:	And Your Annual kWhr Use Is:	Then Your Present Annual Bill (1) Would Be:	And Your Proposed Annual Bill (2) Would Be:	Your Annual Bill Change Would Be:	And Your Percent Change Would Be:
185	1,732	\$357.80	\$358.60	\$0.80	0.22%
370	3,464	656.08	657.68	1.60	0.24
740	6,920	1,258.84	1,262.08	3.24	0.26
803	7,800	1,413.30	1,416.83	3.53	0.25
1,337	12,500	2,252.48	2,258.32	5.84	0.26

(1) Based upon current Delivery Rates and Basic Generation Service Residential Small Commercial Pricing (BGS-RSCP) charges in effect April 18, 2019 and assumes that the customer receives BGS-RSCP service from Public Service.

(2) Same as (1) except includes change in M&M.

<b>Residential Electric Service</b>					
If Your Annual kWhr Use Is:	And Your Monthly Summer kWhr Use Is:	Then Your Present Monthly Summer Bill (3) Would Be:	And Your Proposed Monthly Summer Bill (4) Would Be:	Your Monthly Summer Bill Change Would Be:	And Your Percent Change Would Be:
1,732	185	\$37.25	\$37.45	\$0.20	0.54%
3,464	370	69.56	69.96	0.40	0.58
6,920	740	136.07	136.88	0.81	0.60
7,800	803	147.93	148.81	0.88	0.59
12,500	1,337	248.50	249.96	1.46	0.59

(3) Based upon current Delivery Rates and Basic Generation Service Residential Small Commercial Pricing (BGS-RSCP) charges in effect April 18, 2019 and assumes that the customer receives BGS-RSCP service from Public Service

(4) Same as (3) except includes change in M&M.

## **NOTICE TO PUBLIC SERVICE ELECTRIC AND GAS COMPANY ELECTRIC CUSTOMERS**

### **IN THE MATTER OF THE PETITION OF PUBLIC SERVICE ELECTRIC AND GAS COMPANY FOR APPROVAL OF THE MADISON & MARSHALL SUBSTATIONS (M&M)**

#### **Notice of a Filing and Notice of Public Hearings**

#### **Docket No. XXXXXXXXXX**

**TAKE NOTICE** that, on April 30, 2019 Public Service Electric and Gas Company (Public Service, PSE&G, the Company) filed a Petition and supporting documentation with the New Jersey Board of Public Utilities (Board, BPU) seeking Board approval for electric base rate changes to provide for cost recovery associated with the Company's Madison & Marshall (M&M) Substations.

The filing reflects PSE&G's recovery of and on the capital investments associated with the M&M substations that were incurred from October 1, 2014 through June 30, 2019. The substations were initially part of the Energy Strong Program (ES) approved by the Board Docket Nos. EO13020155 & GO13020156 on May 21, 2014. However, due to a scope change related to the raise and rebuild of the M&M Substations, the investments were to be recovered outside of ES. This filing is being made pursuant an Agreement Regarding Withdrawal of Objection (Agreement), dated November 30, 2016. The agreement allowed the Company to reflect reasonable and prudent costs associated with the M&M substations to be reflected in base rates so long as it went into service more than six months but less than one year after the test year in the Company's 2018 Base Rate Case.

Under the Company's proposal, PSE&G seeks Board approval to recover in base rates an estimated annual revenue increase associated with the capitalized investment costs of the M&M substations incurred through June 30, 2019 of approximately \$7.4 million from the Company's electric customers.

For illustrative purposes the estimated Base Rates effective October 1, 2019 including New Jersey Sales and Use Tax (SUT) for residential Rate Schedule RS are shown in Table #1.

Table #2 provides customers with the approximate impact of the proposed increase in rates relating to the M&M substations, if approved by the Board. The annual percentage increase applicable to specific

customers will vary according to the applicable rate schedule and the level of the customer's usage.

Under the Company's proposal, a typical residential electric customer using 740 kilowatt-hours per summer month and 6,920 kilowatt-hours on an annual basis would see an increase in the annual bill from \$1,258.84 to \$1,262.08, or \$3.24 or approximately 0.26%. The approximate effect of the proposed increase on typical electric residential monthly bills, if approved by the Board, is illustrated in Table #3.

Any rate adjustments with resulting changes in bill impacts found by the Board to be just and reasonable as the result of the Company's filing may be modified and/or allocated by the Board in accordance with the provisions of N.J.S.A 48:2-21 and for other good and legally sufficient reasons to any class or classes of customers of the Company. Therefore, the described charges may increase or decrease based upon the Board's decision.

Copies of the Company's filing are available for review at the Company's Customer Service Centers (addresses located here: <https://nj.pseg.com/customerservicelocations>), online at the PSEG website at <http://www.pseg.com/pseandgfilings>, and at the Board of Public Utilities at 44 South Clinton Avenue, 2nd Floor, Trenton, New Jersey 08625-0350. Any member of the public who wants to inspect the petition at the Board may contact the Board's Division of Case Management at (609) 292-0806 to schedule an appointment.

The following dates, times and locations for public hearings have been scheduled on the Company's filing so that members of the public may present their views. Information provided at the public hearings will become part of the record of this case and will be considered by the Board in making its decision.

Date 1, 2019  
Time 1  
Location 1  
Room 1  
Address 1  
Address Overflow 1  
City 1, N.J. Zip Code 1

Date 2, 2019  
Time 2  
Location 2  
Room 2  
Address 2  
Address Overflow 2  
City 2, N.J. Zip Code 2

Date 3, 2019  
Time 3  
Location 3  
Room 3  
Address 3  
Address Overflow 3  
City 3, N.J. Zip Code 3

In order to encourage full participation in this opportunity for public comment, please submit any requests for needed accommodations, including interpreters, listening devices or mobility assistance, 48 hours prior to the above hearings.

Customers may also file written comments with the Secretary of the Board of Public Utilities at 44 South Clinton Avenue, 3<sup>rd</sup> Floor, Suite 314, P.O. Box 350, Trenton, New Jersey, 08625-0350 ATTN: Secretary Aida Camacho-Welch whether or not they attend the public hearings.

**Table #1**  
**ELECTRIC BASE RATES**  
**For Residential Customers**  
**Rates if Effective October 1, 2019**

		Base Rates		
Electric			Charges in Effect April 18, 2019 Including SUT	Proposed Charges in Effect October 1, 2019 Including SUT
RS	Service Charge	per month	\$4.95	\$4.95
	Distribution 0-600, June-September	\$/kWh	0.039706	0.040797
	Distribution 0-600, October-May	\$/kWh	0.035553	0.035553
	Distribution over 600, June-September	\$/kWh	0.043780	0.044871
	Distribution over 600, October-May	\$/kWh	0.035553	0.035553

**Table #2**  
**Proposed Percentage Change**  
**By Customer Class For Electric Service**  
**For Rates if Effective October 1, 2019**

Electric		
	Rate Class	Percent Change
Residential	RS	0.25%
Residential Heating	RHS	0.26
Residential Load Management	RLM	0.17
Water Heating	WH	0.26
Water Heating Storage	WHS	0.57
Building Heating	HS	0.08
General Lighting & Power	GLP	0.07
Large Power & Lighting- Sec.	LPL-S	0.05
Large Power & Lighting- Pri.	LPL-P	0.03
High Tension-Subtr.	HTS-S	0.04
High Tension-HV	HTS-HV	0.02
Body Politic Lighting	BPL	0.01
Body Politic Lighting-POF	BPL-POF	0.03
Private Street & Area Lighting	PSAL	0.01
Overall		0.13

The percent increases noted above are based upon April 18, 2019 Delivery Rates, the applicable Basic Generation Service (BGS) charges, and assumes that customers receive commodity service from Public Service Electric and Gas Company.

**Table #3**  
**Residential Electric Service For Rates if Effective October 1, 2019**

<b>If Your Annual kWh Use Is:</b>	<b>And Your Monthly Summer kWh Use Is:</b>	<b>Then Your Present Monthly Summer Bill (1) Would Be:</b>	<b>And Your Proposed Monthly Summer Bill (2) Would Be:</b>	<b>Your Monthly Summer Bill Increase Would Be:</b>	<b>And Your Monthly Summer Percent Increase Would Be:</b>
1,732	185	\$37.25	\$37.45	\$0.20	0.54%
3,464	370	69.56	69.96	0.40	0.58
6,920	740	136.07	136.88	0.81	0.60
7,800	803	147.93	148.81	0.88	0.59
12,500	1,337	248.50	249.96	1.46	0.59

- (1) Based upon Delivery Rates and Basic Generation Service Residential Small Commercial Pricing (BGS-RSCP) charges in effect April 18, 2019 and assumes that the customer receives BGS-RSCP service from Public Service Electric and Gas Company.
- (2) Same as (1) except includes the proposed change for the Madison and Marshall Substations.

**Matthew Weissman, Esq.**  
**General Regulatory Counsel - Rates**

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

Attachment 4

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**INCOME ACCOUNT**

	<u>YTD 2018 *</u> '(\$000)
400 Electric Operating Revenues	3,149,850
Electric Operating Expenses:	
401 Operation Expense	2,195,136
402 Maintenance Expense	125,949
403 Depreciation Expense	271,664
404 Amortization of Limited Term Plant	12,105
407 Amortization of Property Losses	24,866
408.1 Taxes Other Than Income Taxes	23,558
409.1 Income Taxes - Federal	(18,262)
410.1 Provision for Deferred Income Taxes	918,677
411.1 Provision for Deferred Income Taxes - Credit	(793,364)
411.103 Accretion Expense-Electric	0
411.4 Investment Tax Credit Adjustments (Net)	(8,528)
Total Electric Utility Operating Expenses	<u>2,751,800</u>
Electric Utility Operating Income	<u>\$ 398,050</u>

\* Electric Distribution only

	<u>YTD 2018</u>
400 Gas Operating Revenues	1,790,946
Gas Operating Expenses:	
401 Operation Expense	1,197,349
402 Maintenance Expense	37,620
403 Depreciation Expense	151,969
404 Amortization of Limited Term Plant	9,446
407 Amortization of Property Losses	35,044
407.3 Amortization of Excess cost of removal	19,621
407.4 Amortization of Excess cost of removal	0
408.1 Taxes Other Than Income Taxes	19,175
409.1 Income Taxes - Federal	(37,249)
410.1 Provision for Deferred Income Taxes	1,369,818
411.1 Provision for Deferred Income Taxes - Cr	(1,284,180)
411.4 Investment Tax Credit Adjustments (Net)	(832)
Total Gas Utility Operating Expenses	<u>1,517,781</u>
Gas Utility Operating Income	<u>\$ 273,165</u>

Net Utility Operating Income	<u>\$ 671,215</u>
------------------------------	-------------------

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**BALANCE SHEET**  
**\$ (In Thousands)**

**Dec 31, 2018**

Assets and Other Debits

Utility Plant

Electric Utility Plant

101	Electric Utility Plant in Service	\$	18,387,991
103	Electric Experimental Plant Unclassified		-
105	Electric Utility Plant Held for Future Use		19,409
106	Electric Completed Construction not classified- Electric		3,555,623
107	Electric Construction Work in Progress		1,155,960
	Total Electric Utility Plant		<u>23,118,984</u>

Gas Utility Plant

101	Gas Utility Plant in Service	\$	8,040,321
103	Gas Experimental Plant Unclassified		-
105	Gas Utility Plant Held for Future Use		96
106	Gas Completed Construction not classified		86,011
107	Gas Construction Work in Progress		13,317
	Total Gas Utility Plant		<u>8,139,745</u>

Common Utility Plant

101	Common Utility Plant in Service	\$	435,766
106	Common Completed Construction not classified		8,527
107	Common Construction Work in Progress		17,345
	Total Common Utility Plant		<u>461,638</u>

Total Utility Plant 31,720,368

Accumulated Provisions for Depreciation and Amortization of  
Electric Utility Plant

108 & 111	Electric Utility Plant in Service	(3,636,440)
108.5	Electric Utility Plant Held for Future Use	-
	Total Electric Utility Plant	<u>(3,636,440)</u>

Gas Utility Plant

108 & 111	Gas Utility Plant in Service	(2,292,658)
-----------	------------------------------	-------------

Common Utility Plant

108 & 111	Common Utility Plant in Service	(175,530)
-----------	---------------------------------	-----------

Total Accumulated Provisions for  
Depreciation and Amortization  
of Utility Plant

		<u>(6,104,628)</u>
--	--	--------------------

Net Utility Plant Excluding Nuclear Fuel 25,615,739

Other Property and Investments

121	Nonutility Property	3,249
122	Accumulated Provision for Depreciation & Amortization of Nonutility Property	(787)
123 & 123.1	Investments in Associated & Subsidiary Companies	45,354
124	Other Investments	269,679
125-8	Special Funds	44,647
175	Long-Term Portion of Derivative Assets	-
	Total Other Property and Investments	<u>362,142</u>



**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**BALANCE SHEET**

Dec 31, 2018

Current and Accrued Assets

131	Cash	\$	39,059
132-4	Special Deposits		21,115
135	Working Funds		-
136	Temporary Cash Investments		0
141-3	Notes and Accounts Receivable		953,611
144	Accumulated Provision for Uncollectible Accounts - Credit		(63,130)
145-6	Receivables from Associated Companies		141,675
151-5	Materials and Supplies (incl. 163)		195,921
158	Allowances		-
164	Gas Stored Underground - Current		-
165	Prepayments		10,177
171	Interest and Dividends Receivable		-
172	Rents Receivable		8,213
173	Accrued Utility Revenues		239,531
174	Miscellaneous Current and Accrued		2,689
175	Current Portion of Derivative Instrument Assets		-
	Total Current and Accrued Assets		1,548,862

Deferred Debits

181	Unamortized Debt Expense		51,253
182	Unrec'd Plt and Reg Costs and Other Reg Assets		3,761,208
183	Preliminary Survey and Investigation Charges		24,463
184	Clearing Accounts		422
185	Temporary Facilities		-
186	Miscellaneous Deferred Debits		41,392
188	Research and Development Expenditures		-
189	Unamortized Loss on Reacquired Debt		48,561
190	Accumulated Deferred Income Taxes		995,947
	Total Deferred Debits		4,923,246

Total Assets and Other Debits

\$ 32,449,989  
(0)

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**BALANCE SHEET**

Dec 31, 2018

Liabilities and Other Credits

Proprietary Capital

201	Common Stock Issued	\$	892,260
204	Preferred Stock Issued		-
207	Premium on Capital Stock		-
208	Donations from Stockholders		2,080,903
210	Gain on Resale or Cancellation of Required Capital Stock		-
211	Miscellaneous Paid-In Capital		-
215	Appropriated Retained Earnings		-
216	Unappropriated Retained Earnings		7,975,916
216.1	Unappropriated Undistributed Subsidiary Earnings		272
219	Other Comprehensive Income		(749)
	Total Proprietary Capital		<u>10,948,603</u>

Long-Term Debt

221	221 Bonds		9,258,381
223	223 Advances from Assoc. Co.		-
225	225 Unamortized Premium on Long-Term Debt		-
226	226 Unamortized Discount on Long-Term Debt		(22,833)
	Total Long-Term Debt		<u>9,235,548</u>

Other Non-Current Liabilities

227-9	Other Non-current Liabilities		914,471
244	Long-Term Portion of Derivative Instrument Liabilities		-
230	Asset Retirement Obligation		302,071
	Total Other Non-Current Liabilities		<u>1,216,542</u>

Current and Accrued Liabilities

231	Notes Payable		271,560
232	Accounts Payable		713,326
233-4	Payables to Associated Companies		317,876
235	Customer Deposits		92,268
236	Taxes Accrued		3,095
237	Interest Accrued		95,752
238	Dividends Declared		-
239	Matured Long-Term Debt		-
241	Tax Collections Payable		365
242	Miscellaneous Current and Accrued Liabilities		491,748
243	Obligations Under Capital leases		-
244	Current Portion of Derivative Instrument Liabilities		-
	Total Current and Accrued Liabilities		<u>1,985,989</u>

Deferred Credits

252	Customer Advances for Construction		44,890
253	Other Deferred Credits		369,566
254	Other Regulatory Liabilities		3,697,658
255	Accumulated Deferred Investment Tax Credits		131,884
281-3	Accumulated Deferred Income Taxes		4,819,309
	Total Deferred Credits		<u>9,063,307</u>

Total Liabilities and Other Credits

\$ 32,449,989