

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

In the Matter of the Verified Petition of **Jersey** : BPU Docket No.
Central Power & Light Company For :
Approval of An Advanced Metering :
Infrastructure (AMI) Program (**JCP&L AMI**) :
: **VERIFIED PETITION**

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

Petitioner, Jersey Central Power & Light Company (the "Petitioner", the "Company" or "JCP&L"), an electric public utility company of the State of New Jersey subject to the regulatory jurisdiction of the Board of Public Utilities (the "Board" or "BPU"), and maintaining principal offices at 300 Madison Avenue, Morristown, New Jersey 07962-1911 and 101 Crawford Corner Road, Building 1, Suite 1-511, Holmdel, New Jersey 07733, respectfully petitions the Board pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1, as follows.

INTRODUCTION

1. JCP&L is a New Jersey electric public utility primarily engaged in the purchase, transmission, distribution, and sale of electric energy and related utility services to approximately 1.1 million residential, commercial and industrial customers located within 13 counties and 236 municipalities of the State of New Jersey.

2. In compliance with the Board’s February 19, 2020 Decision and Order in BPU Docket No. ER16060534 (“AMI Filing Order”)¹, and by way of this Verified Petition and its supporting testimony, the Company is proposing the JCP&L Advanced Metering Infrastructure (“AMI”)

¹ *In the Matter of the Petition of Rockland Electric Company for Approval Of an Advanced Metering Program; and For Other Relief*, BPU Docket No. ER16060524, Decision and Order (February 19, 2020).

Program (“JCP&L AMI Program” or “Program”). Under the Program, the Company proposes to install advanced meters and other advanced metering infrastructure throughout its service territory over an accelerated multi-year period and afford AMI benefits to its residential, commercial and industrial customers.

THE JCP&L AMI PROGRAM

Background

3. The JCP&L AMI Program is filed in response to and in compliance with the AMI Filing Order. The AMI Order ordered JCP&L and other New Jersey electric distribution utilities to file a petition “for AMI implementation”, or update a previously filed petition, by August 27, 2020. The Board’s AMI Filing Order provides that the utilities may choose to file petitions pursuant to “any applicable regulations....” JCP&L files this compliance Petition to seek approval of the JCP&L AMI Program, including its cost recovery mechanism, pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1. Under JCP&L’s Advanced Metering Infrastructure Plan included as Attachment B to the testimony of John C. Ahr (“AMI Plan” or “Business Case”), JCP&L proposes to install advanced meters throughout its service territory over a three-year period commencing on January 1, 2023.

AMI Deployment

4. Under the AMI Plan, the Company will engage in a one-year Pre-Deployment Phase commencing January 1, 2022. The Pre-Deployment Phase consists of two successive six-month periods. The first period is a planning period wherein the Company will: confirm its project team, assess market conditions and pricing, contract with key vendors, make arrangements for procurement of equipment and resources, and develop construction and deployment schedules. An

additional six-month period in the Pre-Deployment Phase is for the build out of necessary IT infrastructure.

5. The Company will commence the installation of advanced meters on January 1, 2023 and continue to do so during the three-year period ending December 2025 (the “Deployment Phase”). JCP&L proposes to install approximately 1.15 million advanced meters, also known as “smart meters,” and related infrastructure throughout its service territory over the course of the Deployment Phase.² JCP&L’s entire mass market customer base of residential, commercial and industrial customers (approximately 99% of all customers), with limited exceptions, will receive a smart meter during this time. During the Deployment Phase, the Company also intends to integrate the AMI system with an advanced distribution management system (“ADMS”).

6. In the twenty-four month period following the Deployment Phase (the “Final Engineering Phase”), the Company will address large commercial and industrial customers that already have advanced interval metering, customers that are difficult to reach, or customers that may require alternative communications solutions (collectively “Challenged Locations”) and install related equipment to complete its AMI communications network. It is during this Final Engineering Phase that the remaining 1% of customers will receive a smart meter.

7. The Company has developed a Customer Communications Plan to communicate with and educate customers before and during AMI implementation. The Customer Communications Plan includes a host of strategies for communicating with customers, communities and other

² As discussed in detail in the testimony of Mr. Ahr and the AMI Plan attached thereto, the “AMI Solution” to be installed includes a network of smart meters (which communicate with each other in a “mesh network”), a field area network (“FAN”) providing connectivity to the smart meters, Range Extenders (“RE”) providing connectivity in suboptimal areas, a wide area network (“WAN”) providing backhaul from the meters, Connected Grid Routers (“CGR”) providing the collection point between the FAN and WAN, Head End software that collects information via backhaul from the meters, a meter data management system (“MDMS”) storing the energy usage data delivered from the head end, and various other core application processes.

stakeholders before meter installation, on installation day, and post-installation. The Customer Communications Plan is attached as an Appendix to the Business Case attached to Mr. Ahr's testimony.

8. JCP&L proposes that residential customers may opt-out of the AMI Program; such customers will pay a monthly fee of \$28.09 for meter readings services. Such customers who elect to replace an AMI meter after it has already been installed with a non-AMI meter (in lieu of the option of disabling communications to the AMI meter) will also pay a one-time meter change out fee of \$44.46. Commercial and industrial customers, as well as any customer who is participating in a net metering program or is taking service under a time varied rate, will not be permitted to opt out of an AMI meter.

AMI Costs

9. Over the twenty-year study period, the Company projects total costs of the Program of \$732 million, with \$506 million in capital investment and \$227 million in operations and maintenance ("O&M") costs. During the Deployment Phase and the one-year period prior to the start of the Deployment Phase (the "Pre-deployment Phase"), JCP&L estimates expenditures of \$418 million, consisting of capital investment of \$342 million and O&M costs of approximately \$76 million. As described in detail in the AMI Plan attached to the direct testimony of Mr. Ahr, the proposed investments include the capital and O&M costs associated with the smart meters, field area network ("FAN") and backhaul; Information Technology ("IT"); and staffing and support (e.g. labor).

10. The costs of the AMI Program, however, are far exceeded by the quantifiable benefits of the Program. The benefits of the Program and the Company's cost-benefit analysis are addressed below, in the direct testimony of Mr. Ahr, and in the AMI Plan attached thereto.

Benefits of the JCP&L AMI Program And Cost Benefit Analysis

11. The Board and its consultants have summarized potential benefits of AMI to customers, to electric utilities, and to achievement of the State's energy goals. For example, the AMI Gold Standards Report by Navigant (§3.2)³ provided that AMI may reduce labor costs, provide voltage optimization, detect outages, increase the opportunity for data collection, provide faster service restoration, improve billing accuracy, detect theft and enhance energy efficiency. Based on that Report, the Board found that "AMI has the potential to benefit the distribution system, streamline and modernize utility operations, provide an enhanced customer experience, and benefit the environment." (AMI Filing Order, p. 2). Similarly, the 2019 Energy Master Plan (§5.3.1, p. 184) provides:

AMI is a foundational component of a modernized electric distribution grid and uses an integrated system of smart meters, communications networks, and data management systems to enable two-way communications between utilities and customers. Statewide AMI installation is a prerequisite of many additional clean energy objectives as laid out in this EMP. Potential benefits include realization of potential gains in efficiencies and cost savings, accelerated service restoration during outages, better environmental outcomes, lower operations and maintenance costs, better demand-side customer engagement, and alternative rate designs.

12. JCP&L has quantified benefits of its AMI Program that demonstrate the Program is cost-effective. As set forth in the Business Case attached to the Direct Testimony of Mr. Ahr, during the twenty year study period the Program is estimated to provide benefits to customers of \$1.358 billion, compared to estimated costs of \$732 million (including capital and expense), or a benefit to cost ratio of 1.85:1. The Company has also calculated benefit to cost ratios on a net

³ The Board retained Navigant Consulting, Inc. to conduct two independent studies: (1) a cost benefit analysis that was filed with the Board on November 9, 2019 for Rockland Electric Company's AMI program ("Capstone Report"), and (2) an nationwide AMI gold standard analysis filed with the Board on November 27, 2019 ("AMI Gold Standards Report").

present value basis from a societal perspective (1.65:1), customer perspective (1.54:1) and Company perspective (1.17:1).

13. Quantifiable customer and societal benefits of the Program include: enhanced outage management (i.e., outage duration reductions); customer consumption management and peak demand reductions; time varying rates (“TVR”); revenue assurance (usage accuracy, theft of service detection and write-off reductions); and reduced carbon emissions. Quantifiable operational benefits include: eliminating nearly all manual meter reads⁴ and reducing other in-person meter services, back office complaint resolution activities, and call center inquiries. The Program will also generate unquantified benefits discussed in the Business Case; the capabilities of AMI to support major State’s 2019 Energy Master Plan: Pathway to 2050 (“EMP” or “Energy Master Plan”) strategies to reduce energy consumption and emissions from the transportation sector via Electric Vehicle infrastructure expansion as well as to support deployment of renewable energy and Distributed Energy Resources. In providing such benefits, the Program is responsive to and consistent with the AMI Filing Order, the BPU’s July 25, 2018 Storm Order in Docket No. EO18030255, the Energy Master Plan, and the Board’s consultants’ reports.

14. The JCP&L AMI Program will have an estimated maximum incremental bill impact on residential customers over the entire deployment period of approximately \$1.47 or about 1.4% of the current average monthly bill. However, the average incremental bill impact from any individual rate adjustment over the course of the Program will be lower.

⁴ The Company expects that meter readers impacted by the AMI Program would be given the opportunity to be redeployed to fill other open positions in the Company, that would otherwise need to be filled.

Cost Recovery For the Mandatory Program

15. Significantly, this Petition is a mandatory filing made in response to the Board's order in the AMI Filing Order. The Board ordered the Company to file a petition "for AMI implementation." (AMI Filing Order, p. 3). In doing so, the Board effectively ordered the Company to propose accelerated capital investment and O&M expenditures in AMI. Accordingly, it is appropriate for the Board to employ the flexibility afforded by N.J.S.A. 48:2-21.1, provide for full and timely recovery of JCP&L's AMI capital investments and O&M costs, and approve the cost recovery mechanism proposed herein.

16. JCP&L proposes a cost recovery mechanism to recover the costs of the AMI Program as described generally herein and in more detail in the attached Direct Testimony of Carol Pittavino. The cost recovery method involves the fixing of an initial tariffed rate in this proceeding to be effective at the commencement of the Pre-Deployment Phase and annual rate filings thereafter for recovery of the capital investments and operations and management expenditures for the AMI Program. Cost recovery will occur through a separate clause of JCP&L's tariff ("Rider AMI"). The Rider AMI clause employs a separate customer charge for residential and smaller commercial customers in rate classes RS, RT/RGT and GS and for larger commercial and industrial customers in rate classes GST and GP. Lighting classes will not be charged this rate because lighting is unmetered. In addition, there are two sub-classes that will not be allocated AMI Program costs at this time. The first sub-class, the high-tension service (230 kV) customers taking service under Rate GT. The second sub-class is the residential and commercial customers under Service Classifications RS and GS that are taking service under Restricted Off-Peak and Controlled Water Heating Service Special Provisions. The proposed tariff clause is set forth in Schedule CP-5 to Ms.

Pittavino's Direct Testimony. A detailed schedule for the anticipated JCP&L AMI Program rate filings is set forth in the direct testimony of Ms. Pittavino.

17. The Company proposes that the costs to be included in the Rider AMI rates will include: return on net investment, i.e., Rate Base, (where Rate Base is plant-in-service less accumulated depreciation/amortization, less associated accumulated deferred income taxes), plus depreciation expense, O&M, and amortization of stranded meter costs and cost of removal ("COR"). The return on net investment will be based on a weighted average cost of capital ("WACC"). The initial WACC will be based on the return on equity ("ROE"), long term debt rate, and capital structure approved by Order dated December 12, 2016 in JCP&L's base rate proceeding in Docket No. ER16040383. A Board-approved change in the WACC in pending BPU Docket No. ER20020146 or a future base rate case will be reflected in any subsequent revenue requirement calculations for the JCP&L AMI Program. As noted, the Company proposes to recover O&M costs and COR in the Rider AMI revenue requirements and rates. These costs are significant (over \$73 million and \$30.8 million, respectively, during the years 2022 through 2027) and result directly from the Board's mandate to implement AMI. Similarly, the recovery of the amortization of stranded legacy meter costs resulting from AMI implementation will also be recovered through the charge. The Company will also apply the appropriate factor to collect applicable sales and use tax ("SUT").

18. Board Staff and Rate Counsel will have the opportunity to review each annual rate filing to ensure that the revenue requirements and proposed rates are being determined in accordance with the Board's Order approving the JCP&L AMI Program. The rate adjustments established in the annual filing are provisional and the prudence of the expenditures in JCP&L AMI Program will be reviewed as part of the next base rate case(s) filed subsequent to the annual rate

filings. In the base rate case(s), plant investment being recovered through the Rider AMI will be included in base rates (and removed from Rider AMI) and all costs recovered through the Rider AMI prior to the base rate case would no longer be subject to refund. JCP&L will continue to file annual Rider AMI rate filings until the conclusion of the next base rate case which follows the conclusion of deployment, when all JCP&L AMI Program costs would be recovered through base rates.

19. As detailed in the testimony of Ms. Pittavino, the Company seeks approval to defer as a regulatory asset the stranded costs associated with the removed legacy non-AMI meters, which will be retired on real-time basis. The average remaining net book value of all non-AMI meters removed shall be added to a regulatory asset and amortized over a rolling five-year period from the month they are retired. The net book value of JCP&L's electric meters as of July 31, 2020 is \$126 million, but this amount will continue to decline over time as the remaining legacy meters are depreciated until replaced by AMI meters. These significant costs were incurred for equipment used to provide service to customers, and the stranded costs are an unavoidable cost associated with the installation of AMI meters as mandated by the Board.

20. The Company is taking actions to mitigate stranded costs associated with standard meters while this Petition is under review. In the AMI Filing Order (p.3, quoting the EMP), the Board observed that "replacing aging standard meters with new standard meters, and not AMI smart meters, may ... 'risk stranding the investments in newly installed meters that are no longer useful.'" Id. Therefore, the Board requests that the utilities be mindful to keep stranded costs to a minimum." Being mindful of the Board's request, and as an example of the Company's actions to mitigate stranded costs, on July 13, 2020, the Company filed a Petition with the Board in BPU Docket No. EW20070482 requesting to temporarily waive requirements of the periodic meter testing

requirements of N.J.A.C. 14:5-4.2 and the Company’s Board-approved its meter sampling plan until deployment of smart meters under the AMI Program is completed. A grant of the waiver would prevent the need for additional investment in standard meters (potentially increasing stranded costs).

21. During the Deployment Phase and Final Engineering Phase, the Company will test all removed meters removed from service in accordance with N.J.A.C. 14:3-4.7(c) (6).

PREFILED TESTIMONY, SCHEDULES, EXHIBITS AND APPENDICES

22. Attached hereto and made a part of this Verified Petition are the following Exhibits, including pre filed Direct Testimony (which further includes schedules and appendices thereto):

<u>Witness</u>	<u>Exhibit No.</u>	<u>Topics</u>
This Petition	JC-1	JCP&L AMI Program Overview and Request for Approval
John C. Ahr Direct Testimony	JC-2	JCP&L AMI Program Implementation, Benefits and Costs, AMI Plan (Engineering Report), Customer Communications Plan, Customer Opt-Out, Metrics and Reporting
Carol Pittavino Direct Testimony	JC-3	Cost Recovery Mechanism, Revenue Requirements, Rate Filings, Bill Impacts

PUBLIC HEARING, NOTICE AND SERVICE OF FILING

23. JCP&L proposes two virtual public hearings be held. JCP&L will shortly provide a draft form of public notice of the public hearings to Staff and Rate Counsel for comment, setting forth the dates, times and places of the public hearings, the projected maximum dollar amount JCP&L seeks to recover through JCP&L AMI Program and the estimated overall impact on customers attributable to implementation of the Program. JCP&L proposes that notice of this filing be combined with notice of the public hearings and be published in daily and weekly newspapers

published and/or circulated in the Company's service areas, after the dates and times of all such public hearings thereon have been scheduled by the Board or the Presiding Officer. The notice will also be served by mail upon the municipal clerks, the clerks of the Boards of Chosen Freeholders and, where appropriate, the County Executive Officers of all counties and municipalities located in the Company's service territory.

24. Copies of this Verified Petition and of all appendices, supporting testimony (including schedules and exhibits thereto) have been or will be duly 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, P.O. Box 003, Trenton, N.J. 08625-0003 in accordance with the Board's requirements.

REQUEST FOR DIRECT BOARD REVIEW

25. JCP&L requests that the Board retain jurisdiction of this filing, directly review it and designate a Commissioner as the Presiding Officer to oversee the proceeding. This has been the Board's customary practice with prior electric utility AMI filings. The Board's direct review is appropriate given that the Board has directed this compliance filing to be made and it will facilitate the expeditious resolution of the Petition and provision of reliability and clean energy benefits to customers who will benefit from the Board's prior experience processing AMI filings.

COMMUNICATIONS

26. Copies of all correspondence and other communications relating to this proceeding should be addressed to:

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CONCLUSION AND REQUEST FOR APPROVAL

WHEREFORE, the Petitioner respectfully requests that the Board retain jurisdiction of this matter and expeditiously issue a final decision and order approving the JCP&L AMI Program and specifically:

- (1) finding that JCP&L AMI Program is in the public interest;
- (2) finding that JCP&L AMI Program as described in this Petition is reasonable and prudent;
- (3) authorizing JCP&L to implement the JCP&L AMI Program under the terms set forth in this Petition including attachments;
- (4) determining that the cost recovery mechanism set forth in this Petition will provide for just and reasonable rates and is approved;
- (5) authorizing JCP&L to recover all prudently-incurred costs of the Program on a full and timely basis, under the cost recovery mechanism set forth in this Petition; and
- (6) granting such other and further relief as the Board shall deem just, lawful and proper.

Dated: August 27, 2020

Respectfully submitted,
RIKER DANZIG SCHERER HYLAND &
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Attorneys for Petitioner,
Jersey Central Power & Light Company

By: /s/ James C. Meyer
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STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In the Matter of the Verified Petition of Jersey :
Central Power & Light Company For : BPU Docket No.
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Infrastructure (AMI) Investment Program :
(JCP&L AMI) :

AFFIDAVIT
OF
VERIFICATION

Carol A. Pittavino, being duly sworn upon her oath, deposes and says:

1. I am Rates Consultant in the Rates and Regulatory Affairs Department for FirstEnergy Service Company, and I am duly authorized to make this Affidavit of Verification on behalf of Jersey Central Power & Light Company ("JCP&L"), the Petitioner named in the foregoing Verified Petition.

2. I have read the contents of the foregoing Verified Petition by JCP&L for approval of the proposed JCP&L AMI Program, and I hereby verify that the statements of fact and other information contained therein are true and correct to the best of my knowledge, information and belief



Carol A. Pittavino

Sworn to and subscribed before me
this 26th day of August, 2020.

JAMES C. MEYER

(Notary Public)

ATTORNEY AT LAW
STATE OF NEW JERSEY