

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

**In The Matter Of The Verified Petition Of Jersey Central
Power & Light Company For Approval Of An Advanced
Metering Infrastructure (AMI) Program
(JCP&L AMI)**

BPU Docket No. _____

**Direct Testimony
Of
Carol Pittavino**

**On Behalf Of
Jersey Central Power & Light Company**

August 27, 2020

1 **I. Introduction**

2 **Q. Please state your name and business address.**

3 A. My name is Carol Pittavino and my business address is 800 Cabin Hill Drive, Greensburg, PA
4 15601.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by First Energy Service Company and my title is Rates Consultant in the Rates
7 and Regulatory Affairs Department, concentrating on rates in New Jersey. I report to Mark A.
8 Mader, Director of Rates & Regulatory Affairs. My principal responsibilities are to provide
9 accounting, financial and analytical support for Jersey Central Power & Light Company
10 (“JCP&L”). My experience and qualifications are set forth in detail in Appendix A to my
11 direct testimony.

12 **Q. Have you previously testified before the New Jersey Board of Public Utilities (“BPU”
13 or “Board”)?**

14 A. Yes. I provided pre-filed testimony on behalf of JCP&L in its two most recently completed
15 base rate cases, in BPU Docket Nos. ER16040383 and ER12111052, as well as in JCP&L’s
16 Reliability Plus Infrastructure Investment Program (JCP&L’s Reliability Plus) rate
17 adjustment proceeding in BPU Docket No. ER19091238.

18 **Q. Please describe the purpose of your direct testimony.**

19 A. JCP&L has proposed an Advanced Metering Infrastructure Program (“JCP&L AMI
20 Program” or “Program”) in its Petition filed with the Board. In my direct testimony, I will
21 address the revenue requirements calculation; the proposed cost recovery, including
22 recovery of incremental operation and maintenance (“O&M”) expense, depreciation
23 expense, stranded cost amortization and cost of removal; bill impacts; and tariffs for the
24 JCP&L AMI Program.

1 My testimony provides detailed schedules setting forth the proposed revenue requirements,
2 initial rates and projected bill impacts during the period from 2022 through 2027, which is
3 the projected end of meter deployment.

4 **Q. Please briefly describe JCP&L’s proposed cost recovery methodology.**

5 A. The Company is proposing to recover the revenue requirements through a separate clause
6 of its tariff, Rider AMI-Advance Metering Infrastructure Charge (“Rider AMI”) via an
7 initial rate, to be updated through annual rate filings. The details of the costs to be
8 recovered, as well as the rate mechanism to recover such costs, are set forth below in this
9 testimony.

10 **II. Revenue Requirements**

11 **Q. How does JCP&L propose to calculate the revenue requirements?**

12 A. For the initial rate and each subsequent rate filing, JCP&L proposes to calculate the revenue
13 requirements associated with the Program costs using the following formula:

$$\begin{aligned} & \text{Revenue Requirements} = [(\text{Pre-Tax Cost of Capital} * \text{Rate Base}) \\ & + \text{Depreciation} + \text{Amortization of Stranded (existing) Meter Costs} \\ & + \text{Incremental O\&M} + \text{Cost of Removal ("COR")} \end{aligned}$$

17 The Company will also apply the appropriate factor to collect applicable sales and use tax
18 (“SUT”).

19 **Q. Please describe the components of JCP&L’s proposed revenue requirement
20 calculation.**

21 A. The “Pre-Tax Cost of Capital * Rate Base” component provides recovery of the return *on*
22 the JCP&L AMI Program capital investment. The term “Pre-Tax Cost of Capital” means
23 JCP&L’s pre-tax overall weighted average cost of capital (“WACC”) for the Program.

1 JCP&L proposes to earn a return on its net investment in the AMI Program based upon an
2 authorized return on equity (“ROE”) and capital structure including income tax effects.
3 The Company’s initial WACC for the Program will be based on the ROE, long-term debt
4 and capital structure approved by the Board on December 12, 2016 in the 2016 JCP&L
5 base rate case, BPU Docket No. ER16040383. JCP&L proposes the initial pre-tax WACC
6 to be 9.16 percent. *See* Schedule CP-1 for the calculation of the current Pre-Tax and After-
7 Tax WACC. Any change in the WACC authorized by the Board in a base rate case
8 following this filing, including the case pending in BPU Docket No. ER20020146, will be
9 reflected in the revenue requirement calculations and subsequent rate adjustment filings
10 for JCP&L Rider-AMI. Any changes to current tax rates will be reflected in an adjustment
11 to the WACC.

12 The term “Rate Base” refers to plant constructed and in-service (“Plant In-Service”)
13 less the associated accumulated depreciation less Accumulated Deferred Income Taxes
14 (“ADIT”) plus the Legacy Meter and Cost of Removal Regulatory Asset (discussed further
15 below). Book recovery of assets associated with advanced meters will be recovered over
16 a depreciable life of 15 years, which is the estimated useful life of such equipment based
17 on input from external resources and internal subject matter experts. All other investments
18 included in this filing will be based on current depreciation rates, including, but not limited
19 to those depreciation rates reflected in the following table, which are subject to change, if
20 and as approved by the BPU.

JERSEY CENTRAL POWER & LIGHT COMPANY		
Calculated Annual Depreciation Accruals Related to Distribution Plant (as of December 31, 2012)		
	Distribution Plant	Annual Accrual Rate (%)
360.12	Distribution Substation Easements	1.31
360.22	Distribution Line Easements	0.73
361.00	Structures and Improvements	0.71
362.00	Substation Equipment	1.25
364.00	Poles, Towers and Fixtures	2.15
365.00	Overhead Conductors and Devices	1.93
365.10	Overhead Conductors and Devices - Clearing	1.56
366.00	Underground Conduit	1.27
367.00	Underground Conductors and Devices	1.61
368.00	Line Transformers	2.42
369.00	Services	1.21
370.00	Meters	4.77
371.00	Installations on Customer Premises	3.71
373.00	Street Lighting and Signal Systems	2.86
Total Distribution Plant		1.94

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ADIT is calculated as Book Depreciation less Tax Depreciation, multiplied by the statutory composite federal and state income tax rate, which is currently 28.11%. Any future changes to the book or tax depreciation rates during the Program construction period and at the time of each rate adjustment, will be reflected in the accumulated depreciation and/or ADIT calculation described above.

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The “Depreciation” component provides for recovery *of* the Company’s investment in the JCP&L AMI Program assets over the useful book life of each asset class. The book recovery of each asset class will be based on current depreciation rates, except for advanced meters, which will be recovered over a depreciable life of 15 years. For Plant In-Service, the depreciation expense is calculated as the book depreciation expense. Any future changes to the book depreciation or tax rates during the construction period of the Program and at the time of each rate adjustment filing, will be reflected in the depreciation expense calculation described above.

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The “Amortization of Stranded (existing) Meter Costs” provides for recovery of JCP&L’s stranded costs for existing non-AMI meters (“Legacy Meters”) being prematurely retired due to BPU ordered technology replacement. The amortization amount

1 also includes amortization relating to the cost of removal over a 5-year period. The
2 amortization amount is reduced by depreciation expense for the Legacy Meters that is
3 currently included in base rates. The amortization expense relating to stranded (existing)
4 non-AMI meter costs is discussed in my testimony below.

5 The term “Incremental O&M” means incremental Operations and Maintenance
6 costs resulting from the AMI Program, as discussed further in my testimony below.

7 Uncollectible expense associated with JCP&L AMI Program is not included in the
8 Revenue Requirement because it will be recovered along with other uncollectible expenses
9 in existing Rider UNC.

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

11 A. Rate Base to be recovered includes all capital expenditures associated with the AMI
12 Program and capitalized AFUDC associated with the projects (the “Capital Investment
13 Costs”). Capital Investment Costs will be recorded in an associated Construction Work
14 In Progress (“CWIP”) account during construction and then in a Plant In-Service account
15 upon the respective project being deemed used and useful.

16 **Q. Will any of the AMI Program expenditures be eligible for AFUDC?**

17 A. Yes. AFUDC is a component of construction costs representing the net cost of borrowed
18 funds and an equity return rate used during the period of construction. AFUDC will be
19 applied to capitalized costs for any and all projects that that have been started, but not
20 placed in service within the same calendar month.

21 **Q. How will AFUDC be calculated?**

1 A. The Company accrues AFUDC on eligible expenditures utilizing the “full FERC method”
2 as set forth in FERC Order 561. AFUDC is accrued monthly and capitalized to CWIP until
3 the project is placed in service.

4 **Q. Will the Company utilize AFUDC once the projects are placed in service?**

5 A. No. The Company will not accrue AFUDC on projects that have already been placed in
6 service.

7 **Q. Will any CWIP balances be included in the revenue requirement calculation?**

8 A. No.

9 **Q. Please explain how O&M will be included in the revenue requirement calculation**
10 **performed under the formula set forth above.**

11 A. JCP&L will project AMI Program O&M expenses to include in the Rider AMI revenue
12 requirement calculation for the prospective period that are incremental to costs recovered
13 in base rates. For purposes of the revenue requirements calculated in this testimony for
14 initial rates, the projected Incremental O&M consists of the incremental O&M costs
15 provided in Attachment C to the testimony of Company Witness John C. Ahr, which
16 represent the *increased* O&M costs resulting from the AMI Plan; JCP&L did not include
17 potential future *reductions* to O&M costs in base rates in the calculation of the revenue
18 requirements at this time. The Company notes that it will true-up the projected incremental
19 O&M expense based on actual results during each annual period of the AMI Program. In
20 conjunction with resolution of this proceeding and the benefit of better information at that
21 time, JCP&L will make projections of AMI Program-driven base rate O&M cost reductions
22 that can be reflected in estimated Incremental O&M and calculations of revenue
23 requirements.

1 **Q. Is there a witness sponsoring the capital and O&M expenditures that you use to**
2 **calculate revenue requirements?**

3 A. Yes. The projected expenditures for the Program are provided by Company Witness John
4 C. Ahr. *See* Attachment C to Mr. Ahr’s testimony.

5 **Q. You also noted that Stranded Costs will be recovered in rates. Please explain how**
6 **this component of the revenue requirement is determined.**

7 A. As noted in the direct testimony of Company Witness John C. Ahr, the installation of AMI
8 meters requires the removal and retirement of existing the non-AMI meters currently
9 installed (i.e., Legacy Meters). The determination of the amount of stranded costs is based
10 on the gross book value of the remaining Legacy Meters less accumulated depreciation.
11 As of July 2020, the undepreciated book value of Legacy Meters is approximately \$126
12 million; this amount will diminish over time as depreciation is applied to remaining (i.e.,
13 to be replaced) Legacy Meters. The Company proposes to retire the removed Legacy
14 Meters on a real-time, monthly basis. The average remaining net book value (“NBV”) of
15 all Legacy Meters removed shall then be added to a regulatory asset (the “Legacy Meter
16 Regulatory Asset”) and amortized over a rolling five-year period from the month they are
17 retired. JCP&L has approximately 1.15 million meters. Thus, for every Legacy Meter
18 replaced, the average NBV would be approximately \$110 per meter, which will be
19 amortized over a five-year period. This regulatory asset will be included net of any
20 amortization and incremental COR in Rate Base. COR is discussed in my testimony below.

21 **Q. Have you provided a schedule showing the calculation of the revenue requirements?**

22 A. Yes. *See* Schedule CP-2 for a calculation of the JCP&L AMI Program revenue
23 requirements for the initial rate and subsequent annual periods through 2027, which I have

1 calculated based on the forecasted capital costs and incremental O&M costs to be incurred
2 during various periods provided by Company Witness John C. Ahr in Attachment C to his
3 direct testimony (Exhibit JC-2).

4 **III. COR**

5 **Q. What recovery is the Company proposing for AMI-related COR?**

6 A. JCP&L is proposing to recover AMI-related COR consistent with the accrual methodology
7 proposed in its current base rate case in BPU Docket No. ER20020146. The accrual rate
8 for Meters Account 370 in this case was established at 2.7%, as calculated and presented
9 in a depreciation study performed by Gannett Fleming, as filed in that case. The accrual
10 percentage multiplied by the June 30, 2020 plant in service amount for Meter Account 370
11 results in an annual accrual amount of \$4,850,089. To the extent that the actual COR
12 incurred exceeds the amount included in base rates, the Company is proposing to defer
13 actual COR expense relating to the legacy meters in excess of the annual amount of
14 \$4,850,089 to a regulatory asset. Furthermore, the Company is also proposing that the
15 deferred COR amount booked to the regulatory asset be amortized over a rolling 5-year
16 period under Rider AMI.

17 **Q. Can the Company be fairly expected to proceed with the AMI Program without**
18 **approval of its proposals for recovery of COR and O&M?**

19 A. No. There will be a substantial increase in O&M expense (over \$73.3 million during the
20 years 2022 through 2027) and COR (approximately \$30.8 million during the years 2022
21 through 2027) as a result of compliance with the Board's mandate of a filing for AMI
22 installation. It would be unfair to proceed without full and timely recovery of all of the
23 costs generated by the requirement, including incremental O&M expense and COR.

1 **IV. Rate Filings**

2 **Q. How does the Company propose to recover the revenue requirements as described**
3 **above?**

4 A. The Company proposes to recover the revenue requirements associated with the Program
5 through an initial tariffed rate and rate adjustment filings made on an annual basis. As
6 stated in Company Witness John C. Ahr's direct testimony, assuming BPU approval the
7 Company plans to begin pre-deployment work on or about January 1, 2022. The Company
8 proposes to make its initial tariffed rates effective on or about that same date. Following
9 the initial rates, which the Company requests be approved in this proceeding, the Company
10 further proposes that its annual rate filing will be made in August of each year with rates
11 effective the following January 1st. Each rate filing will address the true-up and the
12 projected revenue requirement in order to set the new rate. In addition, the Company will
13 accrue interest on a monthly basis on the over/under recovered balance calculated based
14 upon the average balance net of tax at an interest rate equal to the rate on two-year constant
15 maturity Treasuries, as shown in the Federal Reserve Statistical Release on or closest to
16 January 1 of each year, plus sixty basis points, compounded annually as of January 1 of
17 each year. This methodology is consistent with other JCP&L reconcilable riders.

18 The proposed schedule for annual rate filings is listed below.

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JCP&L AMI Program Rate Filing Schedule				
Filing	Filing (On or About)	Projected Spending Through	True-Up of Prior Period Actuals	Rates Effective
0 (Initial Rate)	This Petition	December 31, 2022	N/A	January 1, 2022
1	August 15, 2022	December 31, 2023	January 1, 2022 to June 30, 2022	January 1, 2023
2	August 15, 2023	December 31, 2024	July 1, 2022 to June 30, 2023	January 1, 2024
3	August 15, 2024	December 31, 2025	July 1, 2023 to June 30, 2024	January 1, 2025
4	August 15, 2025	December 31, 2026	July 1, 2024 to June 30, 2025	January 1, 2026
5	August 15, 2026	December 31, 2027	July 1, 2025 to June 30, 2026	January 1, 2027

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The Company will continue annual filings on the above schedule until the conclusion of its first base rate case which follows the conclusion of deployment. The Company proposes to recover its costs for the AMI Program through a separate rate clause of its tariff, Rider AMI. Under the proposed schedule, changes to the rates in Rider AMI would occur once per year, following the above-identified filings with the Board.

Q. Will the BPU and/or Rate Counsel have an opportunity to review the actual expenditures of the Program?

1 A. Yes. As addressed above, following BPU approval of the AMI Program, JCP&L will make
2 annual filings in a process that looks back at prior period actual expenditures and resetting
3 rates to: (1) provide refunds or adjustments to true-up the projected revenue requirements
4 for the prior period to actual revenue requirements based on actual costs, and (2) reset the
5 rates going forward to recover projected costs for that the prospective period. The BPU
6 and Rate Counsel may review each rate filing to ensure that the revenue requirements and
7 proposed rates are being calculated in accordance with the BPU Order approving the AMI
8 Program. Further, the rate adjustments established in the annual rate filings are provisional.
9 The prudence of the Company's AMI expenditures will be reviewed by the Board and Rate
10 Counsel as part of JCP&L's subsequent base rate case(s) following the filings. The rate
11 changes via the annual filings are subject to refund until final determination by the Board
12 that JCP&L prudently incurred these capital, incremental O&M and COR expenditures. In
13 a subsequent base rate case(s), plant investment, incremental O&M, and COR being
14 recovered through the Rider AMI will be included in base rates and all costs recovered
15 through the Rider AMI prior to that base rate case would no longer be subject to refund.

16 **Q. What is the projected revenue requirement for the initial rate recovery period?**

17 A. The revenue requirement is currently forecasted to be \$14 million for the initial rate period
18 January 1, 2022 through December 31, 2022. *See* Schedule CP-3.

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

20 A. The Company proposes to apply the following rate design to all applicable rate classes to
21 recover AMI Program expenditures, subject to the exceptions addressed in the next
22 response. For Service Classifications RS, RT/RGT, GS GST, GP and GT (excluding GT
23 high-tension service), the rate will be a separate customer charge for each rate class. The

1 proposed revenue requirement allocation to the applicable Service Classifications
2 resembles the current distribution allocation for these customers. The detailed calculations
3 supporting the initial rates (in Rider AMI) are shown in Schedule CP-3. In addition,
4 Schedule CP-3 provides a summary of the proposed rates for all forecasted rate filings.

5 **Q. Are there customers that will not be allocated costs under this rider?**

6 A. Yes, lighting classes will not be charged this rate because lighting is unmetered. In
7 addition, there are two sub-classes that will not be allocated AMI Program costs at this
8 time. The first sub-class, the high-tension service (230 kV) customers taking service under
9 Rate GT, already have advanced meters. The second sub-class is the residential and
10 commercial customers under Service Classifications RS and GS that are taking service
11 under Restricted Off-Peak and Controlled Water Heating Service Special Provisions. The
12 meters that are used to measure service are specialty meters and there is not an AMI
13 compatible replacement currently available. In the case of these sub-classes, should the
14 Company replace these meters with AMI meters in the future, JCP&L will begin allocating
15 costs to the sub-classes as well.

16 **V. Bill Impacts**

17 **Q. What are the annual JCP&L AMI Program rate impacts to the typical residential**
18 **customer?**

19 A. Based upon the forecasted rates shown in Schedule CP-3, the bill impacts for a typical
20 residential customer as well as rate class average customers for each rate period over the
21 deployment period are set forth in Schedule CP-4. Based on the projected revenue
22 requirements provided in Schedule CP-2, the initial bill impact of the proposed initial rates
23 for the initial rate period to the typical residential customer who uses 768 kWh per month

1 is an increase of 0.6% or approximately \$0.65 per month above rates effective January 1,
2 2022.

3 A summary of the incremental bill impact on an average residential customer for
4 each year of the JCP&L AMI Program through 2027 compared to the current average
5 monthly bill is shown in the following chart.

AMI Program - Average Residential Rate Impact						
Recovery Period	1	2	3	4	5	6
Effective Date	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Monthly Increase	\$0.65	\$0.95	\$1.42	\$1.16	\$0.05	(\$0.22)
% Monthly Bill	0.6%	0.9%	1.3%	1.1%	0.0%	-0.2%

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7 The maximum incremental bill impact on a residential customer over the entire deployment
8 period is an estimated increase of approximately \$1.42 or about 1.3% of the current average
9 monthly bill.

10 **VI. Tariff Rider**

11 **Q. Does the Company propose a modification to its tariff as part of this filing?**

12 A. Yes. The Company proposes to recover its costs for the JCP&L AMI Program through
13 rates set forth in a separate clause of its tariff. Specifically, the Company is proposing a
14 new tariff rider, Rider AMI, attached hereto as Schedule CP-5. The attached Rider includes
15 the initial tariffed rates proposed to commence on January 1, 2022. In addition, the
16 Company is proposing new tariffed charges for customers who opt-out of the AMI
17 Program, which is attached as schedule CP-6. The basis for the opt-out charge in Schedule
18 CP-6 is discussed in the direct testimony of Company Witness John C. Ahr and the AMI
19 Plan.

20 **Q. Please list the schedules attached to this direct testimony.**

21 A. Schedule CP-1 - Weighted Average Cost of Capital (WACC)

1 Schedule CP-2– Revenue Requirements For the Program Rate Filings

2 Schedule CP-3 – Rate Derivation and Proof of Revenues

3 Schedule CP-4 - Bill Impact Summary

4 Schedule CP-5- Proposed Tariff Sheet for Rider AMI with initial rates

5 Schedule CP-6- Proposed Tariff Sheet for Opt-Out Charge

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7 **Q. Does this conclude your pre-filed direct testimony at this time?**

8 A. Yes, it does.

APPENDIX A

Experience and Qualifications

My name is Carol Pittavino. I am currently employed by FirstEnergy Service Company as a Rates Consultant in the Rates and Regulatory Affairs Department, concentrating on rates in New Jersey. I report to the Director of Rates and Regulatory Affairs. I have held this position since January 2019. I am responsible for providing accounting, financial and analytical support for rate activities.

In August 2012, I was employed by JCP&L as a rates analyst. From November 2017 to January 2019, I held an analyst position in the FirstEnergy Transmission Business Services area, while continuing to support Rates and Regulatory Affairs. In January 2019, I returned to JCP&L Rates and Regulatory Affairs Department as a Rates Consultant.

From October 2003 to September 2010 I was employed by a FirstEnergy predecessor company Allegheny Energy, Inc. as a Senior Accountant in the Regulatory Accounting department. One of my primary responsibilities was FERC Form 1 preparation and analysis. I also performed General Accounting responsibilities and performed forecasting preparation for the regulated subsidiary entities owned by Allegheny Energy, Inc. In addition, I assisted the Rate Department with a Base Case filing as well as prepared the revenue requirement calculation on transmission line construction projects.

I was employed at United Health Group from October 2010 to July 2012 as a Senior Accountant. I was responsible for the oversight and accounting functions of two Medicaid Managed Care Organizations.

From May 2001 through September 2003 I was employed at S.R. Snodgrass as a Senior Accountant. S.R. Snodgrass is a regional public accounting firm which performs external and internal audit services for their clients. I functioned as an external auditor assisting in the drafting

1 and inspection of the financial records of clients, which ultimately resulted in issuing an opinion
2 on their financial records.

3 From June 1985 through April 2001, I was employed for the First National Bank of
4 Herminie. I held various positions when I was employed by the bank. I progressed through all
5 aspects of branch operations which resulted in me being promoted to Branch Manager. I
6 transferred into the finance department as an Accountant and functioned in this capacity until the
7 bank was acquired by The First National Bank of Pennsylvania in April 2001.

8 I graduated from Seton Hill University (then College) in May 2000 with a Bachelor of
9 Science degree with a major in accounting. I earned my Pennsylvania Certified Public Accountant
10 license in September 2003.

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**JERSEY CENTRAL POWER & LIGHT
AMI BUSINESS CASE
WEIGHTED AVERAGE COST OF CAPITAL (WACC)**

SCHEDULE CP-1

	Ratio	Rate	Pre-Tax	Post-Tax
Debt	55%	5.73%	3.15%	3.15%
Equity	45%	9.60%	6.01%	4.32%
WACC			9.16%	7.47%

Tax Rate

State CBT	9.00%
Federal IT	21.00%
Composite	28.11%

JERSEY CENTRAL POWER & LIGHT
 AMI BUSINESS CASE
 REVENUE REQUIREMENTS FOR THE PROGRAM RATE FILINGS

SCHEDULE CP-2

(A)	(B)	(C)	(D)	(E) = (C) + (D)	(F)	(G)	(H) = (E) + (F) + (G)	(I)	(J)	(K)	(L) = (H) x 3.15% / 12	(M) = (H) x 4.32% / 12	(N) = (M) x [(1/(1 - 28.11%)) - (M)]	(O)	(R) = SUM((I):(O))
Year	Month	Gross Plant In-Service	Accumulated Reserve	Net Plant	ADIT	Legacy Meter/COR Regulatory Asset	Rate Base	Depecaion Expense	Amortization Expense	Amortization Over/(Under) Prior Period	Interest Expense	Equity Return	Income Tax Expense	Incremental O&M Expense	Revenue Requirement
2022	Dec-22	\$ 36,350,531	\$ (610,619)	\$ 35,739,911	\$ (1,505,594)	\$ -	\$ 34,234,318	\$ 610,619	\$ -	\$ -	\$ 182,001	\$ 249,396	\$ 97,517	\$ 12,590,728	\$ 13,730,262
2023	Dec-23	\$ 135,940,609	\$ (8,978,523)	\$ 126,962,086	\$ (4,200,617)	\$ 32,127,057	\$ 154,888,527	\$ 8,367,904	\$ 2,862,594	\$ -	\$ 2,889,428	\$ 3,959,376	\$ 1,548,172	\$ 14,445,224	\$ 34,072,698
2024	Dec-24	\$ 246,591,479	\$ (27,152,219)	\$ 219,439,260	\$ (13,410,295)	\$ 71,628,733	\$ 277,657,698	\$ 18,173,696	\$ 9,502,590	\$ -	\$ 6,806,333	\$ 9,326,701	\$ 3,646,871	\$ 16,732,146	\$ 64,188,337
2025	Dec-25	\$ 343,430,440	\$ (54,263,634)	\$ 289,166,806	\$ (27,066,715)	\$ 100,653,906	\$ 362,753,998	\$ 27,111,415	\$ 17,289,301	\$ -	\$ 10,109,594	\$ 13,853,152	\$ 5,416,777	\$ 15,122,935	\$ 88,903,175
2026	Dec-26	\$ 349,943,574	\$ (85,842,928)	\$ 264,100,647	\$ (37,528,682)	\$ 73,275,949	\$ 299,847,914	\$ 31,579,294	\$ 20,925,361	\$ -	\$ 10,338,415	\$ 14,166,705	\$ 5,539,380	\$ 7,337,080	\$ 89,886,235
2027	Dec-27	\$ 361,133,413	\$ (118,322,710)	\$ 242,810,703	\$ (41,111,620)	\$ 45,332,228	\$ 247,031,310	\$ 32,479,782	\$ 21,015,756	\$ -	\$ 8,492,562	\$ 11,637,337	\$ 4,550,362	\$ 7,080,685	\$ 85,256,485

Notes:

- (C) Estimated Year-End Gross Plant In-Service
- (D) Estimated Year-End Accumulated Reserve
- (F) Estimated Year-End ADIT
- (G) Estimated Regulatory Asset for Legacy Meter Replaced and Cost of Removal net cumulative amortizations
- (I) Estimated depreciation expense. Deprecation rates used as approved.
- (J) Estimated amortization expense for regulatory asset for legacy meter replaced less depreciation expense included in account 370 and Cost of Removal. Amortized over a rolling 5-year period
- (K) Amortization of Prior Period reconciliation
- (L) Interest Expense. See CP-1 for Interest Rate
- (M) Total Equity Return. See CP-1 for Equity Rate
- (N) See CP-1 for Tax Rate
- (O) Estimated Incremental O&M expense

JERSEY CENTRAL POWER & LIGHT
AMI BUSINESS CASE
RATE DERIVATION AND PROOF OF REVENUES

SCHEDULE CP-3

Revenue Requirement

2022	\$	13,730,262
2023	\$	34,072,698
2024	\$	64,188,337
2025	\$	88,903,175
2026	\$	89,886,235
2027	\$	85,256,485

Source: CP-2

Revenue Requirement Allocation

	RS	RT/RGT	GS	GST	GP	GT
Year	53.18%	1.35%	34.68%	2.39%	5.17%	3.24%
2022	\$ 7,301,338	\$ 185,121	\$ 4,760,976	\$ 327,542	\$ 710,210	\$ 445,075
2023	\$ 18,118,831	\$ 459,391	\$ 11,814,728	\$ 812,820	\$ 1,762,442	\$ 1,104,487
2024	\$ 34,133,418	\$ 865,431	\$ 22,257,343	\$ 1,531,243	\$ 3,320,201	\$ 2,080,703
2025	\$ 47,276,021	\$ 1,198,653	\$ 30,827,227	\$ 2,120,827	\$ 4,598,598	\$ 2,881,849
2026	\$ 47,798,783	\$ 1,211,907	\$ 31,168,104	\$ 2,144,278	\$ 4,649,448	\$ 2,913,715
2027	\$ 45,336,822	\$ 1,149,486	\$ 29,562,735	\$ 2,033,833	\$ 4,409,970	\$ 2,763,639

Annual Customers

	RS	RT/RGT	GS	GST	GP	GT
Total	12,054,666	188,569	1,586,740	2,394	5,180	1,963

Source: Forecast

Rate Year	RS \$/Cust	RT/RGT \$/Cust	GS \$/Cust	GST \$/Cust	GP \$/Cust	GT \$/Cust
2022	\$ 0.61	\$ 0.98	\$ 3.00	\$ 136.84	\$ 137.11	\$ 226.68
2023	\$ 1.50	\$ 2.44	\$ 7.45	\$ 339.59	\$ 340.24	\$ 562.53
2024	\$ 2.83	\$ 4.59	\$ 14.03	\$ 639.74	\$ 640.97	\$ 1,059.74
2025	\$ 3.92	\$ 6.36	\$ 19.43	\$ 886.07	\$ 887.76	\$ 1,467.77
2026	\$ 3.97	\$ 6.43	\$ 19.64	\$ 895.86	\$ 897.58	\$ 1,484.00
2027	\$ 3.76	\$ 6.10	\$ 18.63	\$ 849.72	\$ 851.35	\$ 1,407.57

Revenue Proof

Year	RS	RT/RGT	GS	GST	GP	GT
2022	\$ 7,353,346	\$ 184,797	\$ 4,760,219	\$ 327,531	\$ 710,230	\$ 445,067
2023	\$ 18,082,000	\$ 460,108	\$ 11,821,210	\$ 812,819	\$ 1,762,443	\$ 1,104,479
2024	\$ 34,114,706	\$ 865,530	\$ 22,261,956	\$ 1,531,238	\$ 3,320,223	\$ 2,080,709
2025	\$ 47,254,292	\$ 1,199,297	\$ 30,830,350	\$ 2,120,836	\$ 4,598,595	\$ 2,881,840
2026	\$ 47,857,025	\$ 1,212,496	\$ 31,163,565	\$ 2,144,269	\$ 4,649,463	\$ 2,913,707
2027	\$ 45,325,545	\$ 1,150,269	\$ 29,560,958	\$ 2,033,832	\$ 4,409,991	\$ 2,763,643

Rounding - Total Revenue

	RS	RT/RGT	GS	GST	GP	GT
2022	\$52,008	(\$323)	(\$758)	(\$11)	\$19	(\$8)
2023	(\$36,831)	\$716	\$6,482	(\$1)	\$1	(\$7)
2024	(\$18,712)	\$99	\$4,613	(\$5)	\$23	\$6
2025	(\$21,729)	\$644	\$3,123	\$10	(\$3)	(\$8)
2026	\$58,243	\$589	(\$4,538)	(\$9)	\$15	(\$9)
2027	(\$11,276)	\$783	(\$1,777)	(\$2)	\$22	\$4

Rounding - Revenue Per Customer

	RS	RT/RGT	GS	GST	GP	GT
2022	\$0.0043	\$0.0000	-\$0.0001	\$0.0000	\$0.0000	\$0.0000
2023	-\$0.0031	\$0.0001	\$0.0005	\$0.0000	\$0.0000	\$0.0000
2024	-\$0.0016	\$0.0000	\$0.0004	\$0.0000	\$0.0000	\$0.0000
2025	-\$0.0018	\$0.0001	\$0.0003	\$0.0000	\$0.0000	\$0.0000
2026	\$0.0048	\$0.0000	-\$0.0004	\$0.0000	\$0.0000	\$0.0000
2027	-\$0.0009	\$0.0001	-\$0.0001	\$0.0000	\$0.0000	\$0.0000

JERSEY CENTRAL POWER & LIGHT
AMI BUSINESS CASE
Bill Impact Summary

SCHEDULE CP-4

	Current (1)	Proposed Class Average Incremental Monthly Bill Increase					
	2020	2022	2023	2024	2025	2026	2027
	Monthly (\$)	Monthly (\$)	Monthly (\$)	Monthly (\$)	Monthly (\$)	Monthly (\$)	Monthly (\$)
RS	\$106.75	\$0.65	\$0.95	\$1.42	\$1.16	\$0.05	(\$0.22)
RT/RGT	\$142.87	\$1.04	\$1.56	\$2.29	\$1.89	\$0.08	(\$0.36)
GS	\$573.82	\$3.20	\$4.74	\$7.02	\$5.76	\$0.22	(\$1.08)
GST	\$29,049.94	\$145.91	\$216.18	\$320.03	\$262.65	\$10.44	(\$49.20)
GP	\$34,931.98	\$146.19	\$216.59	\$320.65	\$263.14	\$10.47	(\$49.29)
GT	\$ 89,481.74	\$ 241.70	\$ 358.10	\$ 530.15	\$ 435.06	\$ 17.31	\$ (81.50)

	Proposed Class Average Incremental Monthly Bill Increase in Percentage						
	2022	2023	2024	2025	2026	2027	
RS	0.6%	0.9%	1.3%	1.1%	0.0%	-0.2%	
RT/RGT	0.7%	1.1%	1.6%	1.3%	0.1%	-0.2%	
GS	0.6%	0.8%	1.2%	1.0%	0.0%	-0.2%	
GST	0.5%	0.7%	1.1%	0.9%	0.0%	-0.2%	
GP	0.4%	0.6%	0.9%	0.7%	0.0%	-0.1%	
GT	0.3%	0.4%	0.6%	0.5%	0.0%	-0.1%	

(1) Based on rates in effect as of August 1, 2020, including Customer, Delivery and Basic Generation Charges.
Including 6.625% NJ SUT
Usage are based on Test Year Weather Normalized units from JCP&L "2016 Base Rate Filing"

AMI Program - Average Residential Rate Impact						
Recovery Period	1	2	3	4	5	6
Effective Date	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Monthly Increase	\$0.65	\$0.95	\$1.42	\$1.16	\$0.05	(\$0.22)
% Monthly Bill	0.6%	0.9%	1.3%	1.1%	0.0%	-0.2%

Rider AMI
Advanced Metering Infrastructure Charge

APPLICABILITY: Rider AMI provides for recovery of revenue requirements associated with advanced metering infrastructure investment projects.

The Advanced Metering Infrastructure (AMI) Charge is a fixed monthly charge and applicable to any Full Service Customer or Delivery Service Customer of Service Classifications RS (Residential Service) except those on water heating special provisions, RT (Residential Time-of-Day), RGT (Residential Geothermal & Heat Pump), GS (General Service Secondary) except those on water heating special provisions, GST (General Service Secondary Time-of-Day), GP (General Service Primary) and GT (General Service Transmission) except those on High Tension service.

<u>Service Classification</u>	<u>AMI Charge (Including SUT)</u>	
RS	\$ 0.65	per month
RT/RGT	\$ 1.04	per month
GS	\$ 3.20	per month
GST	\$145.91	per month
GP	\$146.19	per month
GT	\$241.70	per month

The AMI costs shall accrue monthly interest on any over or under recovered balances of such costs at the interest rate based on a two-year constant maturity Treasuries as published in the Federal Reserve Statistical Release on the first day of each year (or the closest day thereafter on which rates are published), plus sixty basis points, but shall not exceed the Company's overall rate of return as approved by the BPU. Such interest rate shall be reset each year. The interest calculation shall be based on the net of tax beginning and end average monthly balance, consistent with the methodology in the Board's Final Order dated May 17, 2004 (Docket No. ER02080506 et al.), compounded annually (added to the balance on which interest is accrued annually) on January 1 of each year.

The Company will make subsequent annual filings to reset the AMI Charges to recover prior year true-up with interest and prospective revenue requirement for the recovery period as approved by the Board.

Issued: **Effective:**

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Docket No. **dated**

Section 3 - Billings, Payments, Credit Deposits & Metering

3.23 Metering: (Continued)

If requested by the Customer, the Company may, in its sole discretion, elect to provide kilowatt-hour pulses and/or time pulses from the Company's metering equipment. All costs for providing the meter pulses shall be paid by the Customer. If a Customer's consumption of kilowatts and/or kilowatt-hours increases as a result of interruptions or deficiencies in the supply of pulses for any reason, the Company shall not be responsible or liable, for damages or otherwise, for resulting increases in the Customer's bill.

If requested by a Customer, the Company may, in its sole discretion, elect to provide metering to a service location other than what is presently installed or otherwise proposed to be installed by the Company at that location. All costs for special metering facilities provided by the Company, including, but not limited to, all material, labor, overheads and administrative and general expenses, shall be billed to and paid by the Customer.

3.24 Advanced Metering Opt-Out

Any residential Full Service Customer or Delivery Service Customer served under Service Classification RS who declines to have an AMI meter installed when notified, requests the transmitter of an AMI meter be disabled or requests an AMI meter be removed for a digital non-communicating meter, will be classified as having opted-out of AMI metering and shall be subject to the following terms:

- 1.) Monthly Meter Reading – A monthly fee of \$28.09 shall apply to any customer who: refuses to allow the Company to install an AMI meter; requests that the transmitter of an AMI meter be disabled; or requests that an AMI meter be removed.
- 2.) Meter Replacements – Customers shall be charged a one-time fee of \$44.46 for the replacement of an AMI meter with a non-AMI meter. The replacement meter will be manually read. This fee will also apply to any customer who elects to participate in AMI metering after requesting the removal of such meter.
- 3.) Access to Premises – Customers who Opt-out of AMI metering must provide reasonable access for meter reading and meter maintenance that free of safety hazard to customers, the public or the utility personnel or facilities. If the customer fails to provide access for two months in a twelve-month period, then the customer will be required to: (a) relocate their metering equipment to an external location, at the customer's expense; or (b) permit the Company to reinstall an AMI meter or enable the AMI meter transmitter feature.

Customers who are taking generation service under a time differentiated rate or are involved in net metered generation will not have the option to opt out of having a smart meter.

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dated