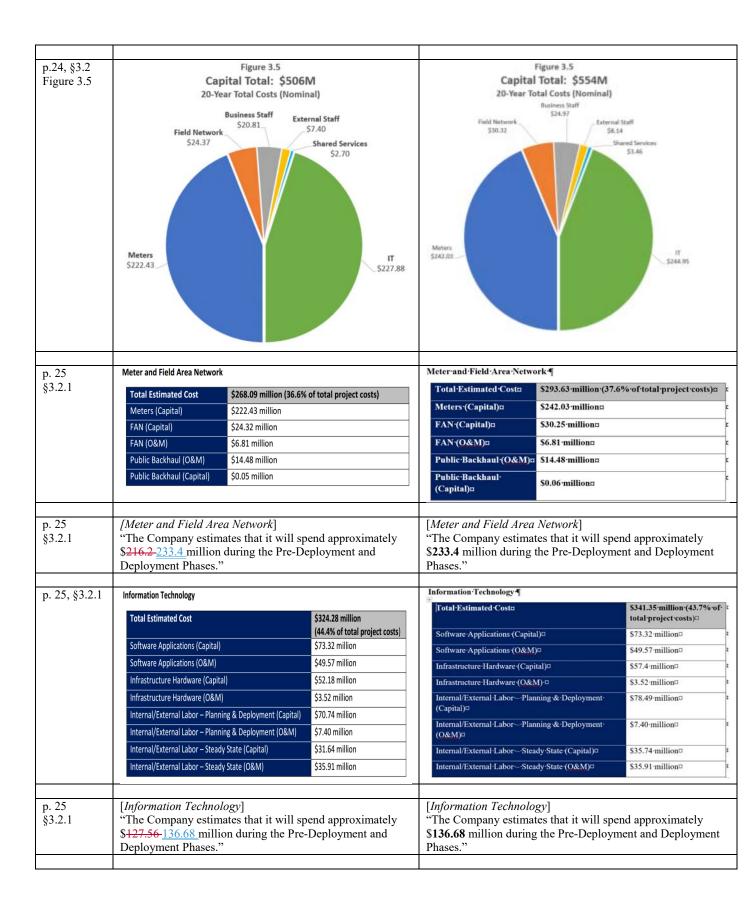
JCP&L-AMI Supplement Filing: Updated Sections of Original Filing (September 14, 2021)

BPU Docket No. EO20080545

Petition (subject)	Original Provision- text to be updated in track changes	Updated Provision- updated text in bold
Paragraph 9 (Est. Cost)	"Over the twenty-year study period, the Company projects total costs of the Program of \$732781 million, with \$506554 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 \$418446.7 million, consisting of capital investment of \$370.7 42 million and O&M costs of approximately \$76 million."	"Over the twenty-year study period, the Company projects total costs of the Program of \$781 million, with \$554 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 \$446.7 million, consisting of capital investment of \$370.7 million and O&M costs of approximately \$76 million."
Paragraph 12 (CBA)	"during the twenty year study period the Program is estimated to provide benefits to customers of \$1.358 billion, compared to estimated costs of \$732781 million (including capital and expense), or a benefit to cost ratio of 1.85:11.74:1. The Company has also calculated benefit to cost ratios on a net present value basis from a societal perspective (1.65:11.55:1), customer perspective (1.54:11.44:1) and Company perspective (1.17:11.08:1)."	"during the twenty year study period the Program is estimated to provide benefits to customers of \$1.358 billion, compared to estimated costs of \$781 million (including capital and expense), or a benefit to cost ratio of 1.74:1. The Company has also calculated benefit to cost ratios on a net present value basis from a societal perspective (1.55:1), customer perspective (1.44:1) and Company perspective (1.08:1)."
Paragraph 14 (rate impacts)	"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 1.36 or about 1.41.3% of the current average monthly bill" [Note: See S-JCPL-REV-2, RCR-E-26(e), RCR-A-8, RCR-E-23 and Supplemental Direct Testimony of Carol	"The JCP&L AMI Program will have an estimated maximum incremental bill impact on residential customers over the entire deployment period of approximately \$1.36 or about 1.3% of the current average monthly bill"
Paragraph 17 (WACC)	Pittavino]] "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. ER1604383 dated October 28, 2020 in the 2020 JCP&L base rate case, BPU Docket No. ER20020146. A Board-approved change in the WACC in []a future base rate case will be reflected in any subsequent revenue requirement calculations for the JCP&L AMI Program" [Note: Updated for most recent base rate order. See RCR-	"The initial WACC will be based on the return on equity ("ROE"), long term debt rate, and capital structure approved by Order dated October 28, 2020 in the 2020 JCP&L base rate case, BPU Docket No. ER20020146. A Board-approved change in the WACC in []a future base rate case will be reflected in any subsequent revenue requirement calculations for the JCP&L AMI Program."
Paragraph 22	E-26(e)]]	[Add reference to supplemental testimony] Carol Pittavino JC-4 Overheads Supplemental Direct Testimony

Ahr Testimony Page: line(s) (subject)	Original Provision- text to be updated in track changes	Updated Provision- updated text in bold
6:1-3 (Ext. Costs)	"Plan would result in accelerated investment by the Company of \$418447 million through the completion of the one-year pre-deployment period and three-year deployment period and \$732781 million on a nominal dollar basis in total over the twenty-year study period"	"Plan would result in accelerated investment by the Company of \$447 million through the completion of the one-year pre-deployment period and three-year deployment period and \$781 million on a nominal dollar basis in total over the twenty-year study period"
7:8-11 (Ext. Costs/CBA)	"The Company's cost benefit analysis estimated operational, customer and societal benefits from the proposed AMI Plan of \$1.358 billion on a cumulative, nominal dollar basis, compared to estimated costs of \$732781 million (including capital and expense) during the twenty-year study period, or a nominal benefit to cost ratio of 1.85:11.74:1."	"The Company's cost benefit analysis estimated operational, customer and societal benefits from the proposed AMI Plan of \$1.358 billion on a cumulative, nominal dollar basis, compared to estimated costs of \$781 million (including capital and expense) during the twenty-year study period, or a nominal benefit to cost ratio of 1.74:1."
20:22-21:5 (Est. Costs)	"The Company has estimated costs for the AMI Plan over a twenty-year study period of \$732781 million in the Business Case. These costs for a successful AMI implementation can be grouped into the following cost categories: (i) smart meters and FAN (\$268-294 million); (ii) Information Technology ("IT") (\$324-341 million); and (iii) staffing and support (\$140_146 million). Through the Pre-deployment and Deployment Phases, these costs are estimated to be: (i) smart meters and FAN (\$216-233 million); (ii) Information Technology ("IT") (\$128_137 million); and (iii) staffing and support (\$757 million)."	"The Company has estimated costs for the AMI Plan over a twenty-year study period of \$781 million in the Business Case. These costs for a successful AMI implementation can be grouped into the following cost categories: (i) smart meters and FAN (\$294 million); (ii) Information Technology ("IT") (\$341 million); and (iii) staffing and support (\$146 million). Through the Pre-deployment and Deployment Phases, these costs are estimated to be: (i) smart meters and FAN (\$233 million); (ii) Information Technology ("IT") (\$137 million); and (iii) staffing and support (\$77 million)."
28:4-10 (Est. Costs/CBA)	"over the twenty year study period, JCP&L AMI Plan is estimated to provide benefits to customers of \$1.358 billion on a cumulative, nominal dollar basis, compared to estimated costs of \$732781 million (including capital and expense), or a benefit to cost ratio of 1.85:11.74:1. On a Net Present Value ("NPV") basis, the AMI Plan is estimated to provide a benefit to cost ratio of 1.54:11.44:1 from the customer perspective, 1.65:1 1.55:1 from the societal perspective, and 1.17:11.08:1 from the Company perspective."	"over the twenty year study period, JCP&L AMI Plan is estimated to provide benefits to customers of \$1.358 billion on a cumulative, nominal dollar basis, compared to estimated costs of \$781 million (including capital and expense), or a benefit to cost ratio of 1.74:1. On a Net Present Value ("NPV") basis, the AMI Plan is estimated to provide a benefit to cost ratio of 1.44:1 from the customer perspective, 1.55:1 from the societal perspective, and 1.08:1 from the Company perspective."

Att. B to Ahr AMI PLAN Page, Section (subject)	Original Provision- text to be updated in track changes			Updated Provision- updated text in bold				
p. 11, § 1.6 (Est. Costs)	"the projected twenty-year lifecycle cost for this AMI Plan is estimated to be \$732781 million on a nominal dollar basis and approximately \$469500 million on a net present value ("NPV") basis when viewed from the Company's perspective. On the twenty-year lifecycle benefits side, operational benefits, customer-specific benefits and societal benefits have been estimated to be \$1.358 billion on a cumulative, nominal dollar basis, and approximately \$542 million on an NPV basis. This results in an overall positive benefit/cost ratio of 1.85:11.74:1 on a nominal basis and 1.17:11.08:1 on an NPV basis (Company perspective). The NPV benefit-cost ratios from both a customer and societal perspective are 1.54:11.44:1 and 1.65:11.55:1, respectively."			"the projected twenty-year lifecycle cost for this AMI Plan is estimated to be \$781 million on a nominal dollar basis and approximately \$500 million on a net present value ("NPV") basis when viewed from the Company's perspective. On the twenty-year lifecycle benefits side, operational benefits, customer-specific benefits and societal benefits have been estimated to be \$1.358 billion on a cumulative, nominal dollar basis, and approximately \$542 million on an NPV basis. This results in an overall positive benefit/cost ratio of 1.74:1 on a nominal basis and 1.08:1 on an NPV basis (Company perspective). The NPV benefit-cost ratios from both a customer and societal perspective are 1.44:1 and 1.55:1, respectively."				
p. 11, § 1.6	Costs = 20-Year				Costs – 20-Year			
(Ext. Costs)	Millions	-	0011	+	Millions	Capital	O&M	Total
	Meters	5222.43	O&M	Total 5222,43	Meters	\$242.03	-	\$242.03
	Field Network	\$24.37	521.29	\$45.66	Field Network	\$30.32	\$21.29	\$51.61
	Business Staff	\$20.81	\$57.63	578.44	Business Staff External Staff	\$24.97	\$57.63	\$82.60
	External Staff	\$7.40	\$43.91	\$51.31	Shared Services	\$8.14 \$3.46	\$43.91 \$7.60	\$52.05 \$11.06
	Shared Services	\$2.70 \$227.88	\$7.60 \$96.40	\$10.30 \$324.28	IT	\$244.95	\$96.40	\$341.35
	Total Costs	\$505.59	\$226.83	5732.42	Total Costs	\$553.87	\$226.83	\$780.70
p. 20 § 3 (CBA)	in nominal dollars, \$506554 million of which are for capital expenditures (Capital) and \$227 million for operations and maintenance (O&M) costs. Approximately \$418447 million (\$342-371 capital; \$76 O&M) is expected to be spent over the Pre-Deployment and Deployment Phases." the NPV benefit-cost ratios from the Company's perspective, the customer's perspective and society's perspective are \$1.17:1, 1.54:1-1.08:1, 1.44:1 and \$1.65:1-1.55:1\$, respectively. On a nominal basis, the overall benefit-cost ratio is \$1.85:1-1.74:1 and represents the summation of all benefits over the 20-year study period divided by the summation of all costs.			dollars, \$554 million of which are for capital expenditures (Capital) and \$227 million for operations and maintenance (O&M) costs. Approximately \$447 million (\$371 capital; \$76 O&M) is expected to be spent over the Pre-Deployment and Deployment Phases." "the NPV benefit-cost ratios from the Company's perspective, the customer's perspective and society's perspective are 1.08:1, 1.44:1 and 1.55:1, respectively. On a nominal basis, the overall benefit-cost ratio is 1.74:1 and represents the summation of all benefits over the 20-year study period divided by the summation of all costs."				
pp. 23 §3.2	Figure 3.4				Figure 3.4			
Figure 3.4		Total Costs:			Total Costs: \$781M			
	External Staff Syna.44 Field Network \$45.66			Suriness Staff \$82.40 Field Network \$51.61 Meters \$242.03	External Staff \$52.05	Shared Services \$11.06		



	Staffing and Support		Staffing and Support¶			
	Total Estimated Cost	\$140.05 million (19.1% of total project costs)	Total·Estimated Cost□	\$145.7 million 4 [18.7% of total-project costs) 2 [14.01 million 2 [14.01		
	Internal/External Labor – Planning & Deployment (Capital)	\$12.29 million	Internal/External·Labor·—·Planning·&·Deployment· (Capital) (Capital)			
	Internal/External Labor – Planning & Deployment (O&M)	\$55.36 million	Internal/External·Labor—Planning·&-Deployment-	\$55,36-million		
	Internal Labor – Steady State (Capital)	\$15.92 million	(O&M)□			
	Internal Labor – Steady State (O&M)	\$41.87 million	Internal·Labor·Steady·State·(Capital) Output Description:	\$19.10-million		
	External Labor – Steady State (O&M)	\$4.30 million	Internal Labor Steady State (O&M)	\$41.87·million		
	Shared (Support) Services (Capital)	\$2.71 million	External Labor - Steady State (O&M)	\$4.30·million©		
	Shared (Support) Services (O&M)	\$7.60 million	Shared (Support) Services (Capital) Shared (Support) Services (O&M)	\$3.46·million \$7.60·million		
			Shared (Support) Services (O&M)	51.00 minion		
p. 27 § 3.2.2 (Annual Budget For Planning & Deployment)	Meters \$ 5,937,950 \$ 54,583,097 \$ 73,365,323 \$ 7. Network \$ 2,242,500 \$ 6,241,030 \$ 7,778,431 \$ 11 IT \$ 28,170,081 \$ 38,223,922 \$ 29,094,545 \$ 11		"The Company estimates that it will sper \$76.83 million during the Pre-Deployme Phases." CAPITAL COSTS Vear 2022 2023 2024 Meters \$56,885,365 \$57,914,043 \$78,354,588 Network \$2,697,500 \$7,735,218 \$9,682,519 IT \$30,763,064 \$40,546,058 \$31,596,070 Total Capital \$40,345,929 \$106,195,319 \$119,633,176			
Attachment C to Ahr Testimony AMI Business Case Budget	IT	5,403,903 \$ 13,268 \$ 26,919 8,519,050 \$ 3,372,753 \$ 8,173,486 6,576,354 \$ 6,465,307 \$ 11,073,935	Meters \$ 6,885,365 \$ 57,914,043 \$ 78,354,588 \$ 77			
ı	Year 2022 2023 2024 Incremental O&M \$ 12,590,728 \$ 14,445,224 \$ 16,732,146 \$ 1	2025 2026 2027 5,122,935 \$ 7,337,080 \$ 7,080,685	Year 2022 2023 2024 2 Incremental O&M \$ 12,590,728 \$ 14,445,224 \$ 16,732,146 \$ 15	025 2026 2027 ,122,935 \$ 7,337,080 \$ 7,080,685		

Pittavino Test. Page:Line(s) (subject)				
1:14-15	"I provided pre-filed testimony on behalf of JCP&L in its two three most recently completed base rate cases, in BPU Docket Nos. ER16040383, and ER12111052 and ER20020146"	"I provided pre-filed testimony on behalf of JCP&L in its three most recently completed base rate cases, in BPU Docket Nos. ER16040383, ER12111052 and ER20020146"		
3:1-10 (return)	"JCP&L proposes to earn a return on its net investment in the AMI Program based upon an authorized return on equity ("ROE") and capital structure including income tax effects. In addition, the calculated return will be reduced by the return on the legacy meters, which resulted from the 2020 Base Rate Case. The Company's initial WACC for the Program will be based on the ROE, long-term debt and capital structure approved by the Board on December 12, 2016 October 28, 2020 in the 20162020 JCP&L base rate case, BPU Docket NoER16040383 ER20020146. JCP&L proposes the initial pre-tax WACC to be 9.169.34 percent. See Schedule CP-1 for the calculation of the current Pre-Tax and After-Tax WACC. Any change in the WACC authorized by the Board in a base rate case following this filing, including the case pending in BPU Docket NoER20020146, will be reflected in the revenue requirement calculations and subsequent rate adjustment filings for JCP&L Rider-AMI."	"JCP&L proposes to earn a return on its net investment in the AMI Program based upon an authorized return on equity ("ROE") and capital structure including income tax effects. In addition, the calculated return will be reduced by the return on the legacy meters, which resulted from the 2020 Base Rate Case. The Company's initial WACC for the Program will be based on the ROE, long-term debt and capital structure approved by the Board on October 28, 2020 in the 2020 JCP&L base rate case, BPU Docket No. ER20020146. JCP&L proposes the initial pre-tax WACC to be 9.34 percent. See Schedule CP-1 for the calculation of the current Pre-Tax and After-Tax WACC. Any change in the WACC authorized by the Board in a base rate case following this filing, will be reflected in the revenue requirement calculations and subsequent rate adjustment filings for JCP&L Rider-AMI."		
	response RCR-E-26 which discusses the return credit related to the Legacy Meter return recovered from the Base Rate Case.]			
3:15-16 (depreciation)	"Book recovery of assets associated with advanced meters will be recovered over a depreciable life of 15 20 years, which is the estimated useful life of such equipment" [Note: See response RCR-E-23, which discusses the useful	"Book recovery of assets associated with advanced meters will be recovered over a depreciable life of 20 years, which is the estimated useful life of such equipment"		
4:8-10 (depreciation)	life of the advanced meters.] "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 1520 years." [Note: See response RCR-E-23, which discusses the useful	"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 20 years"		
	life of the advanced meters.]			
12:22-13:2 (rate impacts)	"the initial bill impact of the proposed initial rates for the initial rate period to the typical residential customer who uses 768 kWh per month is an increase of 0.6% or approximately \$0.650.66 per month above rates effective January 1, 2022."	"the initial bill impact of the proposed initial rates for the initial rate period to the typical residential customer who uses 768 kWh per month is an increase of 0.6% or approximately \$0.66 per month above rates effective January 1, 2022."		
13:6	AMI Program - Average Residential Rate Impact Recovery Period 1 2 3 4 5 6	AMI Program - Average Residential Rate Impact Recovery Period 1 2 3 4 5 6		
13:7-9	"The maximum incremental bill impact on a residential customer over the entire deployment period is an estimated	"The maximum incremental bill impact on a residential customer over the entire deployment period is an estimated		

	increase of approximately \$\frac{1.42}{1.36}\$ or about 1.3% of the	increase of approximately \$1.36 or about 1.3% of the current
	current average monthly bill"	average monthly bill. "
	[Note: See Note: See S-JCPL-REV-2, RCR-E-26(e), RCR-A-8, RCR-E-23 and Supplemental Direct Testimony of Carol Pittavino]	
Pittavino		
Sch.'s		
CP-1	Per filing	See attached updated CP-1
(WACC)		
CP-2	Per filing	See attached updated CP-2
(Rev. Reqs)		•
CP-3 (Rates)	Per filing	See attached updated CP-3
CP-4 (Bill	Per filing	See attached updated CP-4
Impact)		
CP-5	Per filing	See attached updated CP-5
(Rider AMI)		
	[Note: there is no change to CP-6 (opt out tariff)]	[Note: there is no change to CP-6 (opt out tariff)]