CUSTOMER OPERATIONS PANEL TESTIMONY

2	I. Introduction	2
3	II. Summary of Testimony	7
4	III. Strategic Customer Experience Portfolio of Investments	10
5	New Customer Service System	
б	Customer Data and Analytics	24
7	Customer Relationship Management	29
8	Customer Data Sharing	
9	Billing and Payment Enhancements	
10	Digital Customer Experience	
11	Virtual Assistants	53
12	Journey Mapping	58
13	Back Office Automation and Workforce Management	64
14	Outage Communications	70
15	Privacy Readiness	75
16	IV. Supporting Core Customer Service Activities	79
17	Retail Access System Replacement	79
18	Contact Center Cloud	
19	Site Safety Enhancements	
20	Credit Modeling Tool	
21	Replevin and Final Bills	
22	Credit and Debit Card Fees	92
23	Customer Outreach & Education	94
24	V. Supporting Vulnerable Customers	96
25	Energy Affordability Program	
26	VI. Providing Multi-Language Customer Service	
27	VII. Metrics	
28	Customer Service Performance Mechanism	
29	Residential Termination, Uncollectibles and Arrears Incentive Mechanism	125
30	VIII. Other Topics	126
31	Billing and Estimation Challenges	
32	Mandatory Hourly Pricing Threshold	130
33	Electric Reconnection Fees	

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2		I. Introduction
3	Q.	Would the members of the Customer Operations Panel please
4		state their names and business addresses?
5	A.	Michele O'Connell, Christopher Grant, Michael Murphy,
6		Christine Osuji, Matthew Sexton, Jon Minners and Robert
7		Melvin. The business address of Ms. O'Connell, Mr. Murphy,
8		Mr. Sexton, Mr. Melvin and Mr. Minners is 4 Irving Place,
9		New York, NY 10003; the business address of Ms. Osuji is 30
10		Flatbush Avenue, Brooklyn, NY 11217; and the business
11		address of Mr. Grant is 1601 Bronxdale Avenue, Bronx, NY
12		10462.
13	Q.	By whom are the Panel members employed?
14	A.	We are employed by Consolidated Edison Company of New York,
15		Inc. ("Con Edison" or the "Company").
16	Q.	In what capacity are the Panel members employed and what
17		are their professional backgrounds and qualifications?
18	A.	(O'Connell) I am the Senior Vice President of Customer
19		Operations. I have overall responsibility for the Company's
20		customer service programs, including customer outreach, meter
21		reading, billing, and answering customer inquiries. I also
22		oversee the administration of the Company's retail choice
23		program that supports the competitive energy marketplace. I
24		began my employment with Con Edison in 2003 as an Associate

1 Engineer in Transmission Planning within Central Operations. In 2012, I took the position of General Manager, Substations 2 3 Planning and then, in 2015, I took the position of General Manager, Bronx/Westchester Substation Operations. 4 In September 2016, I became the Vice President of Staten Island 5 6 and Electric Services. In November 2019, I was promoted to my 7 current role of Senior Vice President, Customer Operations. Ι hold a Bachelor of Science degree in Electrical Engineering 8 9 from the New Jersey Institute of Technology and a Master of 10 Business Administration in Finance from Montclair State 11 University.

12 (Grant) I am the General Manager of Credit and Field Operations in Customer Operations. I am responsible for 13 meter reading and field collections throughout the service 14 15 territory. I am also responsible for theft-of-service investigations, replevin, credit and collections, 16 uncollectible bills and the Field Operations Performance 17 Management Group. I have been employed by Con Edison for 18 19 almost 25 years and have held a variety of management 20 positions within Customer Operations, in addition to a position in the Steam Business Unit. I was promoted to my 21 22 current position in 2014. I earned a Bachelor of Science 23 degree in Business Management from Cornell University.

1 (Murphy) I am General Manager of Strategic 2 Applications. My current responsibilities include subject 3 matter expertise and operational support in the areas of 4 customer support system design and implementation, analysis and improvements in the area of Customer Experience, 5 б including our Digital Customer Experience ("DCX") program, 7 quality assurance, and customer-related regulatory policy. 8 I have been employed by Con Edison for over 21 years and 9 have held a variety of positions within Customer Operations, in addition to an assignment as Section Manager 10 for Stores Operations in Supply Chain. My prior positions 11 in Customer Operations include Department Manager, Digital 12 13 Customer Experience; Department Manager, Operations and 14 Applications Support; Section Manager, Retail Choice Operations; Senior Specialist, Corporate Customer Group; 15 and Supervisor, Specialized Activities. I earned a 16 Bachelor of Science degree in Business Administration from 17 the University at Albany and a Master of Business 18 Administration in Management of Information Systems from 19 20 Fordham University.

(Osuji) I am General Manager of the Customer
 Assistance group in Customer Operations. I have held this
 position since September 2013. My group includes the
 Company's Customer Experience Centers (formerly known as

1 the Call Center); back-office functions including billing, 2 credit operations, and customer investigations; and the 3 Company's Walk-in Centers. I joined Con Edison in 2000 as 4 a specialist in Human Resources. I have held positions of increasing responsibility in Human Resources Employee and 5 6 Labor Relations, Leadership and Career Development, and 7 Customer Operations. I earned a Bachelor of Science degree 8 in Business Administration from State University at 9 Buffalo.

(Sexton) I am the General Manager of Specialized 10 Activities in Customer Operations. Specialized Activities 11 includes the Corporate Customer Group, Retail Choice 12 13 Operations, the Executive Action Group, and the Meter 14 Action/Unmetered Services Group. I have held this position since December 2017. I joined Con Edison in 2004 as a 15 Supervisor in Customer Operations and have held a variety 16 of positions within Customer Operations, in addition to an 17 assignment as Section Manager for the NorthStar Management 18 Audit in Business Finance. My prior positions in Customer 19 Operations include: Department Manager, Digital Customer 20 Experience; Section Manager, Accounting/Personal Service; 21 22 Section Manager, Process Excellence; Section Manager, Off-Hours Call Center; and Senior Specialist, Off-Hours Call 23 24 I have a Bachelor of Business Administration Center.

degree in Financial Accounting from Baruch College and a
 Master of Business Administration in Human Resource
 Management from Baruch College.

4 (Minners) I am the Department Manager for Customer Outreach and Education. I am responsible for the Company's 5 6 outreach and education program, including outreach to 7 customers, community groups, and officials. I have held 8 this position since February 2021. I joined Con Edison in 9 2016 and was a senior specialist in Customer Outreach and Education before taking on my current role as Department 10 Manager. I have a Bachelor of Arts in Creative Journalism 11 from Baruch College, City University of New York. 12

13 (Melvin) I am the General Manager of the Con Edison 14 and Orange & Rockland Engagement ("CORE") Project, which is the joint Con Edison and Orange and Rockland Utilities, 15 Inc. ("O&R") New Customer Service System ("CSS") 16 implementation team. I have held this position since 2020. 17 I was employed by O&R from 1990 through 1995 in the 18 Economics Research Department. From 1995 through 2008, I 19 was employed by International Business Machines Corp. in 20 various financial management and operations positions. 21 In 22 2008, I returned to O&R as a Specialist in Customer Energy Services and have also served as the Retail Access Manager. 23 24 In 2014, I assumed management responsibility for the CIMS

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1		team, which manages the legacy O&R Billing System. In
2		2018, I became the Business Director for the CSS
3		implementation team, and in 2020 I joined Con Edison as the
4		General Manager of the CSS Implementation Project. I
5		earned a Bachelor of Arts degree in Economics from Hobart
6		College and a Master of Business Administration degree in
7		Financial Economics from Iona College.
8	Q.	Have you previously submitted testimony or testified before
9		the New York State Public Service Commission ("PSC" or the
10		"Commission")?
11	A.	Mr. Grant, Mr. Murphy, Ms. Osuji, Mr. Sexton, and Mr.
12		Melvin have submitted testimony in previous cases. Ms.
13		O'Connell and Mr. Minners have not submitted testimony
14		before the Commission.
15		II. Summary of Testimony
16	Q.	What is the purpage of the Danalis testimony?
17		what is the purpose of the Paher's testimony:
	A.	This Panel's testimony presents an overview of planned
18	Α.	This Panel's testimony presents an overview of planned programs for Customer Operations that are necessary, in
18 19	Α.	This Panel's testimony presents an overview of planned programs for Customer Operations that are necessary, in conjunction with other Company programs addressed by other
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18 19 20 21 22	Α.	<pre>what is the purpose of the Panel's testimony? This Panel's testimony presents an overview of planned programs for Customer Operations that are necessary, in conjunction with other Company programs addressed by other witnesses/panels, to achieve the following objectives: 1) implement a Strategic Customer Experience ("Strategic CX") Portfolio of investments that will meet both evolving</pre>
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1 support core customer service activities, including 2 migration of the contact center infrastructure to a cloud-3 based solution, enhancements to Site Safety tools, credit 4 modeling, inactive gas replevin and final bill processes, credit and debit card fees, and customer outreach and 5 6 education; 3) address how the Company has and will continue 7 to support its most vulnerable customers as its service 8 territory recovers from the COVID-19 pandemic; 4) provide 9 service to customers who speak languages other than English; 5) establish a basis for new and revised 10 performance metric targets during the rate period; and 6) 11 address billing and estimation challenges, mandatory hourly 12 13 pricing for large customers and electric reconnection fees. Does the Company propose information technology ("IT") 14 Q. investments in this Panel's testimony and, if so, are these 15 16 IT investments a part of the Company's IT Governance process and overall enterprise IT portfolio? 17 Yes, the Company is proposing a number of IT investments in 18 Α. this Panel. These investments are governed by the Company's 19 Information Technology Board (ITB), in the same manner as 20 all the IT efforts discussed by the Information Technology 21 22 Panel. These IT investments are discussed in the Customer Operations Panel because they are so closely tied to other 23

1		customer issues discussed in this Panel and have a primary
2		objective of enhancing the customer experience.
3	Q.	What period does your testimony cover?
4	A.	The Panel will present the programs planned for the 12-
5		month period ending December 31, 2023 ("Rate Year" or
6		"RY1"). While, as discussed by the Company's Accounting
7		Panel, the Company is not proposing a multi-year rate plan
8		in this rate case, the Company is interested in pursuing,
9		through settlement discussions with Staff and interested
10		parties, a multi-year rate plan. To facilitate settlement
11		discussions, we also address capital plant additions and
12		other programs and initiatives for the two years following
13		the Rate Year. We will refer to the 12-month periods
14		ending December 31, 2024 and December 31, 2025 as "RY2" and
15		"RY3," respectively.
16	Q.	What is the aggregate projected spending on customer
17		service-related activities described in this testimony?
18	Α.	In total, the Company projects expenditures of \$112.0
19		million in RY1, \$77.3 million in RY2, and \$93.0 million in
20		RY3 on customer-service-related capital programs described

discussed by this Panel will require additional incremental
O&M expenditures of \$50.2 million in RY1, an incremental

in this testimony. The Company projects the programs

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reduction of \$3.1 million in RY2, and a further reduction
 of \$387,000 in RY3.

3 These amounts do not include capital and O&M funding 4 for the Customer Recommendations and Analysis Tools 5 program. This program is a part of the Strategic CX 6 Portfolio of investments outlined in this testimony, but is 7 discussed in the Customer Energy Solutions ("CES") Panel 8 testimony. The cost of that program is included, however, 9 in the discussion of the cost of the Strategic CX Portfolio in Part III of this testimony. 10

11 Q. Are some of your programs applicable to both electric and12 gas services?

A. Yes. We note that the programs described in our testimony
address the needs of both electric and gas customers and,
therefore, the associated costs are allocated as common
programs. The Accounting Panel describes and applies the
allocation of these costs between electric and gas service.
Does your testimony propose any new incentives or

19 mechanisms?

20 A. No.

21 III. Strategic Customer Experience Portfolio of Investments
22 Q. Why is the Company proposing the Strategic CX Portfolio?
23 A. Providing an optimal customer experience continues to be at
24 the core of our business and, as a result, is an important

1 part of this rate filing. Continued investments in the 2 customer experience are more important than ever as 3 societal trends, including technological advances, and the 4 clean energy transition transform how our customers use 5 energy and interact with the Company. Indeed, the State 6 expects that customers will play an important role in 7 helping to achieve State clean energy goals, and supporting 8 customers through this transition is accordingly part of 9 the Company's clean energy commitment. With this in mind, we have developed a series of investments focused on the 10 customer experience we call our Strategic CX Portfolio. 11 These programs will meet both evolving customer and 12 13 stakeholder expectations and enable the Company to lead the 14 transition to a clean energy future.

15 Q How does the Strategic CX Portfolio of investments create 16 value for customers?

The Strategic CX Portfolio will provide value for customers 17 Α. in several ways. It will increase customer satisfaction as 18 the Company meets rising customer expectations for service 19 and communications; drive cost efficiencies through 20 improved service and resolution; support statewide clean 21 22 energy goals by generating customer demand for and streamlining adoption of programs, as well as providing 23 24 customer and system data that can facilitate investment and

1	accelerate the deployment of clean energy solutions
2	throughout the State; enhance understanding and adoption of
3	optional rates, which help customers save money and support
4	grid efficiency; support customer satisfaction through
5	improved communication during outages; and provide
6	education and access to payment assistance when customers
7	experience financial difficulties that impact their ability
8	to pay for service.
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9 Q. Are these new investments or the continuation of existing10 investments?

The Company's Customer Experience efforts began with 11 Α. proposals in Cases 16-E-0060, 16-G-0061, 19-E-0065 and 19-12 13 G-0066, and these investments continue programs approved in 14 those proceedings, including the Digital Customer Experience effort (2016 cases) and Customer Data and 15 Analytics (2019 cases). In addition, the Company is 16 proposing new programs that reflect emerging customer and 17 stakeholder needs, changes in technology, and industry 18 19 trends.

20 Q. What type of investments are included in the Strategic CX21 Portfolio?

A. The investments include IT system enhancements and new
implementations, as well as costs for vendor and employee
support. The specific details of the investments are

outlined in detail in this testimony and associated
 exhibits.

3 Q. Does the Strategic CX Portfolio of investments support O&R 4 as well?

Yes, the programs in the Strategic CX Portfolio support 5 Α. 6 both companies, resulting in cost efficiencies and a common 7 customer experience. For example, the New CSS, Customer 8 Relationship Management and Digital Customer Experience 9 programs were included in Joint Proposal pending the PSC's approval in O&R's 2021 Rate Case (21-E-0073, 21-G-0074). 10 Why is it important for these investments to continue? 11 Ο. 12 The Company's investments in the customer experience over Α. 13 the last few years have provided measurable value to 14 customers. This has been documented in quarterly Next Generation Customer Experience ("Next Gen CX") reports 15 filed in Cases 19-E-0065, 19-G-0066, 18-E-0067 and 18-G-16 0068, and further details have been provided in 17 EXHIBIT_(CO-1) Customer Experience Progress. Without 18 further investments, the Company will not be able to 19 continue to add valuable enhancements that meet the rising 20 expectations of customers and stakeholders. In addition, 21 22 the Company must continue to make investments in foundational customer experience technology that will 23 24 enable the Company to provide exceptional services to

1 customers and respond to emerging issues. For example, 2 when the COVID-19 pandemic began, the Company leveraged its 3 investment in customer experience technology to quickly 4 provide customers with options to attest to financial hardship and receive customer protections provided by New 5 6 York State via the Parker Mosely (Chapters 108 and 126 of 7 the Laws of 2020) legislation passed in 2020 and the Parker 8 Richardson legislation passed in 2021. In addition, 9 customer experience investments must continue so that our customers can help the State meet the goals of the Climate 10 Leadership and Community Protection Act (the "CLCPA"). 11 Meeting the State's ambitious clean energy goals in the 12 13 CLCPA and elsewhere will require customers' energy use to 14 change significantly, and the Company will require tools 15 and capabilities that support customers through this 16 transition.

17 Q. How does the Company plan to track accomplishments and customer value as part of the Strategic CX Portfolio? 18 The Company proposes to continue filing quarterly reports 19 Α. currently filed with the Secretary for its Next Gen CX 20 investments in Cases 19-E-0065, 19-G-0066, 18-E-0067 and 21 22 18-G-0068. As they have for the investments made over the last several years, these quarterly reports will provide 23

transparency into the progress and accomplishments of the
 Strategic CX Portfolio.

3 In addition to the strategic value of these efforts, as 0. 4 defined in this testimony and the accompanying exhibits, has the Company incorporated cost savings from the 5 6 Strategic CX Portfolio investments into its plans? 7 The Company has a track record of deploying customer Α. 8 experience technology that improves customer satisfaction 9 while also resulting in cost savings. The Company has reported this progress during the current rate plan in its 10 Next Gen CX quarterly reports. In this rate filing, the 11 12 Company has stated in the respective exhibits that the 13 Strategic CX Portfolio of investments will provide specific 14 opportunities for cost efficiencies.

However, cost savings have not been incorporated into 15 16 the proposals for RY1-RY3 because the Company expects nearterm customer service complications due to abnormal 17 operating conditions that will offset any potential cost 18 savings resulting from these efficiencies. Specifically, 19 the Company expects these complications to arise due to 20 conditions created by the pandemic and the Company's 21 22 conversion to a new billing system. The Company expects 23 customer service interactions to increase as a result of 24 historically high levels of customer arrears during the

1 pandemic. In addition, the Company expects increases in 2 customer interactions during the stabilization period of 3 the new billing system, as noted in EXHIBIT (CO-2) New 4 Customer Service System. Efficiencies that are achieved 5 during RY1-RY3 will support the Company's ability to 6 maintain customer service levels during these near-term 7 challenges but will not result in a net reduction to 8 overall operating costs. 9 Q. Does the Company propose to provide updates on the progress 10 of these efforts, including realized cost efficiencies during RY1-RY3? 11 12 Yes, as noted above, the Company proposes to continue its Α. 13 quarterly reporting filed with the Commission on the 14 progress of its customer experience investments in the same manner as the current plan and will report cost 15 16 efficiencies that are realized during the rate plan. In addition, the Company may use the data to develop estimates 17 of direct cost savings in future rate filings as the 18 solutions mature and abnormal operating conditions subside. 19 What specific investments is the Company proposing as part 20 Ο. of its Strategic CX Portfolio? 21 22 The Company proposes investments in four capability areas. Α. 23 In the Foundation and Building Blocks capability area, the

24 Company proposes the New Customer Service System, Customer

1 Relationship Management, Digital Customer Experience, 2 Customer Data and Analytics, and Privacy Readiness. In the 3 Clean Energy Solutions capability area, the Company 4 proposes Customer Data Sharing and Recommendations and Analysis Tools (discussed in the CES Panel testimony). 5 In 6 the Expand Channels and Communications capability area, the 7 Company proposes Billing and Payment Enhancements, Virtual 8 Assistants, and Outage Communications. And in the Advance Internal Capabilities capability area, the Company proposes 9 Journey Mapping and Back Office Automation and Workforce 10 Management. 11 What is the total funding proposed for the Strategic CX 12 Q. 13 Portfolio? 14 The Company proposes to spend \$123.6 million in capital and Α. additional incremental O&M of \$51.4 million in Rate Year 1, 15 16 \$85.2 million in capital and an incremental reduction in O&M of \$2.9 million in Rate Year 2, and \$80.0 million in 17 capital and a further reduction in O&M of \$2.6 million in 18 Rate Year 3. Please see EXHIBIT (CO-3) Strategic CX 19 Portfolio Investments for a summary of the projects / 20 21 programs and associated cost. Please describe the specific proposed projects / programs 22 Q.

in detail.

1	Α.	Each of the components of the Strategic CX Portfolio of
2		investments is discussed below.
3		New Customer Service System
4	Q.	Please describe the status of the Company's efforts related
5		to the new Customer Service System.
6	A.	The Company is implementing the new CSS as a strategic
7		investment to serve the needs of and strengthen its
8		relationships with its electric and gas customers. While
9		the new CSS is replacing the back-office billing system and
10		is not a customer-facing system, it interacts with
11		customer-facing systems.
12		The new Oracle Customer Care and Billing ("CC&B")
13		platform will replace both Con Edison's and O&R's existing
14		billing systems. The Commission approved this investment
15		in Con Edison's and $O\&R$'s prior rate cases. There is an
16		allocation of costs between the two companies for the
17		project, with approximately 92.75 percent allocated to Con
18		Edison and 7.25 percent allocated to O&R.
19	Q.	What work has been completed or is planned for this project
20		in the current rate plan?
21	A.	The Company has been following the business plan for this
22		project submitted in Cases 19-E-0065 and 19-G-0066. In
23		2019-2020, the Company completed pre-implementation work

24 and planning. In 2021, the Company completed design work

1		and commenced the system build phase. The Company expects
2		to complete the system build in early 2022.
3		In 2022, extensive testing of the system commences,
4		along with training in the latter half of 2022. In 2023,
5		the Company will conclude User Acceptance Testing and User
6		Training before the scheduled go-live date.
7	Q.	Has the Company reported on the progress of the new CSS
8		implementation?
9	A	Yes. As required in the Commission's January 16, 2020
10		Order Adopting Terms of Joint Proposal and Establishing
11		Electric and Gas Rate Plan in Cases 19-E-0065 and 19-G-0066
12		(the "2020 Rate Order"), the Company files quarterly
13		progress reports on the status and expenditures for the
14		project. The Company has also filed annual Customer
15		Service System Staffing and Training reports in December
16		2020 and 2021.
17	Q.	Has the Company sought input from interested stakeholders
18		on this project?
19	A.	Yes. The Company held stakeholder forums on June 1, 2020
20		and October 26, 2020, each of which was attended by over 20
21		stakeholder representatives. In addition, the CSS project
22		team has been working closely with vital business
23		stakeholders, including the Company's corporate Bill Print
24		and Customer Messaging vendors, Energy by 5 (Luthin

1		Associates), corporate financial institutions, New York
2		City Department of Citywide Administrative Services
3		("DCAS"), New York City Housing Authority, New York
4		Electronic Data Interchange Working Group, New York Power
5		Authority, customer consultants, and other external
6		parties, including energy service companies ("ESCOs"), to
7		support the transition to the new CSS.
8	Q.	How much has been spent on the project to date?
9	A.	As of December 31, 2021, the Company spent \$234.4 million
10		of the project's approved capital funding, including \$53.7
11		million for the Oracle CC&B software, and $$5.9$ million on
12		O&M. The Company forecasts to spend \$136.1 million in
13		2022, of which \$126.5 million will be capital and \$9.6
14		million will be O&M.
15	Q.	What is the Company's funding request to complete
16		implementation of the new CSS system?
17	A.	The Company proposes to spend \$59.8 million in capital in
18		Rate Year 1 to complete implementation of the system. This
19		is in line with the Company's Commission-approved business
20		plan from the 2020 Rate Order, and the costs are primarily
21		needed for Con Edison's solution integrator, staffing, and
22		hardware and software. The Company also proposes to spend
23		\$27.8 million in O&M for Rate Year 1.

Q. The initial business plan noted that approximately \$44
 million of capital would be needed in 2023. Please
 explain.

4 The overall capital cost to implement the new CSS is not Α. changing. Con Edison's total capital expenditure for the 5 6 new CSS project is expected to be in line with the \$421 7 million cap on capital expenditures established in the 8 prior electric and gas rate proceeding. The increase of 9 \$15.8 million in capital in 2023 relative to the business plan is the result of a shift in capital spending from 10 earlier rate years to 2023. 11

Please describe the Company's estimated O&M spending 12 0. 13 related to the completion of the new CSS implementation. 14 To complete the new CSS implementation, the Company Α. forecasts a total O&M expenditure of approximately \$27.8 15 million for 2023. These costs include labor costs for IT 16 and Customer Operations support, including temporary 17 employees to assist in the Call Center during training and 18 operational support after the system goes live. It also 19 includes costs for change management, including training 20 development, training delivery, and communications, and to 21 22 design and develop training materials and methodologies to prepare the organizations for the transition to the new 23 24 CSS.

1 The original business case estimated \$22.6 million in 2 O&M for 2023, so this request represents an increase of 3 \$5.2 million. The increase is driven by an updated 4 estimate in the calculation for provisional headcount outlined in the previous rate case and additional 5 6 supervisors needed to oversee staffing for provisional 7 customer service representatives ("CSRs") and increased 8 overtime for go-live back-office support. 9 Q. Will the Company incur ongoing capital costs after the new 10 CSS is operational? Yes, the Company is requesting \$7.8 million in capital in 11 Α. 12 Rate Year 2 and \$7.8 million in capital in Rate Year 3 to 13 cover upgrades to application and database server hardware 14 and non-Oracle CC&B software upgrades. The capital expenditures will also cover system enhancements for future 15 system functionality, rate configurations and designs. 16 The Company is developing a list of additional functions to be 17 implemented after 2023 that were identified after the 18 completion of the design phase. Examples of such 19 20 additional functionality are the development of a customer rate impact tool and the addition of positive ID waterfall 21 22 questions to assist in confirming customer identities. Are the capital amounts for Rate Years 2 and 3 included in 23 Q.

24 the overall \$421 million cap for the project?

1	A.	No. The \$421 million cap on capital is for project
2		implementation costs that conclude in 2023. These
3		additional capital costs will be expended after the new CSS
4		is implemented.
5	Q.	Will the Company incur ongoing O&M costs in Rate Years 2
6		and 3, after the new CSS is operational?
7	Α.	Yes, the Company estimates that ongoing O&M spending will
8		be required to support the new CSS after it goes live. The
9		Company projects the O&M spending to be \$22.9 million in
10		Rate Year 2 and \$19.2 million in Rate Year 3. These O&M
11		costs include staffing for the new CSS system, software and
12		hardware maintenance, cloud hosting costs for testing and
13		development environments and training, and other employee
14		expenses. The staffing costs are a result of project staff
15		moving from a capital cost to an O&M cost, not new
16		headcount. The O&M for Rate Year 2 includes the provisional
17		CSR resources that were approved in the 2020 Rate Order.
18	Q.	Does the increase in O&M costs for 2023, 2024 and 2025
19		impact the project's payback period contained in the
20		Customer Service System Business Plan?
21	Α.	Yes, but the impact to the project's cost-benefit
22		calculation is minimal. The payback period for the new CSS
23		investment is extended by 24 months due to the O&M
24		increase.

1	Q.	Have you prepared, or had prepared under your supervision,
2		exhibits that detail the Company's proposed investment in
3		the new Customer Service System?
4	Α.	Yes. We have prepared two exhibits, entitled EXHIBIT_(CO-
5		2) New Customer Service System and EXHIBIT(CO-4) New CSS
6		Enhancements.
7		Customer Data and Analytics
8	Q.	Please describe the status of the Company's efforts related
9		to the Customer Data and Analytics Program.
10	A.	This program began in 2020 with a goal of using modern data
11		and analytics platforms to connect disparate customer data
12		sources, bringing together information from customer
13		interactions, accounts and billing data, and sorting
14		through the resulting data to identify patterns, trends,
15		correlations and relationships. The connected data is
16		being used to develop a better understanding of and predict
17		current and future customer needs.
18		A key focus area in 2020-2022 was to enhance the
19		Company's Enterprise Data and Analytics Platform ("EDAP")
20		to integrate and model data sources and deliver initial use
21		cases such as Call Center employee performance and
22		productivity dashboards, linking website activity to

24 customers contact the Company multiple times about the same

23

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customer phone calls, and identifying drivers for why

1		issue. The work also resulted in a simplified data model
2		with new reporting and analytics tools that improved the
3		speed of analyses that require information from multiple
4		systems.
5	Q.	What is the projected capital cost of this program over the
6		2023-2025 rate period?
7	Α.	The Company proposes to spend \$13.72 million in capital for
8		Rate Year 1, \$18.9 million in capital for Rate Year 2, and
9		\$19.9 million in capital for Rate Year 3.
10		Capital funding will be used for project management,
11		IT development and system integrator costs in the following
12		focus areas: Customer Analytic Record Enhancements,
13		Personalized and Streamlined Interactions, Payment Journey
14		Insights, Customer Satisfaction Root Cause Analysis,
15		Service Channel Strategy, Clean Energy Program Insights and
16		Data Source Integration.
17	Q.	Is the Company planning to increase the amount of $O\&M$
18		associated with this program?
19	A.	Yes. The Company requests an increase of \$3.08 million for
20		Rate Year 1, an incremental increase of \$220,000 in Rate
21		Year 2 and an incremental increase of \$1.45 million for
22		Rate Year 3 to maintain the robust customer analytics
23		environment within EDAP, support the Company's Demand
24		Management Analytics Platforms ("DMAP"), implement new

1		tools and software that enable big data analysis on
2		customer service issues, support rapid insights, and
3		provide structured project and change management needed to
4		maintain value from the program's use cases.
5	Q.	What specifically is the Company proposing for this program
6		over the 2023-2025 period?
7	A.	The Company proposes to expand use cases and data sources
8		that business units across the Company can leverage to
9		obtain customer and market insights. More specifically, we
10		seek to accomplish the following:
11		• Expand previous use cases and data sources with an
12		additional 25 data sources, including internal
13		databases, databases from third-party vendors, and
14		publicly available data sets.
15		• Develop analytics models for additional insights, such
16		as why customers drop off certain communication
17		channels and why certain service channels provide
18		higher customer satisfaction. Another key area of
19		focus will be on payment program propensities and
20		payment agreement analytics to support new programs
21		and processes to address customer needs regarding
22		payment preferences and assistance.

Identify personalized insights to improve and
facilitate customer experiences, such as situations

where the CRM system should send preemptive outbound
customer support, or where root cause analysis is
needed to address customer satisfaction issues. These
personalized insights can be sent to Virtual Assistant
and CSRs to help in real time and contribute to faster
resolution.

7 • Integrate clean energy program data into the platform to gain actionable insights that support expansion of 8 9 our clean energy programs across customer segments. For example, this will allow the Company to develop 10 analytics models for insights on building 11 12 electrification opportunities in disadvantaged communities and proactively reach out to customers who 13 14 would benefit the most from clean energy programs.

Maintain the EDAP technologies that support the
 program and create a change management and governance
 team to oversee program delivery and evolution.

18 Q. What are the benefits of this program?

19 A. This program personalizes customer insights to recommend 20 programs or activities that are the best for a given 21 customer's circumstances, which enables the Company to 22 deliver a more personalized customer interaction that can 23 improve satisfaction and trust in Con Edison's business 24 delivery while enabling cost efficiencies.

1 Specific investments in payment assistance-based use 2 cases will allow the Company to proactively identify 3 candidates for payment agreements and gather insights into 4 how clean energy programs and incentives can support 5 customers requiring payment assistance.

6 Improved program targeting and efficiency measures 7 will optimize program design and activities across 8 programs. With deep customer insights, the Company can 9 meet rising customer expectations and introduce customers 10 to new programs and services that will advance progress 11 toward meeting the goals of the CLCPA.

12 Q. Why is it important that these investments are made at this 13 time?

14 A. This program's consolidated data and insights are critical 15 to all other investments in the Company's Strategic CX 16 portfolio, as they enable more effective and intelligent 17 customer service. Continued investment in this program is 18 also necessary to realize the full value of the enterprise-19 level Customer Data and Analytics program that began in 20 2020.

Q. Have you prepared, or had prepared under your supervision,
exhibits that detail the Company's proposed investment in
the Customer Data and Analytics program?

1	Α.	Yes. We have prepared five exhibits, entitled
2		EXHIBIT(CO-5) Customer Data and Analytics, EXHIBIT(CO-
3		6) Customer Data and Analytics Request, EXHIBIT_(CO-7)
4		Customer Data and Analytics Capital Request Detail,
5		EXHIBIT(CO-8) Customer Data and Analytics Data Sources
6		and EXHIBIT(CO-9) Customer Data and Analytics Use Cases.
7		Customer Relationship Management
8	Q.	Please explain what a CRM tool does.
9	Α.	A CRM solution gathers customer interactions across all
10		channels in one place. It supports the entire customer
11		lifecycle, beginning with the capture and management of
12		prospective customer contact data. It manages all
13		important information about the customer, including
14		profile, contacts, communications preferences and consents,
15		and the entire history of interactions with the Company via
16		any channel. These interactions are from conversations
17		with agents at the call center and transactions made or
18		attempted via self-service channels such as the web,
19		interactive voice response systems ("IVR"), chatbots or
20		mobile apps.
01		Using a CDM tool the Company will have a full view of

Using a CRM tool, the Company will have a full view of the customer and can prepare proactive campaigns, deliver contextual and guided service experiences to resolve customer inquiries, allow agents to provide suggestions and

1	recommendations proactively, engage with customers
2	regarding clean energy programs and offerings and payment
3	assistance enrollment, and apply advanced analytics to
4	target customers. The ability to support improved
5	engagement will be particularly important to the more than
6	three million residential and small commercial mass market
7	customers who could benefit from this more personalized
8	service.

9 Q. What funding is required for this program during the three10 Rate Years?

A. The Company proposes to spend \$6 million in capital for Rate Year 1, \$12 million in capital for Rate Year 2, and \$10 million in capital for Rate Year 3. The Company proposes O&M spending of \$1 million in Rate Year 1 and an incremental increase of \$1 million in Rate Year 2. O&M spending will not change from Rate Year 2 to 3.

Capital funds will be used to implement an initial CRM 17 18 infrastructure that will integrate with Con Edison's core systems to enable the creation of new workflow management 19 20 capabilities for customer service representatives, a comprehensive knowledge management system, a platform to 21 22 manage customer enrollment in clean energy and energy 23 efficiency programs, and an enterprise-wide management tool 24 for all marketing campaigns. The O&M expenditures are

1		necessary to cover software licenses and administrative
2		services, including change management and training for
3		employees on how to use the new software.
4	Q.	What are you proposing for this program over the 2023-2025
5		period?
6	A.	Implementing a single enterprise CRM solution fully
7		integrated with other platforms will require a large,
8		multi-year effort. For the 2023-2025 period, the Company
9		proposes taking the initial steps of selecting and hiring a
10		knowledgeable and experienced system integrator, choosing a
11		platform or vendor for the system, and developing the
12		improvements that will enable the initial benefits of a CRM
13		system. These benefits include centralized marketing and
14		communications management, a knowledge management database
15		accessible by all customer-facing employees, employee
16		dashboards to manage interactions/transactions and help
17		customers more efficiently, and program enrollment
18		management focusing on clean energy and payment assistance
19		programs.
20	Q.	Will this tool be integrated with other IT platforms?
21	Α.	Yes. When fully developed, the CRM program will integrate

with the new CSS, AMI, DCX and numerous clean energy
 programs (e.g., Demonstration Projects, AMI Innovative
 Pricing Pilots (Smart Energy Plan), Energy Efficiency

1		programs). Additionally, the CRM platform will serve as an
2		action center for several ongoing and new capital projects
3		proposed in this filing, including Virtual Assistant,
4		Journey Mapping, Outage Communications and Customer Data
5		and Analytics.
6	Q.	What are the benefits of this program?
7	A.	The CRM will facilitate consistent, seamless customer
8		experiences. It will reduce inbound calls to the call
9		center by increasing proactive outbound communications that
10		anticipate customers' needs; enable seamless campaign
11		management from development to customer messaging, allowing
12		the Company to target the right customers with the right
13		clean energy offers at the right time; help the Company
14		more effectively educate customers about rate offers; and
15		guide customers through payment options when they fall
16		behind.
17		CRM also allows customer-facing departments to act on
18		and draw conclusions from the Customer Data and Analytics
19		program to create intelligent solutions for day-to-day
20		problems and have rich historical data to help customers
21		during transactions/interactions.
22	Q.	Why should these investments be made now?
23	Α.	A CRM will allow the Company to achieve increased customer

24 engagement and satisfaction by enabling all internal

organizations to better understand our customers' needs
 (with an initial focus on residential and small commercial
 mass market customers) and target them for the new programs
 that fit their profiles.

From a customer service perspective, one of the 5 6 biggest challenges the Company currently has is fragmented 7 processes and multiple systems of record which prevent 8 employees from helping customers through multiple issues in 9 the same interaction. The CRM's integration with other Company programs as well as external vendors that provide 10 customer communications will give employees full visibility 11 12 into Con Edison's interaction with customers, so we can 13 engage with them more efficiently and successfully.

14 Clean energy programs such as energy efficiency, demand management, distributed generation, energy storage 15 and building electrification can leverage a robust CRM to 16 improve the customer experience with tailored offerings 17 based on a full 360-degree view of the customer's 18 interactions with the Company. The customer-facing 19 programs described in the CES Panel testimony could 20 leverage a CRM system to not only monitor customer 21 22 engagement, but also gain useful insights on preferences 23 and interests based on past interactions across the various 24 organizations within the Company.

1		Finally, a CRM will facilitate compliance with
2		regulatory and legislative requirements related to customer
3		communications.
4	Q.	Have you prepared, or had prepared under your supervision,
5		exhibits that detail the Company's proposed investment in
6		the CRM program?
7	A.	Yes. We have prepared two exhibits, entitled EXHIBIT_(CO-
8		10) Customer Relationship Management and EXHIBIT(CO-11)
9		Customer Relationship Management Request.
10		Customer Data Sharing
11	Q.	What is the purpose of your testimony regarding customer
12		data sharing?
13	A.	The purpose of this testimony is to describe the Company's
14		efforts in expanding third parties' access to customer data
15		to facilitate the Commission's data-sharing goals, as well
16		as clean energy goals set forth by New York State and the
17		City of New York, and to propose incremental spending to
18		continue to support and enhance the data-sharing platforms
19		developed by the Company in recent years.
20	Q.	Please summarize the Company's work to date on sharing
21		customer data with third parties.
22	A.	The Company supports the PSC's goal of developing
23		frameworks and systems to responsibly manage and share
24		customer and system data that can facilitate investment and

accelerate the deployment of clean energy solutions
 throughout the State, thereby creating significant value
 for customers.

4 Since 2016, the Company has grown its technical capabilities to offer a robust suite of options for third 5 6 parties to access customer data - with customer consent -7 including building application program interfaces ("APIs") to enable transmission of large quantities of interval 8 9 usage data from our AMI system, among other data elements. These efforts have been documented in the Company's 10 biannual Distributed System Implementation Plan ("DSIP") 11 filings, as well as its quarterly reports on the Next Gen 12 13 CX programs, which can be found in Cases 16-M-0411 and 19-14 E-0065, respectively.

15 The main customer data-sharing platforms are as 16 follows:

Share My Data - allows utility customers to automate the secure transfer of their own energy usage data to
 authorized third parties, based on affirmative (opt-in)
 customer consent and control, consistent with the Green
 Button Connect My Data standard.

Large Customer API - allows large customers with numerous
 accounts to retrieve the same customer billing and

1		interval data available in Share My Data for their
2		accounts without the upfront consent process.
3		• ESCO API -similar to Large Customer APIs, ESCO APIs allow
4		energy services companies to retrieve customer data for
5		specific account numbers with presumed consent in
б		accordance with the Uniform Business Practices.
7		ullet Third Party Access to My Account - an extension of the
8		Company's My Account web portal which was piloted in 2019
9		and publicly launched in 2021 that allows third parties
10		to request access to customers' My Account experience to
11		manage their accounts, retrieve data, and transact on
12		behalf of customers.
13		• Aggregated Whole-Building Usage Data - Con Edison offers
14		a web service for building owners or their authorized
15		agents to automatically import aggregated whole-building
16		data into Energy Star Portfolio Manager®.
17	Q.	What type of third parties use these data-sharing tools?
18	A.	Third parties who use these tools include companies that
19		provide wide variety of products to customers. These
20		companies include aggregators, energy software vendors,
21		energy management and compliance companies, rate
22		consultants and third parties looking to provide services
23		for companies to reduce their carbon footprint and offer
24		alternative clean energy solutions.
Q. Have third parties been using the platforms successfully?
 A. Yes. As of December 29, 2021, there are 19 third parties
 fully approved and active on the Share My Data platform,
 eight third parties in the onboarding queue, and 9,304
 customers that have authorized Con Edison to share their
 data with a third party.

7 We are in the process of onboarding two large 8 customers (NYPA and and the New York City Department of 9 Citiwide Administrative Services) to access the Large 10 Customer API platform, and there has been interest in 11 joining the platform from hospitals and other large 12 agencies.

As of January 4, 2022, there are 275 users registered with the Third Party Access to My Account platform, and 90,348 customers have authorized third parties to view their information this way.

With respect to Aggregated Whole-Building Usage Data, in 2021, there were 27,985 distinct properties with consumption requests and 973 distinct requestors using this service. Similarly, there were 25,357 distinct properties with consumption requests and 934 distinct requestors in 2020.

23 Q. Have there been any lessons learned along the way?

1 Α. The Company has sought to continuously improve the 2 platforms over time in response to stakeholder feedback as 3 well as PSC orders. For example, from 2018-2020, the 4 Company expanded the data available via its API-based platforms beyond interval usage data to include near-real-5 6 time usage information with a latency of less than four 7 hours, two years of historical billing information, service 8 addresses, and account numbers.

9 For Third Party Access to My Account, the Company 10 expanded its features in response to stakeholder feedback 11 in 2021, enabling exports of account data, bulk requests 12 for customer authorization (up to 50 at a time) and a tool 13 to view all of the accounts associated with a third party's 14 profile.

We have also taken steps to facilitate the technical onboarding required for third parties to use the datasharing platforms, providing detailed documents for businesses and technical consultants, a testing "sandbox" to allow for technical testing, online web forms to initiate onboarding, and standardized process expectations for implementation.

Q. What are you proposing for this program over the 2023-2025time period?

1	A.	The Company proposes to spend \$1 million in capital for
2		Rate Year 1, \$2.5 million in capital for Rate Year 2 and
3		\$2.5 million in capital for Rate Year 3. The Company also
4		requests 1.35 million in O&M spending starting with Rate
5		Year 1. The O&M spending will not change in Rate Years 2 or
6		3.

7 The Company seeks capital funding to continue development and expansion of Share My Data, Large Customer 8 9 API and ESCO API, including infrastructure and dataset 10 enrichment based on customer and third-party needs, expanded capabilities such as bulk authorization on the 11 12 Share My Data platform, and enhancements to the onboarding 13 process through automation and improved testing 14 capabilities.

In addition, the Company seeks O&M funding to support 15 the growing platforms through an expanded team of technical 16 resources to monitor performance and system availability 17 and engage third parties to improve onboarding and 18 technical issue resolution. This same resource capacity 19 will also support ongoing needs of customers and third 20 parties using the Third-Party Access to My Account 21 22 services. O&M will also be used to build out incremental 23 improvements to the Company's processes that enable

benchmarking by buildings using aggregated whole-building
 data.

3 How will this investment fulfill third-party and 0. 4 stakeholder needs for improvement to these platforms? As listed in EXHIBIT_(CO-12) Example of Data Sharing Focus 5 Α. 6 Areas, the Company has logged a number of suggestions from 7 third parties to improve the user experience and 8 performance of our data-sharing platforms. Many of the 9 items are a result of stakeholder feedback.

For example, performance enhancements to improve platform response time will address pain points in data transfer processes. The team supporting the data-sharing platforms has also identified potential improvements to data quality, such as mapping of meter numbers across data exchanges.

Additionally, continued growth of datasets and technical resources is needed as utilization by customers and third parties increases. Without adequate funding, the data-sharing platforms will not be properly supported,

20 resulting in sub-optimal performance.

21 Q. Why should these investments be made now?

A. The funding proposed for the Customer Data Sharing program
 supports mandated initiatives required by PSC orders, local
 laws and New York State laws, including the CLCPA.

1		Additionally, as the PSC directed in its February 11, 2021,
2		Order Implementing an Integrated Energy Data Resource
3		("IEDR"), the Company must continue to support its existing
4		data-sharing channels until such time as the statewide IEDR
5		can replace the functionality offered by some of the
б		Company's platforms.
7	Q.	Have you prepared, or had prepared under your supervision,
8		exhibits that detail the Company's proposed investment in
9		the Customer Data Sharing program?
10	A.	Yes. We have prepared four exhibits, entitled
11		EXHIBIT(CO-13) Customer Data Sharing, EXHIBIT(CO-14)
12		Customer Data Sharing Request, EXHIBIT(CO-15) Customer
13		Data Sharing O&M Request Detail and EXHIBIT_(CO-12)
14		Example of Data Sharing Focus Areas.
15		Billing and Payment Enhancements
16	Q.	Please describe the purpose of this program and how it
17		expands upon the Bill Redesign program completed during the
18		2020-2022 rate plan.
19	A.	The Billing and Payment Enhancements program will continue
20		to evolve the Company's billing and payment interactions
21		with customers and third parties to support new options
22		consistent with technology trends and the Company's clean
23		energy commitment.

1 The new capabilities outlined below and further 2 detailed in the exhibits noted below are made possible by 3 the Company's prior investments in software that increased 4 the flexibility and efficiency of bill and correspondence 5 generation. They are also made possible by the design 6 overhaul that led to the current modern, customer-friendly 7 bill format aligned with My Account and the Company's 8 mobile applications. With this work complete, the Company 9 can proceed to further adapt bill designs to accommodate targeted messaging for clean energy programs and the 10 advanced formats needed to present charges for new and 11 emerging rates, such as net crediting for Community 12 13 Distributed Generation ("CDG"). 14 What funding is required for the program? Q. The Company proposes to spend \$1 million in capital for 15 Α.

16 Rate Year 1, \$1 million in capital for Rate Year 2 and \$1 17 million in capital for Rate Year 3. O&M funding is 18 \$400,000 annually starting in Rate Year 1 to coordinate the 19 program, fund IT resources, conduct customer research and 20 pay fees associated with new technology platforms and 21 services. The O&M funding will not change for Rate Years 2 22 or 3.

Q. What are the main categories of work to be undertaken aspart of this program?

A. The main categories are Billing and Customer Communication
 Process Enhancements, Payment Enhancements and Technology
 Upgrades.

4 Q. Please continue.

With Billing and Customer Communication Process 5 Α. б Enhancements, the Company will improve bill presentation 7 with customer-focused targeted messages; implement a 8 centralized documents archiving program in coordination 9 with the Back Office Automation and Workforce Management Program; investigate the potential to consolidate back-end 10 outbound communications processes so that the Company can 11 create and deliver hard copy and digital correspondence, 12 13 emails, texts and other types of messages from a central, 14 coordinated delivery platform; and evaluate how to offer 15 bill and correspondence content in languages beyond English 16 and Spanish.

Payment Enhancements work will focus on exploring
partnerships and implementing necessary integrations to
offer payment transactions via third-party platforms on
which customers increasingly rely, like PayPal, Apple Pay,
Venmo, and Google Pay.

Technology Upgrades will involve maintaining billing and payment platforms at the most current version, evaluating future platform upgrade features to keep up with

1		industry changes and customer expectations, and exploring
2		additional technology that would allow bank account
3		transactions to be completed in near-real time (as opposed
4		to the 1-3 day delay customers experience today).
5	Q.	What are the benefits of the program?
6	A.	Overall, the funding proposed in the Billing and Payment
7		Enhancements program will assist in keeping up with further
8		advances in technology, enhance customer satisfaction by
9		delivering the right message and payment options at the
10		right time, and enable targeted messaging and on-bill
11		promotion of clean energy programs to help achieve
12		statewide clean energy goals. It will also help to
13		centralize communications delivery and archiving, and offer
14		customers easy methods for conducting their personal and
15		business payment transactions with the Company.
16		A centralized customer communication management
17		("CCM") system will achieve cost efficiencies by
18		eliminating redundancies across multiple communications
19		vendors and delivery channels. The program will also

20 improve communications during outages by delivering
21 messages via customers' preferred methods.

22 Continued bill enhancement through specific targeted 23 messaging will benefit customers in need of payment 24 assistance, expose customers to and educate them on clean

1	energy programs, and introduce customers to new optiona	al
2	rates that will both save them money and support grid	
3	efficiency.	

4 Q. Why should these investments be made now?

A. A recent Bill Redesign project survey indicated that 97% of
our customers were either somewhat or very satisfied with
our bill redesign. Funding proposed for Billing and
Payment Enhancements will assist in keeping up with further
changes in digital technology and customer expectations.

As an example of how swiftly the billing and payment 10 landscape is changing, in March 2021, 1,875 Con Edison 11 residential and commercial customers were surveyed and 44% 12 13 showed interest in making payments through Venmo, PayPal or 14 Zelle. In a September 2019 survey, only 4% preferred those 15 methods. As third-party options are becoming increasingly 16 popular, customers expect their utility to provide payment options on par with their other day-to-day transactions. 17

Additionally, maintaining the most current version of billing and payment platforms and evaluating future platforms upgrades will allow the Company to keep up with industry changes while maintaining the high availability and reliability of this important software.

1	Q.	Have you prepared, or had prepared under your supervision,
2		exhibits that detail the Company's proposed investment in
3		the Billing and Payment Enhancements program?
4	A.	Yes. We have prepared four exhibits, entitled
5		EXHIBIT(CO-16) Billing and Payment Enhancements,
6		EXHIBIT(CO-17) Billing and Payments Enhancements Request,
7		EXHIBIT(CO-18) Post Bill Re-Design Survey Report, and
8		EXHIBIT(CO-19) CE Bill Payment Method Survey Report.
9		Digital Customer Experience
10	Q.	Please describe the background of this program.
11	A.	The Digital Customer Experience ("DCX") program is a multi-
12		year program spanning all of the Company's digital
13		platforms (i.e., web, mobile web and apps) that continually
14		refines and builds upon the Company's core digital platform
15		in operation since 2017. The DCX program has consistently
16		delivered customer value, including increased adoption of
17		digital self-service across various key customer
18		transactions. In addition, the Company through this
19		program continues to identify customer experience
20		enhancements to meet changing market and customer needs.
21	Q.	What funding is required for the program over the 2023-2025
22		time period?
23	Α.	The Company proposes to spend \$11.4 million in capital for
24		Rate Year 1, \$15.03 million in capital for Rate Year 2, and

\$15.05 million in capital for Rate Year 3. This includes
 internal labor, vendor costs and software and hardware
 needs.

4 The Company also requests an increase in O&M spending of \$2.6 million for Rate Year 1, an incremental increase of 5 6 \$360,000 in Rate Year 2, and an incremental increase of 7 \$380,000 in Rate Year 3. These costs include maintenance 8 of information technology infrastructure, software as a 9 service fees, cloud hosting fees, maintenance fees, contractor services, storm hardening testing and additional 10 full-time equivalent ("FTE") resources to provide day-to-11 day maintenance, manage the customer experience and create 12 13 and introduce new creative content.

14 Q. What are you proposing for this program over the 2023-202515 time period?

16 A. The DCX program will continue to use a customer-centric, "Agile" project management approach (i.e., an iterative and incremental method of managing the design and build of the digital platform) that will adapt project scopes to changing priorities based on customer feedback, analytics and regulatory mandates. The planned areas of focus for DCX during the 2023-2025 time period are as follows:

Ongoing Optimization & Transactional Expansion ongoing efforts to improve the user experience, remove

1 transactional friction points, expand online self-2 service options, create new experiences to support clean energy programs (e.g., offers and enrollment in 3 4 eligible energy efficiency programs, and streamlined understanding of complex programs and their impact on 5 б billing) and address emerging issues, as the Company 7 did when implementing COVID-19 protections in 2020 and 8 2021.

- 9 Mobile App Enhancement keeping the apps consistent
 10 with web enhancements and planned expansion of
 11 features across the digital platforms.
- Technology Upgrades and Enhancements maintain a high
 level of reliability and an error-free experience
 across the digital platforms by evaluating timing of
 upgrades and potential infrastructure improvements.
- Personalization and Control ongoing efforts to add 16 value by personalizing the digital experience, 17 including leveraging the Customer Data and Analytics 18 19 program to build granular customer segmentation that will allow for more targeted journeys and experiences. 20 • Interactive Voice Enhancements & Upgrades - expand the 21 DCX program scope to include additional digital 22 channels, including the IVR system, text and email. 23

Leverage Emerging Technologies - continue to monitor
 both customer and industry trends to offer simple and
 convenient ways to transact across the Company's
 digital platforms and build new and expanded features
 to support the Company's clean energy programs, such
 as smart home, electric vehicles, solar and building
 electrification initiatives.

8 Q. Does the Company propose a specific effort to support CLCPA9 goals?

10 A. Yes. Under the Personalization and Control focus area, the
11 Company proposes to develop improved web tools which allow
12 CDG hosts to more effectively manage their subscribers.
13 This includes improved features to input and update
14 subscriber allocations and to view changes in the status of
15 subscriber accounts.

16 Q. What are the benefits of this effort?

17 A DCX web portal for CDG providers will support increasing Α. regulatory requirements and customer/provider expectations, 18 19 digitize CDG-related transactions to provide faster response times, enable more self-service features, and 20 provide customers a unified experience for CDG billing and 21 crediting history within a single portal. This will 22 23 support the State's long-term 10 GW statewide solar goal 24 (by 2030) as well as its recent proposal to fund at least

an additional 200 MW of CDG in Con Edison's service
 territory.

3 Q. How will the implementation of a new customer service4 system in 2023 impact the DCX program?

5 A. The Company's customer-facing digital experiences have been 6 designed with the flexibility to continue to provide value 7 to customers as the Company migrates to a new CSS. The 8 Company will need to integrate the new CSS with the 9 existing DCX platform as part of the transition. Costs 10 associated with these integrations have been included in 11 the funding estimates for the new CSS program.

12 Additionally, with the implementation of a new CSS 13 there will be opportunities to deliver new functional 14 experiences for customers. These enhancements will take advantage of efficiencies of the newer billing system and 15 16 the alignment of all commodities within a single billing For example, the new billing system will provide 17 system. greater billing details that can be made accessible to 18 customers online. These future enhancements will need 19 validation and deeper dives, which will take place after 20 implementation and integration of the new CSS in 2023. 21

22 New digital enhancements that are identified during 23 the new CSS transition will be earmarked for implementation 24 post go-live. For example, if the Journey Mapping program

1	identifies an online process refinement in early 2023, this
2	item can be prioritized for implementation once the new CSS
3	is stabilized.

4 Q. What are the benefits of the program?

5 Α. The DCX program's continuous improvement approach - relying 6 on agile project management, journey mapping 7 recommendations and customer feedback - has resulted in measurable increases in customer satisfaction and effort 8 9 scores. See EXHIBIT_(CO-1) Customer Experience Progress for additional details of this progress. In addition, 10 since the launch of the My Account experience in July 2017, 11 12 the Company has seen monthly average users (i.e., the 13 number of users who log in at least once a month) increase 14 from 99,000 to over 376,000.

During the 2023-2025 time period, DCX will continue to 15 focus on driving cost efficiency through increased adoption 16 of lower-cost digital channels. Examples of success in 17 this area include enhancements to the customer moving 18 process (developed in conjunction with the Journey Mapping 19 program) that resulted in an increase from about 20% to 20 over 55% of customers starting service online instead of by 21 22 calling the call center.

The Company will also prioritize transactions andjourneys for customers experiencing payment difficulties,

including continued enhancement of payment agreement
 processes - building on the expanded self-service options
 developed in response to the COVID-19 economic crisis - and
 online enrollment in the Company's discount program for
 eligible low-income customers.

6 Continued investment in the DCX program is also 7 critical to the Company's ability to support statewide 8 clean energy goals by providing customers with important 9 information and tools regarding programs, energy usage and 10 rates, and lead generation for clean energy programs.

The value to be gained by customers from continued 11 12 support and funding for the DCX program is perhaps best 13 illustrated by the program's ability to nimbly pivot 14 priorities to meet emerging regulatory, customer and business needs. The Company met the COVID-19 legislative 15 and regulatory requirements around customer attestation to 16 financial hardship and payment assistance options with 17 robust self-service options. Additionally, the Company 18 responded after Tropical Storm Isaias with online spoilage 19 claim forms and, later, expanded claim form options for 20 non-storm matters. DCX allows the Company to continually 21 22 evaluate priorities and work with stakeholders to deliver value with speed and agility. 23

24 Q. Why should these investments be made now?

1	Α.	DCX has already delivered improved customer satisfaction,
2		customer engagement and reduced cost through call
3		deflection. Continued investment is necessary to sustain
4		performance while keeping up with rapidly changing customer
5		expectations and evolving technology trends.
б	Q.	Have you prepared, or had prepared under your supervision,
7		exhibits that detail the Company's proposed investment in
8		the DCX program?
9	A.	Yes. We have prepared four exhibits, entitled
10		EXHIBIT_(CO-20) DCX, EXHIBIT_(CO-21) DCX Request,
11		EXHIBIT_(CO-22) DCX Capital Request Detail and
12		EXHIBIT(CO-23) DCX O&M Request Detail.
13		Virtual Assistants
14	Q.	Please describe the background of this program.
15	A.	The Company began its Virtual Assistant program in 2020,
16		developing an Artificial Intelligence ("AI") enabled
17		conversational bot that is available 24 hours a day, 7 days
18		a week, 365 days a year on the web and IVR channels. The
19		Company launched the virtual assistant, named Watt, in
20		2021, and it has resulted in more than 20,000 successful
21		transactions, with a total customer satisfaction score of
22		4.19 out of 5.

1	Q.	Is the Company increasing the customer service abilities
2		and transactions within the virtual assistant as proposed
3		in its 2019 rate filing?

Yes. In the first quarter of 2021, the Company launched 4 Α. 5 Watt with four use cases - stop/start/move service, 6 identify and authenticate customer, register for an online 7 profile, and provide feedback. Since then, the Company has added five additional cases, including view/pay bill, pay 8 9 as a quest, enroll in a payment agreement, self-identify as being impacted financially by COVID-19, and request a 10 payment extension. The Company also integrated Watt with 11 live chat agents for customers that want to continue 12 13 chatting online but want to do so with a live 14 representative. Also, the Company has made Watt available 15 across 13 pages of the Con Edison website.

16 In January 2022, the Company released new programming so that callers to the Company's main phone number can 17 choose to interact with Watt to complete transactions 18 without waiting to speak with an agent. Customers who 19 choose this option receive a link on their cell phone where 20 they can seamlessly continue their transaction with Watt. 21 In this same release, the Company also enabled Watt to 22 engage with customers in Spanish. 23

1 As the team gathers feedback from customers and 2 reviews transcripts, the Company is continually looking for 3 additional opportunities to improve service within the 4 virtual assistant by identifying and remediating specific places where Watt is having trouble completing customer 5 6 transactions. We then train the bot to work through these 7 areas and answer increasingly complex requests before 8 escalating to a representative.

9 Q. What funding is required for the program over the 2023-202510 time period?

A. The Company proposes to spend \$3.1 million in capital for Rate Year 1, \$5.5 million in capital for Rate Year 2, and \$4.1 million in capital for Rate Year 3. The Company also request an O&M increase of \$1.53 million for Rate Year 1, an incremental increase of \$800,000 in Rate Year 2, and an incremental increase of \$600,000 in Rate Year 3.

Q. What is the Company proposing for the Virtual Assistantprogram over the 2023-2025 time period?

A. The Company seeks to continue investing in its virtual
assistant by expanding the types of interactions it can
support, integrating Watt with other parts of the business,
leveraging the bot to further the Company's efforts on
State clean energy goals, ensuring Watt is updated
regularly to align with DCX enhancements and other system

1	changes that are necessary to support the transition to a
2	new customer service system, and adding reporting and
3	tracking functionality to continuously monitor the bot's
4	performance and improve use cases. Activities planned
5	include but are not limited to the following:
6	• Add new self-service capabilities through Watt, including
7	sign up for e-Bill, submit a meter read for AMI opt-out
8	customers, set up a Level Payment Plan and report an
9	outage. These four use cases alone make up approximately
10	43,000 monthly customer inquiries handled by CSRs.
11	• Enable Watt to suggest a payment agreement with flexible
12	terms based on the customer's payment and credit history.
13	• Allow Watt to update and modify how customers would like
14	to be contacted for different types of communications.
15	• Provide customers with answers to questions about
16	electric vehicles and guide them to resources on the Con
17	Edison website to help inform their purchasing decisions.
18	• Link AMI data, home energy audit and Alexa/Google
19	assistant skills within Watt.
20	• Update Watt's skillset to act as an energy advisor and
21	provide customers with energy conservation advice based
22	on their personal usage history.

Q. What are the benefits of continued investment in this
 program?

3 Further investment will allow Watt to provide personalized Α. 4 and dynamic on-demand messaging that considers customers' needs, account status, preferences and household energy 5 6 factors. For example, Watt will act as a clean energy 7 advisor and provide simple, accessible resources for 8 customer clean energy solutions, which will reduce 9 customers' costs, improve the customer experience and support Company and State clean energy goals. Watt will 10 also be able to provide convenient, streamlined education 11 and access to payment assistance for customers, which is 12 13 particularly important in light of the financial impact of 14 the COVID-19 pandemic on customers in the Company's service territory. Operationally, Watt enables a reduction in 15 16 phone calls, helping to drive cost efficiencies by eliminating unnecessary calls to CSRs. 17 Why should these investments be made now? 18 0. The Company's continued enhancements to the Virtual 19 Α. Assistant program, combined with ongoing advancements in 20 this proven technology, will enhance the customer 21

22 experience in a cost-effective manner.

Maintaining the Virtual Assistant program as-is,
without further investment, would result in the Company

1		failing to maximize the full potential of its technology
2		and result in an inferior customer experience. The Company
3		would not be able to scale or add additional use cases
4		without upfront costs, which would severely limit the
5		potential of this technology to help attract new customers
6		to self-service and increase participation in clean energy
7		programs.
8	Q.	Have you prepared, or had prepared under your supervision,
9		exhibits that detail the Company's proposed investment in
10		the Virtual Assistant program?
11	A.	Yes. We have prepared three exhibits, entitled
12		EXHIBIT(CO-24) Virtual Assistants, EXHIBIT(CO-25)
13		Virtual Assistants Request and EXHIBIT_(CO-26) Virtual
14		Assistants Capital Request Detail.
15		Journey Mapping
16	Q.	Please describe the background of this program.
17	A.	Journey Mapping is a process improvement method that
18		explores the full sum of a customer's experience when
19		interacting with a company, not just discrete interactions
20		or transactions. Unlike other process improvement
21		techniques, Journey Mapping focuses on the customer and is
22		grounded in what is commonly referred to as "Voice of the
23		Customer" data, which is an amalgam of customer research,
24		benchmarking data, and operational data.

1 Con Edison launched its Journey Mapping program in 2 2017 to enable the Company to consistently provide a high-3 satisfaction, low-effort customer experience across 4 interaction journeys. Our dedicated team uses Agile project management and Design Thinking practices with 5 б customer research, data analytics and employee input to 7 design enhanced experiences and deliver quick-to-market 8 improvements.

9 The Company has made extensive progress with the initial journeys outlined for improvement in its 2019 rate 10 filing, validating that Journey Mapping is an effective 11 process improvement method that warrants implementation as 12 13 a best practice across all customer interactions. For 14 further information, please see EXHIBIT_(CO-27) Journey Mapping Completed Journey Improvements. The Company has 15 also been reporting on the progress of the Journey Mapping 16 program in its quarterly Next Gen CX reports filed in Cases 17 19-E-0065 and 19-G-0066. 18

Additionally, having a Journey Mapping team has enabled the Company to continually adapt products and services for customers with increasingly dynamic needs and wants. For example, the main objective for improvement to the Customer Outage Communications Journey over the past few years was to enhance communications during a major

1		outage event. Our research during this effort also
2		highlighted an opportunity to improve the experience of
3		customers with flickering lights or low-voltage conditions,
4		outside of a major event, which the team plans to address.
5	Q.	What funding is required for the program?
6	A.	The Company proposes to spend \$1.1 million in capital for
7		Rate Year 1, \$2.2 million in capital for Rate Year 2, and
8		\$2 million in capital for Rate Year 3.
9	Q.	Is the Company planning to increase the amount of O&M
10		associated with this program?
11	Α.	Yes. The Company request an increase of \$380,000 for Rate
12		Year 1 and an incremental increase of \$100,000 in Rate Year
13		2 to expand the Journey Mapping team and capabilities and
14		fund the implementation of identified improvements that
15		cannot be capitalized. O&M needs will decrease
16		incrementally by \$400,000 in Rate Year 3 due to a decrease
17		in contract/vendor services following completion of journey
18		enhancement projects in Rate Years 1 and 2.
19	Q.	What is the Company proposing for this program over the
20		2023-2025 time period?
21	Α.	For the years 2023-2025, the Company proposes capital
22		funding to implement technology improvements identified
23		during the Journey Mapping process. The Company also seeks
24		additional O&M funding to expand the team and capabilities

to support an increased number of journeys, as well as fund
the implementation of identified improvements. Expanded
capabilities will include additional customer research,
toolkits, a playbook for enabling Journey Mapping
principles across the enterprise, and data analysis and
project execution resources.

7 Ongoing Journey Mapping efforts will include 8 refinement of the customer experience as program offerings 9 and customer expectations evolve, with a focus on lowincome customers, commercial customers and their agents, 10 and customers participating in clean energy programs. 11 Please see EXHIBIT_(CO-31) Journey Mapping Focus Areas for 12 13 a detailed listing of potential focus areas during Rate 14 Years 1-3.

15 Q. What are the benefits of continuing the program?

16 Customer satisfaction increases when customers are given Α. the experience they want to accomplish a goal. The Journey 17 Mapping team creates journey maps that enable the Company 18 to understand customers on an emotional level and implement 19 better experiences that help customers accomplish their 20 goals more easily. By continuing this program, the Company 21 22 will realize the full potential that a robust Journey Mapping program has to offer, including process 23 24 optimization, error reduction and increased customer

satisfaction and brand trust - particularly among customers that are adopting clean energy solutions, struggle to pay their bills or have special needs. For example, Journey Mapping supports these customers to better understand, access, and receive the payment assistance they need. This will be increasingly important as the COVID-19 pandemic has resulted in more customers requiring assistance.

8 We therefore believe that this program will in 9 particular provide for our low- and moderate-income 10 customers who generally reside in disadvantaged 11 communities.

Journey Mapping also benefits customers by producing low-effort, high-satisfaction interactions and avoiding interactions that frustrate customers, require follow-up calls, and drive up operating costs.

16 Q. Why should these investments be made now?

17 A. Through benchmarking, data analysis and customer research, 18 the Journey Mapping program is essential to keeping up with 19 changing customer expectations. Suspending or limiting the 20 Journey Mapping team at this juncture would dramatically 21 reduce the potential benefits that could be gained from 22 bringing together and improving customer interaction-23 related processes across the Company.

1 New York State's clean energy transformation will 2 necessitate streamlined customer adoption of clean energy 3 products and programs as well as new rates. Journey 4 Mapping will support this goal by designing effective journeys that improve customers' understanding and adoption 5 б of new technologies and identifying opportunities for 7 customers to learn about clean energy solutions and new 8 rate options at various touchpoints (e.g., when 9 establishing service or during high-bill inquiries). Additionally, for emerging clean energy programs and new 10 rates, Journey Mapping will help mitigate the risk of 11 creating long and expensive implementation projects without 12 13 fully understanding customers' needs and expectations.

14 Finally, the outage communications Journey Mapping 15 team has made many improvements to how the Company 16 communicates with its customers during an outage event. See EXHIBIT__(CO-28) Outage Communications Past Progress 17 for details on outage communications deployed during recent 18 outage events. As climate change drives the potential for 19 more frequent severe weather events, the Journey Mapping 20 team will continue working on improvements to meet rising 21 22 customer expectations for reliable service and accurate information when outages do occur. 23

1	Q.	Have you prepared, or had prepared under your supervision,
2		exhibits that detail the Company's proposed investment in
3		the Journey Mapping program?
4	A.	Yes. We have prepared four exhibits, entitled
5		EXHIBIT(CO-29) Journey Mapping, EXHIBIT(CO-30) Journey
б		Mapping Request, EXHIBIT(CO-31) Journey Mapping Focus
7		Areas and EXHIBIT(CO-27) Journey Mapping Completed
8		Journey Improvements.
9		Back Office Automation and Workforce Management
10	Q.	Please describe the background of this program.
11	A.	The Back Office Automation and Workforce Management program
12		encompasses a collection of investments in software and new
13		systems that will automate repetitive and manual back-
14		office tasks, improve workflow and exception management
15		processes and enhance tools used by employees.
16		This program began in 2020 and to date has largely
17		focused on robotic process automation ("RPA") of back-
18		office tasks, a new exception management tool, and
19		enhancements to the tools used to guide CSRs through
20		customer interactions.
21	Q.	Has this program produced value in terms of reduced back-
22		office work to date?
23	A.	The RPA has successfully automated addressing meter issues
24		in the Meter Data Management System, which reduces

1 estimated bills and enables on-time, accurate billing. In 2 addition, RPA has successfully automated validating account 3 information before issuing an estimated bill, validating 4 and adjusting accounts with inconsistent readings, 5 addressing customer accounts when rejected readings are 6 populated and addressing customer accounts that are not 7 billed up to date after cancellations due to rate changes 8 and ESCO marketer changes. The RPA engagement has been a 9 success due to synergy between and among all departments working alongside one another. We have successfully 10 reduced repetitive work, allowing our back-office staff to 11 focus on more complex work. To date we have completed 20 12 13 use cases that are now live, including AMI Billing Process, 14 Commercial Net Metering Billing, Rejected Meter Exchange, PSC Complaints, Over Estimation, Statement Generation, 15 16 Solar Onboarding Process and Community Solar Allocate Energy for Bill Credits. We continue to work on automating 17 processes, with our upcoming use cases to include Value of 18 Distributed Energy Resources ("VDER") Reporting Automation 19 and Onboarding Solar Accounts into the CSS. 20 What funding is required for the program? 21 Q. 22 The Company proposes to spend \$1.5 million in capital for Α.

24 \$2.5 million in capital for Rate Year 3, which includes

23

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Rate Year 1, \$2.5 million in capital for Rate Year 2, and

1		funding for software and hardware costs for an AMS tool,
2		Content Management tools and Workforce Management
3		solutions, Robotic Process Automations, Gas Service Line
4		Inspection Applications and Call Center Work Management
5		Tools. The Company is also proposing an increase in O&M
6		spending of \$760,000 in Rate Year 1 and an incremental
7		\$100,000 in Rate Year 2, which covers licensing and
8		supports costs associated with improved technologies
9		including training, software bug fixes, testing and code
10		migration. O&M expenses will not increase from Rate Year 2
11		to Rate Year 3.
12	Q.	What specifically is the Company proposing for this program
13		over the 2023-2025 time period?
14	A.	The Company plans to build on the initial successes of this
15		program and expand its scope to include systems that will
16		streamline additional back-office work. The proposed work
17		streams include:
18		• Robotic Process Automation. While the Company has made
19		great strides in RPA, more work is necessary in exception
20		work management to prepare for the transition to a new
21		customer service system. The Company will prioritize
22		additional automation opportunities based on overall
23		effort involved, associated customer satisfaction and
24		projected cost savings.

1 Access Management System for Workflow Management Tools. ٠ 2 The Company will implement an automated access management 3 system ("AMS") for existing back-office workflow management tools - including the Field Collection System, 4 5 Load Profile Data System and others - to act as a central 6 controller that unifies different access rights systems 7 and automate employee access to multiple applications. • Gas Line Service Inspection Application. The Company 8 9 will develop and implement a custom, automated process to communicate with customers regarding required gas service 10 line inspections, replacing a manual process that has 11 12 presented challenges. This process will add a dashboard 13 to quickly identify target customers and enable reporting functions. This project will enhance the Company's 14 ability to perform these inspections in accordance with 15 the Commission's April 20, 2017, Order in Case 15-G-0244, 16 17 directing utilities to fine customers that do not provide access for inspection and terminate service if customers 18 do not cooperate after being fined. 19 • Content Management. In conjunction with the Billing and 20

20 Content Management: In conjunction with the Billing and 21 Payment Enhancement program, the Company will explore 22 software and tools to manage the lifecycle, distribution 23 and use of customer content/documents received by CSRs at

the Customer Experience Centers, consistent with document
 retention regulations.

3 • Call Center Workforce Management Solution. The Company plans to procure a Workforce Management ("WFM") solution 4 5 that will enable it to monitor call center and backoffice staffing levels, exception times (e.g., holidays, 6 7 vacation, and sick and training time), scheduling accommodations and intraday performance in one 8 9 centralized platform. The WFM solution will improve the existing management processes used by our operating areas 10 and support the Company's efforts to provide a high level 11 12 of service to customers in the most efficient manner. What are the benefits of the program? 13 Ο. 14 The investments will contribute to a more efficient, Α. 15 positive customer experience while reducing costs, 16 enhancing back-office processes, and empowering employees with the proper tools to provide exceptional customer 17 service. Additionally, investments in Back Office 18 19 Automation and Workforce Management will save time, money 20 and effort by improving data storage, management, and exchange. Specific examples include: 21 • RPA will reduce the number of customers receiving 22 estimated bills, or not receiving a bill, and result in 23

24 more bills being issued in a timely fashion.

1	•	Access Management System for Workflow Management will
2		secure and speed up the provision of user permissions.
3		AMS will also reduce the risk of human error in managing
4		access to important customer information systems.
5	•	Gas Line Inspection Application will equate to
б		approximately 4.5 FTE employees in Gas Operations and
7		Customer Operations who would otherwise be needed to
8		perform these tasks.
9	•	Content Management will create a means to effectively
10		capture, index, route and archive customers' documents,
11		allowing processing to advance more rapidly and giving
12		front and back-office personnel a more complete view of
13		the customer's records. These improvements will
14		contribute to shorter call times and eliminate the need
15		for repeated interactions.
16	•	The Call Center Workforce Management Solution is expected
17		to improve staff utilization with accurate demand-based
18		scheduling and drive an improved customer experience in
19		terms of CSR availability. It will also improve the
20		Company's understanding and adaptation to fluctuations in
21		call volumes, patterns and agent availability, leading to
22		shorter wait times for customers.

23 Q. Why should these investments be made now?

1	Α.	For each of the projects outlined above, continuation of
2		existing inefficient and manually intensive processes will
3		increase customer resolution time, erode customer
4		satisfaction and reduce operational efficiencies. As an
5		example, one of the main risks the Company will encounter
6		in not acquiring a new Workforce Management solution is a
7		deficiency in its response time to customers' calls.
8		Without an advanced WFM tool, Con Edison is unable to
9		thoroughly analyze and address the root cause of this
10		increase in response time.
11	Q.	Have you prepared, or had prepared under your supervision,
12		exhibits that detail the Company's proposed investment in
13		the Back Office Automation and Workforce Management
14		program?
15	Α.	Yes. We have prepared four exhibits, entitled
16		EXHIBIT(CO-32) Back Office Automation and Workforce
17		Management, EXHIBIT(CO-33) Back Office Automation and
18		Workforce Management Request, EXHIBIT(CO-34) Back Office
19		Automation and Workforce Management Tool Assessment
20		Readout, and EXHIBIT(CO-35) RPA Implementation Steps.
21		Outage Communications
22	Q.	Please describe the background of this program and the ways
23		in which the Company has already begun to address concerns
24		regarding its outage communications.

A. Customer and stakeholder expectations of communications
related to outages are increasing as technology advances
make real-time error reporting and status updates a reality
in many industries. Accordingly, our customers want
specific and timely outage communications available via
multiple channels as soon as possible.

7 As noted earlier in this Panel's testimony, the 8 Company responded to concerns regarding its outage 9 communications by forming a Journey Mapping team. This team has made great strides in expanding the frequency, 10 volume, clarity, and delivery of customer outage 11 communications, as detailed in EXHIBIT__(CO-28) Outage 12 13 Communications Past Progress. Improvements to increase the 14 number of touchpoints with customers experiencing an outage 15 and expand communication channels have reduced call volumes 16 and freed up CSRs to focus on customers in need of the most 17 urgent assistance.

18 Q. Has the Company identified opportunities for further19 development of its outage communications?

20 A. Yes. Based on successes seen at other utilities, the
21 Company believes there is an opportunity to develop new
22 technologies and platforms, as described below, which will
23 allow us to provide more detailed information to targeted

1		groups of customers before, during and after outages to
2		meet safety and customer satisfaction goals.
3	Q.	What funding is required for the program?
4	A.	The Company proposes to spend \$1.01 million in capital for
5		Rate Year 1, \$1.6 million in capital for Rate Year 2, and
6		\$2.1 million in capital for Rate Year 3. O&M changes
7		include an increase of \$1.09 million in Rate Year 1, an
8		incremental decrease of \$50,000 in Rate Year 2, and an
9		incremental increase of \$60,000 in Rate Year 3.
10	Q.	What are you proposing for this new program over the 2023-
11		2025 time period?
12	Α.	The program would include the following components:
13		• Emergency Customer Messaging Center ("ECMC"), a
14		centralized platform to identify specific groups of
15		customers affected by an imminent or ongoing emergency
16		and create and send customized messages as quickly as
17		possible.
18		• Continued Investment in Outage Messaging, including:
19		o Continuing to support and create iterative
20		enhancements to our internal message creation
21		process, efficacy of messages, and customer outreach
22		tools, including the Outage Map, based on
23		stakeholder feedback.
1	o Expanding the reach of the Company's existing outage	
---	--	
2	communications by delivering messages in additional	
3	languages and enabling outage reporting and status	
4	updates in new and preferred channels (e.g., Virtual	
5	Assistant, social media).	

6 o Expanding the Outage Communications program to
7 eliminate gaps in communications with master-metered
8 customers and create new touchpoints with customers
9 facing electric problems considered "non-outages,"
10 such as flickering lights or voltage issues.

O Creating a comprehensive and continuous human centered training for all Control Center and field
 employees.

Emergency Event Task Tool ("EETT"), an internal
 operational and communications task management platform
 focused on large-scale outage events and coordination of
 internal tasks for customer communications, which
 archives all event activity and tasks.

19 Q. What are the benefits of the program?

20 A. First, investments outlined above will improve customers'
21 experiences during outage events and increase overall
22 customer satisfaction.

Second, weather and climate realities are evolving
 rapidly, creating a need to constantly adapt and develop

1 more agile processes and technologies that enable faster 2 and more flexible communications. As the Company's service 3 territory experiences unprecedented extreme weather events, 4 the Company needs the ability to craft new, non-template 5 messages that speak to customers about these events.

6 Additionally, the improvements proposed in this 7 program are crucial to enhancing customer communications for safety. While today we can create web banners, press 8 9 releases and social media posts, we do not yet have the ability to script a message specific to an urgent event and 10 get it to customers quickly via email and text. Increasing 11 our ability to communicate with customers more quickly will 12 13 enable them to react sooner. It is also important to build 14 digital tools that can accurately track and record outage-15 related tasks and communications in real time, as well as 16 report out after events occur.

17 Q. Why should the investments be made now?

18 A. The PSC has noted that effective communications with 19 customers through press releases, social media and other 20 customer messaging or alerts are a key aspect of how a 21 utility disseminates useful information. Customers and 22 stakeholders have also asked for better outage 23 communication.

1 Outage communications strategy is crucial to the 2 success of our long-term strategies. Because of the 3 realities of climate change, and despite our efforts to 4 make our systems as resilient and reliable as possible, the Company wants to be prepared for increased demand on the 5 6 system and the increased need for engagement with our 7 customers during outages. 8 Have you prepared, or had prepared under your supervision, 0.

9 exhibits that detail the Company's proposed investment in
10 the Outage Communications program?

11 A. Yes. We have prepared five exhibits, entitled

12 EXHIBIT_(CO-36) Outage Communications, EXHIBIT_(CO-37)

13 Outage Communications Request, EXHIBIT_(CO-38) Outage

14 Communications Benchmarking, EXHIBIT_(CO-39) Outage

15 Communications ECMC and EXHIBIT_(CO-28) Outage

16 Communications Past Progress.

17

Privacy Readiness

The New York State Legislature is considering privacy 18 0. legislation similar to landmark privacy laws adopted in 19 Europe and California. Is the Company preparing to comply 20 with such a law should it be passed by the Legislature? 21 22 Yes. The Company has been consistently improving its Α. 23 privacy practices. Despite our efforts, it will be 24 challenging both from a people and technology perspective

1 to implement a program structure that provides customers 2 and consumers the rights afforded them under the 3 regulations that New York and other states are promulgating 4 that mirror the GDPR and CCPA. For example, the GDPR and CCPA require companies to provide information when 5 6 requested about where a resident's data resides in our 7 There are numerous places where it could reside systems. 8 in our systems. Manual processes and efforts will not be 9 sufficient to address these requests. Thus, the Company is seeking funding to respond effectively and efficiently from 10 the customer's perspective. 11

The Company has a significant population of 12 13 applications and systems that collect and store personal 14 information and personally identifiable information 15 ("PII"), as well as numerous third-party vendors that process personal information and PII on the Company's 16 To proactively assess and prepare for the evolving 17 behalf. regulatory landscape and anticipated privacy regulation, 18 the Company engaged a consultant in 2020 to prepare a 19 20 Privacy Readiness Plan.

21 Q. What funding is required for this program?

A. The Company proposes to spend \$12 million in capital for
Rate Year 1, \$4.13 million in capital for Rate Year 2, and
\$2 million in capital for Rate Year 3 to support the

1		technology infrastructure described below. The Company
2		also requests \$5.98 million of O&M funds beginning in Rate
3		Year 1 for an Office of Privacy Management team to
4		implement and maintain the technology infrastructure and
5		processes, and updates to foundational IT infrastructure
6		involving non-labor expenses such as software vendor fees
7		and other technology costs. O&M costs will stay the same
8		in Rate Year 2 and increase by an incremental \$20,000 in
9		Rate Year 3.
10	Q.	What specifically are you proposing for this program over
11		the 2023-2025 time period?
12	A.	The Company is proposing a two-part program:
13		• Technology Infrastructure: To meet customer and regulator
14		expectations, the Company will invest in technology to
15		assist in complying with the proposed privacy laws. The
16		nascent technology will track the types of personal data
17		stored in our systems, while providing individuals rights
18		over that data.
19		The key tools to be developed under this part of the
20		program include standardized consent management
21		solutions, an enterprise customer preferences portal, a
22		framework and platform for data subject rights
23		management, a mechanism for verification of the data
24		subject requestor, customer-facing software and

1		workflows, integration of consent management solutions,
2		and a mechanism to fulfill customer data requests.
3		• Governance Resources: The Company hired a Director of
4		Privacy Compliance (aka Chief Privacy Officer), who will
5		build a dedicated team of three specialists. This team
6		will provide centralized leadership, guidance, and
7		monitoring of privacy-related activities and controls.
8	Q.	What are the benefits of the program?
9	A.	The staffing, processes and technologies implemented as
10		part of this program will provide the Company with the
11		capabilities to meet evolving compliance requirements.
12	Q.	Why should these investments be made now?
13	Α.	The Privacy Readiness Program is a set of strategic efforts
14		intended to position the Company to comply with expected
15		upcoming New York privacy law changes and support business
16		and customer needs. And, even if such laws are not passed
17		during the expected time frame, the program is a best
18		practice standard the Company should implement considering
19		the current threat environment and general customer
20		concerns regarding data privacy. Moreover, as more states
21		pass similar legislation, this type of privacy program will
22		become a baseline requirement that companies must meet
23		regardless of where they do business.

1	Q.	Have you prepared, or had prepared under your supervision,
2		exhibits that detail the Company's proposed investment in
3		the Privacy Readiness Program?
4	Α.	Yes. We have prepared three exhibits, entitled
5		EXHIBIT(CO-40) Privacy Readiness, EXHIBIT(CO-41)
6		Privacy Readiness Request and EXHIBIT_(CO-42) Privacy
7		Readiness Capital and O&M Request Detail.
8		IV. Supporting Core Customer Service Activities
9		Retail Access System Replacement
10	Q.	Does the Company plan to replace its Retail Access Systems
11		during the Rate Years?
12	Α.	Yes, the Company plans to replace its Retail Access Systems
13		as part of a two-year project taking place from 2024 to
14		2026.
15	Q.	What funding is required for the project?
16	A.	The Company proposes to spend \$3.842 million in capital for
17		Rate Year 2 and \$21.70 million in capital for Rate Year 3
18		to support the replacement of the existing systems. This
19		includes, labor, and accounts payable costs associated with
20		implementation of the capital work described below.
21	Q.	Please describe the Company's estimated O&M spending for
22		the project.
23	Α.	The Company forecasts O&M spending of \$2.16 million in Rate
24		Year 3 to maintain the technology infrastructure, software

license fees, and processes associated with the new
 platform.

Q. Please describe the Company's existing systems and
processes that are used to manage the Retail Access
program.

б During the early stages of the New York State Retail Access Α. 7 program, the Company custom-built a suite of Retail Access 8 applications to support the transactions and functionality 9 necessary to fulfill its central role in facilitating the 10 competitive energy marketplace - e.g., enrolling customers 11 with ESCOs, billing transactions and exchanging customer usage information. After 20 years, these systems remain 12 13 critical pieces of infrastructure, without which the 14 Company could not perform its Retail Access functions. 15 Why is the Company proposing to replace these systems? Ο. Since the inception of the Retail Access market, 16 Α. participation in the Company's service territory has grown 17 to over 600,000 customers and 200 ESCOs. The combined 18 volume of transactions required for account changes, price 19 changes, and monthly and historical usage requests is now 20 close to 14.5 million per year. However, the technology 21 22 used to build the Retail Access Systems cannot scale to 23 meet the volume or complexity of today's market. This is 24 resulting in more transactions being delayed, as the

Company, ESCOs and Electronic Data Interchange ("EDI")
 providers must resolve issues.

3 While the Company has made a concerted effort over the 4 years to enhance its processes, modify the applications, and implement monitoring and alerts for when transactions 5 б fail to process, there are limitations in what can be 7 achieved because the technologies used to build the 8 applications do not integrate with modern monitoring tools. 9 To continue to fulfill its role in the competitive energy market and comply with the PSC's Uniform Business Practices 10 and Retail Access-related orders, the Company must reduce 11 risk and improve operational efficiencies by replacing its 12 13 legacy applications.

What are the key activities that the Company will undertake 14 Q. in the proposed Retail Access System Replacement project? 15 16 This project will replace the Company's legacy systems that Α. enable market interactions with ESCOs and EDI providers 17 with a robust new platform that is adaptable to meet future 18 needs through modern technologies and infrastructure. 19 То accomplish this, the Company will select and hire a 20 knowledgeable and experienced system integrator, select a 21 22 technology solution, and initiate system development, including testing, training and overall change management. 23

1	Q.	Does the project's scope include the Company's functions to
2		schedule natural gas on behalf of approved Gas Marketers?
3	A.	No, it does not. For information on the Company's plans
4		related to Gas Marketers, please see the Gas
5		Infrastructure, Operations and Supply Panel's testimony.
6	Q.	Have you prepared, or had prepared under your supervision,
7		exhibits that detail the Company's proposed investment in
8		the Retail Access System Replacement Project?
9	A.	Yes. We have prepared two exhibits, entitled EXHIBIT_(CO-
10		43) Retail Access System Replacement and EXHIBIT_(CO-44)
11		Retail Access System Replacement Request.
12		Contact Center Cloud
13	Q.	Does the Company have any plans to invest in its Customer
14		Experience Center infrastructure that went into service in
15		2016?
16	A.	Yes. The Company has concluded that it is necessary to
17		replace its on-premises contact center systems and
18		technologies with a vendor-provided Software as a Service
19		("Saas") cloud solution. This transition is planned for
20		2025.
21	Q.	What funding is required for the project?
22	A.	The Company proposes \$2 million in capital for Rate Year 3
23		for costs associated with developing IVR and Automatic Call

1 Distribution ("ACD") applications via third-party

2 professional services.

infrastructure.

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3 Q. Please elaborate on how the Company arrived at the decision4 to invest in a cloud-based system.

5 Α. In 2026, the Company's Customer Experience Center б infrastructure will reach an operational age of ten years. 7 The Customer Assistance department has taken stock of which 8 applications/systems are nearing end of life and where 9 there might be opportunities to rethink operations, processes and architecture to take advantage of cloud 10 services. These ongoing evaluations have led the Company 11 to conclude that it is time to transition the Customer 12 13 Experience Center platform to the cloud 14 Please explain the rationale behind the 2026 go-live date. Q. 15 Due to the lifespan of the existing contact center Α. 16 infrastructure, the Company anticipates in 2026 it would need to perform a refresh of the hardware, software and 17

Q. What are the benefits of moving to a SaaS cloud solution?
A. Moving to a cloud-based platform will create cost
efficiencies; increase reliability, resiliency, flexibility

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platform. It would be most beneficial, financially and

that time instead of investing further in the existing

operationally, to transition to a cloud-based platform at

1		and safety; and reduce cybersecurity threats and the need
2		for Company resources to maintain on-premises
3		infrastructure.
4	Q.	Have you prepared, or had prepared under your supervision,
5		exhibits that detail the Company's proposed investment in
6		the Contact Center Cloud project?
7	A.	Yes. We have prepared two exhibits, entitled EXHIBIT(CO-
8		45) Contact Center Cloud and EXHIBIT(CO-46) Contact
9		Center Cloud Request.
10		Site Safety Enhancements
11	Q.	Please explain the term Site Safety and the operational
12		area that is covered by this project.
13	A.	The Company has a requirement in its Electric Emergency
14		Response Plan filed with the Commission in Case 21-E-0567
15		to protect the public from downed wires during an overhead
16		electric emergency. To meet this requirement, the Company
17		has developed a comprehensive Site Safety program that
18		manages the resources needed to address reports of downed
19		wires. Specifically, Site Safety resources are dispatched
20		to a downed wire location, make the area safe and stay at
21		the location until additional Company personnel arrive who
22		can fix or de-energize the downed wire.
23	Q.	Does the Company have existing systems and processes that

24 are used to manage the Site Safety program during an event?

1	Α.	Yes. In response to outage events in the 2018-2020 time
2		period, the Company has developed a Site Safety Management
3		System, a mobile application used to coordinate and share
4		information between Site Safety management and wire guards
5		in the field, and a suite of trainings and educational
6		materials for employees and contractors supporting Site
7		Safety.
8	Q.	What funding is required for the Site Safety Enhancements
9		project over the 2023-2025 time period?
10	Α.	The Company proposes to spend \$0.35 million in capital for
11		Rate Year 1, \$0.35 million in capital for Rate Year 2, and
12		\$0.35 million in capital for Rate Year 3.
13	Q.	What are you proposing for this project over the 2023-2025
14		time period?
15	A.	The Company proposes updates to all Site Safety program
16		training material (e.g., eLearning, training videos,
17		customer materials) and system applications (i.e., Site
18		Safety Management System and mobile app).
19	Q.	Why are updates necessary at this time?
20	A.	The Company needs to make these enhancements so that the
21		many employees performing Site Safety can do so safely,
22		efficiently and in accordance with changes to the Site
23		Safety process that the Company has already filed with the
24		Commission as part of its Electric Emergency Response Plan.

1	Q.	What are the benefits of the project?
2	Α.	The enhanced Site Safety Management System and mobile app
3		will enable the Company to automatically track down wire
4		tickets and resources, account for Site Safety personnel's
5		time in the field, and enhance communication between Site
6		Safety management teams and wire guards in the field.
7		These systems will also allow for automatic distribution of
8		work/tickets to wire guards, eliminating manual
9		distribution. In addition, contractors will have access to
10		the new systems, giving them more complete information and
11		the ability to communicate with the management team.
12	Q.	Have you prepared, or had prepared under your supervision,
13		exhibits that detail the Company's proposed investment in
14		the Site Safety Enhancements project?
15	Α.	Yes. We have prepared one exhibit, entitled EXHIBIT(CO-
16		47) Site Safety Enhancements.
17		Credit Modeling Tool
18	Q.	Please describe the background of this program.
19	A.	The Company uses field collections of customer arrears due
20		to non-payment as a last resort, when the Company's robust
21		programs to help customers who are experiencing payment
22		challenges have not been successful. Since 2018, the
23		Company has been using a predictive analytics credit
24		modeling and customer behavior risk scoring tool ("Credit

1		Modeling Tool" or "Tool"). The Tool was developed to
2		support field collections of customer arrears due to non-
3		payment and adopt a more risk-based approach to loss
4		management. It helps identify accounts most likely to
5		close with a high balance for field collection
6		prioritization. This in turn helps the Company maximize
7		efficient use of field resources, minimize disruption for
8		customers that are deemed likely to pay and will not
9		require a field visit, and mitigate uncollectible bill
10		losses to the benefit of all customers.
11	Q.	What funding is required for the program during the 2023-
12		2025 time period?
13	A.	The Company requires \$400,000 per year in O&M for this
14		program beginning in 2023. O&M spending does not increase
15		in Rate Years 2 or 3.
16	Q.	What does the Company propose to do with the Credit
17		Modeling Tool during the 2023-2025 time period?
18	A.	The Company proposes funding for maintenance costs to
19		maintain and enhance the Tool, which will allow for more
20		frequent updates to the model and enable more accurate
21		field prioritization. Additional enhancements will include
22		the use of machine learning models that capture
23		relationships among known data factors and encompass the
24		use of data mining, statistics, modeling and artificial

1		intelligence to analyze data and make predictions. In
2		addition, new data will be incorporated into the model to
3		improve the accuracy of the algorithms where appropriate.
4	Q.	Why should these investments be made now?
5	A.	The proposed enhancements to the Credit Modeling Tool will
6		help reduce the risk of uncollectible bills resulting from
7		the COVID-19 pandemic. As of December 31, 2021,
8		residential customers in arrears increased approximately
9		40% and accounts receivable balances have increased 147%
10		compared to December 2019. The impact is even higher on
11		commercial customers, with customers in arrears increasing
12		more than 150% and balances increasing approximately 500%
13		compared to pre-pandemic levels.
14		Given the unprecedented number and balances of

15 customers in arrears, proactively using the Credit Modeling 16 Tool to identify customers early in the arrears process 17 will assist in maximizing our field resources and 18 mitigating uncollectible bills, providing value to all 19 customers.

Q. Have you prepared, or had prepared under your supervision,
exhibits that detail the Company's proposed investment in
the Credit Modeling Tool program?

A. Yes. We have prepared one exhibit, entitled EXHIBIT_(CO48) Credit Modeling Tool.

1

Replevin and Final Bills

2 What operational processes are addressed in this program? Ο. 3 The Company's proposal covers fees stemming from two Α. 4 ongoing processes - one related to the Company's efforts to reduce the number of unlocked gas meters associated with 5 6 inactive accounts, and the other related to the Company's 7 final attempts to collect unpaid bills. These processes 8 are designed to protect customer and public safety and 9 reduce uncollectible losses, respectively, which benefits all customers. 10

11 Q. Please summarize the processes.

The Inactive Gas Replevin process is used as a final resort 12 Α. 13 to provide for the safety of the Company's customers and 14 mitigate operational, financial, and regulatory risks associated with unlocked gas service without a responsible 15 16 party. The process involves the Company requesting an order through the courts to remove a meter when we are not 17 able to gain access to the premises and are not able to cut 18 service in the street. 19

The Final Bill process is the Company's last attempt to collect unpaid bills. The Company works with collection agencies to help collect from customers who closed an account with an unpaid balance and have not opened a subsequent account. When the customer closes an account

1		and does not open a new account in the Company's service
2		territory after a period of approximately 41 days, Con
3		Edison refers the account to a collection agency to collect
4		outstanding balances on the Company's behalf for a
5		commission.
6	Q.	What is the Company's proposal regarding these processes
7		for the 2023-2025 time period?
8	A.	The Company is seeking a temporary increase in O&M expenses
9		to support increased costs in the Inactive Gas Replevin and
10		Final Bills processes during 2023 and 2024.
11	Q.	Why does the Company need increased O&M for this work?
12	A.	The Company anticipates increased costs in these two areas
13		due to the COVID-19 pandemic. In the case of Inactive Gas
14		Replevin, the Company has experienced delays in processing
15		court requests because courts have experienced closures and
16		backlogs during the pandemic. As such, there is a growing
17		list of cases that will need to be addressed, and the
18		Company intends to pursue these cases expeditiously to
19		protect customer and public safety.
20		Similarly, the Company voluntarily suspended
21		collections activity for all customers in March 2020 and
22		plans to resume the Final Bill process in 2022. During the
23		disconnection moratorium, both residential and commercial
24		customers have built up large arrears. The Company

anticipates that this will result in a backlog of Final Bill cases when collections resume. It is important that the Company pursue these Final Bill cases to mitigate an increase in bad debt write-offs, which ultimately are paid for by all customers via uncollectible bill costs in rates.
Q. How long does the Company anticipate this additional work will take, and what will it cost?

A. The Company is proposing a temporary O&M increase of \$1.7
million in Rate Year 1, lowering to \$1 million in Rate Year
2, to cover replevin and collection agency fees as it works
through the backlog of cases described above. The Company
anticipates that the operating costs for these two
processes will go back down to pre-pandemic levels by Rate
Year 3.

15 Q. What are the benefits of the proposed O&M funding?

16 A. The increase in funding for replevin-related fees, will 17 allow the Company to address additional inactive gas cases 18 that require the replevin process to remove the meter. The 19 funding sought by the Company will allow it to fulfill this 20 important obligation in a timely manner and avoid delays in 21 addressing the most difficult-to-reach inactive cases.

22 Regarding the Final Bills process, the Company is 23 forecasting an increase in uncollectible bills over the 24 next five years due to the economic impact of the COVID-19

1 pandemic. As noted in the Credit Modeling Tool section of 2 this Panel's testimony, current trends indicate an unprecedented increase in the number of customers in 3 4 arrears and balances associated with those accounts. The 5 Company expects that the financial impact of the pandemic 6 will surpass the impact of the 2008 recession during the 7 2023-2025 time period, as the 2008 recession had a lesser 8 impact on customer arrears. Given these factors, the 9 Company anticipates higher final bill balances, which will translate to higher commissions for collection agencies. 10 The increase in collection agency costs will allow the 11 Company to pursue former customers who owe substantial sums 12 13 of money, which will decrease the burden of higher 14 uncollectible balances on all customers. 15 Have you prepared, or had prepared under your supervision, Ο. exhibits that detail the Company's proposed investment in 16 the Replevin and Final Bills program? 17 We have prepared one exhibit, entitled EXHIBIT_(CO-18 Yes. Α. 49) Replevin and Final Bills. 19 20 Credit and Debit Card Fees 21 Q. In 2020, the Company ceased charging per-transaction fees 22 to customers that paid their bill via a credit or debit card, and instead absorbed the projected cost of these fees 23 24 into rates for the 2020-2022 time period. Does the Company

propose to continue this "no-fee" policy for customers
paying via credit and debit cards for the 2023-2025 time
period?

4 Yes, for multiple reasons. First, most of the utilities in Α. 5 the State have eliminated their per-transaction fees for 6 credit and debit card payments, so continuing with current 7 practice is consistent with the rest of New York State. 8 Second, customer satisfaction would decrease if the Company 9 were to re-instate the transaction fees after they had become accustomed to no-fee payments. Third, as explained 10 in the Customer Operations Panel's initial testimony in 11 Cases 19-E-0065 and 19-G-0066, customers can perform myriad 12 13 transactions via credit and debit cards in their daily life 14 without paying a fee and expect to have the same payment 15 experience at their utility as they do at the grocery store, pharmacy, and online retailers. 16

Q. What costs does the Company project for the 2023-2025 timeperiod?

A. The Company estimates it will incur \$9.9 million in costs
for Rate Year 1, \$10.9 million in Rate Year 2, and \$12
million in Rate Year 3 for credit and debit card fees.
Q. Please explain the basis for these cost projections.
A. The Company had initially projected that credit and debit
card payment volumes would increase in the initial years of

its no-fee policy. Combined, credit and debit card
 payments were 7.6 and 9.5 percent of all payments in 2020
 and 2021, respectively, which is within one percentage
 point of the Company's projections.

Our future projections for this metric - informed by 5 6 data from Chartwell on utility credit and debit card 7 payment trends - have the percentage of overall payments 8 increasing to approximately 16% by 2026. This reflects a 9 modest 10 percent annual increase in customers paying with credit and debit cards. These projections of increased 10 credit and debit card payments were used to develop our 11 forecast for associated fees. Please see EXHIBIT_(CO-50) 12 13 Credit and Debit Card Fee Industry Trends for further 14 information on industry trends.

15

Customer Outreach & Education

16 Q. Please explain the role of Customer Outreach.

The Company's Customer Outreach program has been in place 17 Α. for over ten years and was developed to provide customer 18 outreach, education activities and materials for programs 19 20 to educate the Company's customers regarding their rights, responsibilities, and options as utility customers. 21 The 22 program was later expanded to help customers learn more about energy safety, scam awareness, new program 23 24 initiatives, energy management, energy efficiency and other

1		clean energy topics, energy savings and financial resources
2		available to them. For a comprehensive description of this
3		program please see the Company's annual Outreach and
4		Education Plans filed in Cases 19-E-0065 and 19-G-0066.
5	Q.	Is the Company planning to increase the amount of $O\&M$ spent
6		on Outreach and Education activities?
7	A.	Yes. An O&M increase of \$2.18 million is needed beginning
8		in Rate Year 1. There is no increase for Rate Year 2 and
9		an incremental \$100,000 increase in Rate Year 3.
10	Q.	How will this funding be used?
11	A.	Funding will pay for the following activities:
12		• Development of communications and marketing materials to
13		engage our low-income communities as part of our Low-
14		Income and At-Risk Outreach and Education Plan,
15		• Increasing staff capacity to deepen and expand
16		relationships in the community as part of the targeted
17		Regional Outreach program,
18		• Development of additional personalized education
19		campaigns that provide customer specific and actionable
20		information to targeted audiences, including in languages
21		other than English and Spanish,
22		• Expansion of generalized email campaigns, including those
23		associated with key customer journeys such as electric

24 vehicles, payment agreements and self-service tools,

1		• Increased costs for direct mail campaigns and educational
2		awareness materials,
3		• Maintaining our current level of engagement with the
4		communities we serve through the development of
5		multichannel communications, and
6		• Expanding customer notifications, including emails and
7		texts, around credit and collections activities.
8	Q.	Have you prepared, or had prepared under your supervision,
9		exhibits that detail the Company's proposed increase in the
10		Outreach and Education program's O&M cost?
11	A.	Yes. We have prepared two exhibits, entitled EXHIBIT(CO-
12		51) Customer Outreach and Education and EXHIBIT_(CO-52)
13		Customer Outreach and Education Request.
14		V. Supporting Vulnerable Customers
15	Q.	This proceeding is taking place during an unprecedented
16		pandemic that has dramatically impacted customers in the
17		Company's service territory. What impact has the economic
18		downturn had on customers' ability to pay their utility
19		bills?
20	A.	The Company understands that the pandemic has created
21		hardships for many customers and is taking steps to provide
22		relief and assistance to those customers. As demonstrated
23		in our monthly Collections Activity Reports filed in Case
24		91-M-0744, many of our customers have struggled to pay

1	bills during the pandemic. And as noted earlier in this
2	Panel's testimony, as of December 31, 2021 residential
3	customers in arrears greater than sixty days increased
4	approximately 40% and accounts receivable balances for
5	residential customers have increased over 147% compared to
6	December 2019.

7 Q. What is the Company doing to support vulnerable customers8 during this difficult time?

9 Α. Con Edison has current programs and is proposing new 10 programs to support these customers. Current programs include the Energy Affordability Program ("EAP"), where the 11 12 Company provides discounts to qualifying low-income 13 customers, as more fully described below. The Company also 14 has implemented ongoing outreach and education regarding bill assistance and payment plan opportunities for all 15 customers and is coordinating with social service agencies 16 to apply public assistance funding. The Company is also 17 working in the EAP Working Group led by DPS Staff to 18 discuss statewide efforts to improve the EAP and address 19 20 growing arrears.

Q. Please describe the current programs supporting vulnerablecustomers in more detail.

23 A. Each of the programs is described further below:

1 Energy Affordability Program: The EAP provides bill • discounts to low-income customers in accordance with the 2 Commission's Orders in Case 14-M-0565, including 3 substantial increases to our monthly bill discounts 4 5 implemented pursuant to the Commission's August 12, 2021 6 Order Adopting Energy Affordability Policy Modifications 7 and Directing Utility Filings ("2021 EAP Order"). The 2021 EAP Order resulted in a 63% increase in the total 8 9 EAP program budget compared to the amounts set forth in the 2020-2022 rate plan. See EXHIBIT_(CO-53) Current 10 Low Income Discount Amounts and Budget for the current 11 12 budgets and bill discount levels for electric and gas 13 customers.

14 The 2021 EAP Order also changed the discount 15 calculation formula to better align discounts with 16 increases in rates, so that participating low-income 17 customers will continue to have a six percent energy burden, on average, even as average bills are expected to 18 19 increase as a result of approved delivery rate increases. This means that Con Edison customers participating in the 20 EAP will automatically receive discount increases to 21 offset the average bill increases stemming from this rate 22 23 filing. Please see the Energy Affordability Program 24 section later in this Panel's testimony for further

1	details on EAP topics, including budget increases
2	reflected in this rate filing, future discount updates,
3	reporting, reconnection fee waivers, cost recovery and
4	social service agency mailing costs.

5 • Outreach and Education: The Company has provided outreach, education and engagement on bill assistance and 6 7 payment plan availability as arrears have grown during the pandemic. This includes the development of a 8 9 comprehensive home for all information on bill assistance at coned.com/billhelp. The Company has provided ongoing 10 messaging on bills, in emails and in targeted text 11 12 message campaigns directing customers to this site. The bill assistance site explains customer protections such 13 14 as disconnection moratoriums, directs customers to public 15 assistance opportunities such as the New York State 16 Emergency Rental Assistance Program ("ERAP"), and explains the Company's offer of flexible no-interest 17 payment plans. 18

19 The Company has also leveraged its technology 20 investments to improve the experience for customers who 21 have payment challenges. For example, the Company allows 22 customers to enter into custom payment plans on the 23 Company's website or mobile app, with the ability to 24 modify the terms of the agreement, such as the down

1 payment or number of installments, based on their 2 preference. Also, the Company gave customers multiple 3 ways to obtain protections under the pandemic-related 4 Parker Richardson Act of 2021, including on the Company's website and mobile app. As a result, over 281,000 5 6 customers attested to financial hardship due to the 7 pandemic. Finally, all of these tools provided on the 8 Company's website and mobile app were also incorporated 9 into the Company's virtual assistant, Watt, which can help customers easily get protections for low-income 10 customers and enter into flexible payment plans. 11

12 • Coordinating with Social Service Agencies: The Company maintains robust processes to automatically match data 13 14 with local service agencies on a quarterly basis to 15 facilitate seamless enrollment of customers receiving 16 public assistance into the Company's EAP. In addition, 17 the Company coordinates with public assistance agencies so that the Home Energy Assistance Program ("HEAP") 18 19 payments and other assistance, such as Utility Guarantee and Direct Voucher payments, are applied properly to 20 21 eligible customer accounts. Importantly, the Company also prioritized the recently developed ERAP and HEAP 22 23 Regular Arrears Supplement ("RAS") programs in 24 conjunction with local public assistance agencies and the

1 Office of Temporary and Disability Assistance ("OTDA"). 2 The Company established processes to validate customer 3 eligibility and apply public assistance relief funds and 4 arrears waivers to accounts. Finally, in 2020, the 5 Company administered the Emergency Summer Cooling Credit 6 program, which was proposed by New York City, to provide 7 relief to vulnerable customers on summer electric bills 8 in 2020 so that they could remain home and run their air 9 conditioners to avoid heat-related health impacts in the early days of the pandemic. This was particularly 10 important during the pandemic because of the legitimate 11 concern that customers might be less likely to visit 12 13 community cooling centers due to fears of COVID-19 14 transmission.

15 • Participating in the EAP Working Group: The Company is 16 also participating in the statewide EAP Working Group 17 established in the 2021 EAP Order. The EAP Working Group's goals include reviewing and improving the EAP 18 19 programs and evaluating means to address arrears caused 20 by the pandemic. Multiple proposals are being considered 21 in this forum, including improvements to the process for customer self-certification for enrollment in the EAP 22 23 program and arrears management programs. The Company

1 supports these efforts and is working with stakeholders 2 and DPS Staff on a number of these proposals. 3 Please describe any proposed programs or ongoing actions 0. 4 that will support vulnerable customers during the 2023-2025 5 time period. б The Company proposes to continue and expand efforts Α. 7 associated with outreach and education to customers who 8 require payment assistance. To that end, the Company 9 proposed an increase in its Outreach and Education program, as described earlier in this Panel's testimony and in 10 EXHIBIT (CO-51) Customer Outreach and Education. 11 The Company, working with the other utilities and stakeholders 12 13 in the EAP Working Group, will also be providing outreach 14 and education specifically around assistance and how to 15 self-certify into the EAP program.

16 The Company also proposes to aid vulnerable customers by increasing customer experience technology funding as 17 part of the Strategic CX Portfolio. As described in this 18 testimony, a key value driver of these programs is that 19 they will support customers who require payment assistance. 20 The Company has made great strides in this area, and 21 22 continued funding will allow the Company to continue this 23 work.

1 To support small business customers who have been 2 impacted by the pandemic, the Company is also proposing a 3 new business incentive rate program directed to that class 4 of customers. Please see the Electric Rate Panel's testimony for additional information. 5 6 Finally, the Company is proposing a new Low-Income 7 Renewable Credit Program that would use revenues from 8 Company-owned solar generation to provide incremental bill 9 relief to EAP participants. Please see the CES Panel's testimony for more information. 10 Are there any measures that may help the Company's 11 Ο. 12 vulnerable customers that are being considered outside of 13 this proceeding? 14 Yes. As noted above, the EAP Working Group is Α. 15 contemplating arrears management or forgiveness programs on a statewide basis. The Company, working with the other 16 17 utilities, has developed preliminary parameters for an administratively workable arrears management program to 18 help pandemic-impacted residential customers. The Company 19 will continue to actively support the development of such a 20 program in the EAP Working Group. 21 22 The EAP Working Group is also evaluating potential

further changes to the EAP discount methodology that theCompany would implement upon Commission Order.

1 Energy Affordability Program 2 Does the Company propose any changes to its EAP in this Ο. 3 filing? 4 The Company will continue with its implementation of the Α. 2021 EAP Order, which established qualifying public 5 6 assistance programs, discount amounts, a process for 7 updating the discounts, and reporting requirements. 8 What are the assumed discount costs for Rate Year 1, and 0. 9 how does this compare to the amounts set aside in the 2020-2022 rate plan? 10 The assumed electric discount cost in Rate Year 1 is \$118.8 11 Α. 12 million, which represents an incremental \$48.6 million in 13 costs above the \$70.2 million currently in rates. 14 The assumed gas discount cost in Rate Year 1 is \$35.4 million - \$25.7 million for gas heating customers (SC3) and 15 \$9.7 million for non-heating customers (SC1). This 16 represents an incremental \$10.8 million in costs above the 17 \$24.6 million currently in rates for gas discounts. 18 These assumed discounts reflect updates stemming from 19 the 2021 EAP Order. However, the Company anticipates that 20 the discount amounts may change during the course of this 21 22 rate proceeding, as OTDA income and benefit level assumptions are updated and as average bill amounts change, 23 24 and to reflect any 2023 delivery rate increases. The

1		Company expects that these input assumptions will further
2		increase discount amounts and budgets. The Company will
3		provide an update, if feasible, at the update stage.
4	Q.	Does the Company propose to continue the reconnection fee
5		waiver component of the EAP?
6	A.	Yes. This rate proposal assumes an annual target cost of
7		\$1,188,186 for electric reconnect fee waivers and an annual
8		target of \$75,000 for gas reconnect fee waivers. All
9		eligible EAP participants will receive a waiver on a first
10		come, first serve basis. The Company's proposed tariff
11		states that each fee waiver program will end once the cost
12		of these programs equals the target for the Rate Year. The
13		Company will notify the parties to this rate case if it
14		projects that the electric and/or gas reconnect fee waiver
15		cost target will be reached during any Rate Year.
16	Q.	Adding together the discount costs and the reconnection fee
17		waiver costs, what is the Company's target budget amount
18		for the Electric and Gas EAPs in Rate Year 1?
19	A.	The target budget amount for the Electric EAP is
20		\$120,006,792. The target budget amount for the Gas EAP is
21		\$35,468,093.
22	Q.	Does the Company propose any form of reconciliation if
23		actual participation in the EAP is higher or lower than the
24		Company's forecast, or if the annual updates to discount

1 levels result in increased or decreased spending on bill 2 discounts?

A. Yes. Consistent with the 2020-2022 electric rate plan, all
over- and under-recoveries associated with the electric
discounts and the waiver of reconnection fees will be
recovered through the Revenue Decoupling Mechanism ("RDM")
from all customers subject to the RDM for the Electric EAP.
The Company proposes to continue this reconciliation
without modification.

10 Similarly, all over- and under-recoveries associated 11 with the gas discounts and the waiver of reconnection fees 12 will be recovered through the Monthly Rate Adjustment 13 ("MRA") from all customers subject to the MRA for the Gas 14 EAP. The Company proposes to continue this reconciliation 15 without modification.

Is it possible that the actual costs of the Electric and 16 Ο. 17 Gas EAPs may change in subsequent years if the Commission approves a multi-year rate plan in this proceeding? 18 Yes. Based on past experience and the Commission's 19 Α. required annual review and potential reset of income 20 discounts in each tier, actual participation in the 21 22 Company's EAPs will vary over the course of a multi-year rate plan. However, the target amounts for both bill 23 24 discounts and reconnection fee waivers outlined above will

1		not be modified in RY2 or RY3 of a multi-year rate plan.
2		This method of recovering program costs in the second and
3		third rate years is consistent with how the Company's EAPs
4		were funded during the 2020-2022 rate period.
5	Q.	Does the Company propose to continue funding up to \$100,000
6		in each Rate Year toward the New York City Human Resources
7		Agency and Westchester Department of Social Services'

8 administrative costs?

9 A. Yes.

10

VI. Providing Multi-Language Customer Service

Does the Company currently provide customer service options 11 Ο. 12 for customers who speak languages other than English? 13 Α. Yes. The Company operates in a very diverse territory with 14 a large base of customers who speak a diverse array of languages. As a result, the Company provides various 15 resources for customers who speak languages other than 16 English. This includes the ability for a customer to speak 17 with a CSR who speaks Spanish, Russian, Polish, Korean, 18 Mandarin, or Cantonese. Customers may also access services 19 through the Company's language line vendor, which provides 20 translation services in these and other languages. 21

In addition, customers who speak a language other than English can use the IVR phone technology to perform selfservice transactions. The Company provides IVR service in

1		the seven languages spoken by our CSRs. Customers can also
2		utilize the Company's website in over 20 languages using
3		the live translation service offered by Google, which is
4		integrated with the website. The Company's virtual
5		assistant Watt provides service in both English and
6		Spanish. In terms of billing and correspondence, the
7		Company offers these communications in both English and
8		Spanish. Finally, customer outreach material is available
9		in multiple languages as well.
10	Q.	Is the Company proposing any efforts to advance these
11		services beyond what is already offered?
12	A.	Yes, the Company has incorporated funding in its Outreach
13		and Education and Billing and Payment Enhancements programs
14		to continue progress in this area by exploring offerings in
15		languages other than English and Spanish. Please see
16		EXHIBIT_(CO-51) Customer Outreach and Education and
17		EXHIBIT_(CO-16) Billing and Payment Enhancements for
18		additional information.
19		VII. Metrics
20		Customer Service Performance Mechanism
21	Q.	Does the Company have a proposal for Customer Service
22		Performance Mechanism ("CSPM") metrics and targets?
23	A.	Yes, the Company proposes to continue its CSPM metrics with
24		the modifications and targets described below.
1	Q.	Describe the Company's current CSPM.
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2	Α.	The Company's current CSPM adopted in Cases 19-E-0065 and
3		19-G-0066 consists of seven metrics. The metrics include
4		Commission Complaints; four Customer Satisfaction Surveys
5		focused on Electric Emergency Calls, Gas Emergency Calls,
6		Phone Center Calls (non-Emergency), and Service Center
7		Visitors; Outage Notification; and Call Answer Rate. See
8		EXHIBIT_(CO-54) CSPM Matrix for a matrix of the current
9		CSPM and the associated targets.
10	Q.	Has the Company met the CSPM targets in the current rate
11		plan?
12	A.	Yes, despite pandemic challenges the Company has met its
13		targets in RY1 and RY2 of the current rate plan.
14	Q.	What changes to the individual metrics does the Company
15		propose?
16	A.	The Company proposes changes to the four Customer
17		Satisfaction Survey metrics and the Commission Complaints
18		metric, and the elimination of the Outage Notification
19		Incentive Mechanism metric.
20	Q.	Describe the current Customer Satisfaction Survey metrics.
21	A.	The current Customer Satisfaction Survey metrics involve
22		the fielding of four surveys, twice a year, of customers
23		who called the Company's call center and spoke to a CSR or
24		visited a Company Walk-In Center. The four surveys focus

1		on Electric Emergency Calls, Gas Emergency Calls, Phone
2		Center Calls (non-Emergency), and Service Center Visitors.
3		The surveys are conducted via phone only and take
4		approximately twenty minutes for customers to answer a
5		series of questions. A composite score is then developed
6		from these responses and evaluated against established
7		targets.
8	Q.	What changes does the Company propose for the Customer
9		Satisfaction Surveys metric?
10	A.	The Company proposes two changes: a change to the survey
11		instrument being utilized for the metric, and a
12		consolidation of survey groups from four to two.
13	Q.	Please describe the details of the proposed change in
14		survey instrument.
15	Α.	The Company proposes a change to the survey instrument used
16		because the current surveys no longer provide a realistic
17		evaluation of the Company's level of service to customers
18		for several reasons. First, three of the four surveys
19		(Electric Emergency Calls, Gas Emergency Calls, and Non-
20		Emergency Phone Center Calls) only survey customers who
21		spoke with a CSR at the Company's contact center. This
22		approach is no longer representative of customer
23		interactions with the Company, as most customers today
24		interact with the Company through digital and self-service

1 tools, which have expanded significantly in recent years. 2 For example, in 2021, Con Edison had over 18 million 3 digital transactions on its website, mobile app, and IVR 4 platforms, including start, transfer, and stop service transactions; auto-pay and e-bill enrollment; payment and 5 6 payment assistance transactions; and outage reporting. 7 During this same period, CSRs at the Company's contact 8 center answered 4.4 million calls.

9 Second, the survey method does not match customers' 10 expectations. The current survey is done only by phone and 11 takes twenty minutes to complete. This is not consistent 12 with modern survey methods, which generally rely on a quick 13 response to 1-3 questions via email or online as soon as 14 possible after the transaction occurred.

15 Third, customers are only surveyed for calls that fall 16 within the two time periods that the survey is fielded per 17 year, which is not necessarily representative of the 18 service the Company provides to customers year-round. 19 Q. What survey instrument does the Company propose to use for 20 its CSPM beginning in Rate Year 1?

A. The Company proposes to adopt the statewide customer
satisfaction survey designed by the utilities and DPS Staff
and implemented on a pilot basis per the October 18, 2018,
Order in Case 15-M-0566 ("Survey Order"). Subsequent to

1 the Survey Order, DPS Staff issued a report on June 15, 2 2020 in the same case recommending that the email survey be continued on a permanent basis effective January 1, 2021. 3 Why is this survey more appropriate for use as a CSPM 4 Q. 5 metric? б The statewide survey method is a better representation of Α. 7 customer satisfaction than the current survey for a number 8 of reasons. The survey includes customer who interact with 9 the Company on self-service channels, not just those customers who speak with a CSR. In addition, the survey is 10 designed with modern customer survey preferences in mind, 11 12 which increases the response rate. It is a single-13 question, five-point scale for customer satisfaction that a 14 customer can respond to via email in less than 30 seconds. The survey is also fielded continuously throughout the 15 16 year, avoiding measurement of customer satisfaction only during limited weeks. Finally, the survey is a consistent 17 measurement that all New York State utilities deploy and 18 was recommended for use on a permanent basis by DPS. 19 What question is asked of customers on this single-question 20 Ο. 21 survey? 22 The question that is included in each utility's survey is Α. 23 as follows: Thinking about your most recent transaction 24 with Con Edison, how satisfied are you? Responses to the

1		question are on a 1-5 scale: 1=Very Dissatisfied,
2		2=Dissatisfied, 3=Neither Satisfied nor Dissatisfied,
3		4=Satisfied and 5=Very Satisfied.
4	Q.	Does the Company have email addresses for a large
5		representative percentage of its customers, so that the
6		proposed survey would reach all customer groups?
7	Α.	Yes. As of January 12, 2022, the Company has email
8		addresses for 72% of our residential customers and 60% of
9		our commercial customers. Within the residential
10		population, we have emails for 61% of our low-income
11		customers and 58% of our CONCERN (i.e., elderly, blind and
12		disabled) customers.
13	Q.	Has the Company implemented this survey and, if so, how
14		much data has the Company collected via this survey over
15		time?
16	Α.	Yes. Consistent with the Survey Order, the Company
17		implemented the statewide survey in January 2019 and
18		continues to receive responses from customers across
19		regions and interaction channels. The Company samples 10
20		percent of each type of customer interaction to receive the
21		surveys daily, so the sampling is proportional to
22		customers' actual inquiry volume across channels. As such,
23		the Company has a robust data set covering its entire
24		service territory for a three-year period. The Company has

1		also found this continuous feedback from customers to be
2		helpful in identifying opportunities to improve the
3		customer experience. The Company reports information from
4		this survey on its monthly Performance Indicator Report
5		("PIR") in Case 15-M-0566.
6	Q.	What languages is the email survey offered in?
7	A.	The survey is offered in English, Spanish, Korean, Polish,
8		Russian and Chinese, for customers who have notified the
9		Company that they require correspondence in those
10		languages.
11	Q.	Do responses to the statewide survey the Company proposes
12		come from a diverse group of customers that is
13		representative of the Company's overall customer base?
14	A.	Yes, the Company had 32,393 customers respond to the survey
15		in 2020 and 33,290 customers respond in 2021. The
16		responses came from customers from across each region of
17		the Company's territory and included customers
18		participating in the Company's EAP program and CONCERN
19		program. For example, in the month of November 2021, the
20		Company received 2,435 survey responses from customers. Of
21		these responses 12% were from customers participating in
22		the Company's EAP program, and 8.6% were from customers
23		participating in the CONCERN program.

1	Q.	Please	describe	the	deta	ails	of	the	proposed	change	in
2		survey	groups f	rom	four	to	two.				

A. The Company proposes to combine gas and electric emergency
interactions into one Emergency Interactions survey. The
Company also proposes to combine service center visitor
survey responses with all other non-emergency responses
into one Non-Emergency Interactions survey.

8 Q. Why is the Company proposing this change?

9 Α. The Company proposes to combine gas and electric emergency 10 surveys into one Emergency Interactions survey because these interactions address the same customer issue, and the 11 12 Company sees no reason to track them separately. In 13 addition, combining the survey responses in these two 14 emergency categories will mitigate the impact of a smaller number of transactions in each separate category, which 15 might create results that are not representative. 16

The Company also proposes to combine service center 17 visitor survey responses with all other non-emergency 18 transactions into one Non-Emergency Interactions survey 19 20 because service center visitors are a small fraction of 21 overall survey responses and do not warrant separate 22 tracking and targets. As explained in this testimony, the 23 Company proposes a new survey instrument which will measure 24 interactions across channels including web, mobile app,

1		IVR, and interactions with a CSR. Service Centers are
2		another interaction channel the Company offers and should
3		be evaluated together with all other channels in a single
4		Non-Emergency Interactions survey grouping.
5	Q.	Is the Company also proposing a change to the Commission
6		Complaints metric?
7	A.	Yes, the company is proposing a number of changes to this
8		metric.
9	Q.	Describe the calculation of the current Commission
10		Complaints metric.
11	A.	The Company's Commission Complaints rate metric is an
12		annual measure of the number of escalated complaints to the
13		PSC per 100,000 customers. The PSC has an established two-
14		tier structure for customer inquiries. Initial inquiries
15		are referred to utilities through the Quick Resolution
16		System ("QRS") and can then be escalated by the customer to
17		become Standard Resolution System ("SRS") complaints. The
18		PSC calculates the Commission Complaint metric based on
19		escalated SRS complaints only, enabling utilities to
20		resolve inquiries through the QRS process before they
21		become official Commission complaints.
22	Q.	How does the Company's complaint performance compare
23		historically with other utilities in the state?

1	Α.	While the Company's number of initial inquiries received
2		from customers as part of QRS process is similar to other
3		utilities, more of these inquiries are escalated to the SRS
4		process, and therefore the overall Commission Complaint
5		rate is generally higher for Con Edison than other
6		utilities in the state.

7 Q. What are the drivers of escalated complaints by Con Edison8 customers?

9 Α. Drivers include complaints related to high bills, payment 10 challenges, billing and estimation, and complaints from rate consultants who submit inquiries in these same 11 categories and others on behalf of commercial customers, 12 often on issues where the Commission has already ruled in 13 14 the Company's favor. Please see EXHIBIT_(CO-55) 2021 Commission Complaint Drivers for a breakdown of complaints. 15 What factors might explain why the Company's Commission 16 Ο. Complaint rate has historically been higher than other 17 utilities in the state? 18

19 A. The Company's territory includes one of the largest, most 20 dynamic cities in the country. As a result, the Company 21 has a much larger commercial customer population with more 22 complex billing and rate inquiries compared to other 23 utilities. In addition, compared to other utilities, the 24 Company has more indoor meters, which historically has

1		created access issues and resulted in estimated bills and
2		billing adjustments. Finally, the Company's service area
3		has an active base of rate consultants who submit a larger
4		number of complaints on behalf of commercial customers
5		compared to other utilities.
6	Q.	Has the pandemic or other external or internal influences
7		impacted recent complaint escalations?
8	Α.	Yes, the COVID-19 pandemic and a multi-year transition to
9		AMI meters have impacted customer complaints.
10		Specifically, meter access issues associated with the
11		pandemic have resulted in an increase in billing and
12		estimation-related inquiries. In addition, the process of
13		removing and replacing over four million meters in the
14		Company's territory as part of the AMI initiative has
15		resulted in billing and meter challenges for some
16		customers. The Company has also been performing
17		Commission-mandated gas service line inspections and
18		applying fees to customers who do not provide access to
19		complete these inspections in accordance with Commission
20		orders and the Company's tariff. In some cases, these fees
21		have resulted in customer complaints, even though the fees
22		are authorized by the Commission.

Q. Does the Company's current Commission Complaints metric
 properly represent the Company's level of service to
 customers?

4 While measuring total complaints per 100,000 customers Α. No. is appropriate, the current process results in some 5 6 complaints being included in the calculation of the metric 7 even though these complaints have failed to show any 8 deficiency in the Company's service to customers or involve 9 a rate consultant who submitted dozens of cases on the same issue that has already been decided by the PSC in the 10 Company's favor. 11

Q. What is the Company's proposal to address this issue?
A. The Company proposes a change where complaints would be
omitted from calculation of the Commission Complaints
metric in the following situations:

16 • The initial inquiry is escalated to an SRS complaint 17 without the Company having a chance to respond within a reasonable period of time. This includes cases where the 18 19 customer escalated the complaint despite not responding to attempts by the Company to reach them or before the 20 21 Company has had a reasonable period of time to respond. 22 The Company proposes that such a reasonable period of 23 time be 14 calendar days, with the exception of rate 24 consultant cases, for which the Company recommends 30

1		days because they are often filed for multiple customers
2		at the same time and are generally more complex.
3	•	The initial inquiry is escalated to a complaint for an
4		issue that the Commission has clearly ruled in the
5		Company's favor in a prior case or ruling.
6	•	The initial inquiry is escalated to a complaint for an
7		issue concerning an action by the Company that is clearly
8		allowed and performed in accordance with the Company's
9		tariff. For example, complaints about tariff-related
10		fees for refusing access to the Company for meter-related
11		work and gas service line inspections would no longer
12		count toward the metric.
13	•	Multiple cases are filed on behalf of different customers
14		by a single customer representative for a single issue.
15		The Company proposes that these cases count as one case
16		if the party that filed them alleges the same complaint
17		in all cases. The Company's current rate plan Joint

Proposal, as well as past rate plans, has included language stating that one or more inquiries escalated by a rate consultant raising the same issue as to more than one account, whether such contacts are made at the same time or different times, should not be counted as more than one complaint if the issue is under consideration by the Department or the Commission and no Company

1 deficiency is found. However, this exception has not in 2 practice effectively accounted for the repeated filing of 3 complaints by rate consultants. The Company proposes to 4 reiterate this language with slight modifications to account for complaints that are filed on substantially 5 6 similar grounds. The Company looks forward to working 7 with Staff to develop a process to identify complaints 8 that should be consolidated for the purposes of the 9 complaint metric, while remaining committed to responding to all complaints in a timely manner. 10 • The initial inquiry is escalated to a complaint where 11 12 there is no issue the Company can reasonably resolve. These includes complaints about high bills where a meter 13 test finds no underlying problem and complaints about 14 15 outages caused by extreme weather that could be 16 reasonably expected to result in outages. Does the Company propose any changes to the Outage 17 Q. Notification Incentive Mechanism ("ONIM")? 18 19 Yes, the company proposes elimination of the ONIM metric. Α. 20 Please see the Storm Response and Resilience Panel testimony for the reasons why this metric should be 21 eliminated. 22

23 Q. Does the Company propose targets for the proposed CSPM24 metrics?

1	Α.	Yes, the Company proposes new targets for the Customer
2		Satisfaction Surveys and Call Answer Rate metrics. The
3		Company proposes no change to the Commission Complaints
4		metric target so long as the proposed changes identified
5		above are adopted.
6	Q.	What targets does the Company propose for the Customer
7		Satisfaction survey metrics?
8	A.	The Company reviewed three years of available actual data
9		from 2019-2021. The three-year average for Emergency
10		Interactions and Non-Emergency Interactions was 3.76 and
11		4.07 respectively out of a range of 1-5, with 1 being "not
12		satisfied" and 5 being "very satisfied." The Company's
13		proposes targets of 3.55 for Emergency Interactions and
14		3.75 for Non-Emergency Interactions for RY1-RY3. These
15		targets represent a reasonable floor for customer
16		satisfaction for the Company to be evaluated against,
17		especially given the customer service challenges expected
18		as a result of historic levels of arrears during the
19		pandemic.
20	Q.	What target does the Company propose for the Call Answer

21 Rate metric?

A. The Company proposes a Call Answer rate metric target of
65%. This is a slight reduction from the target for RY3 of
the current rate plan, which is 67%.

1 The Company proposes this reduction due to the 2 pandemic-driven arrears increases described earlier in this 3 Panel's testimony and the Company's transition to a new 4 billing system, both which are expected to impact call volumes during the upcoming rate plan. This modest 5 6 decrease in the target will mitigate cost increases that 7 would be required to maintain a level of 67% as the Company 8 navigates the expected temporary near-term challenges. 9 Customer payment challenges drive increased calls, which the Company has been attempting to manage both by fielding 10 calls and increasing self-service options through the 11 pandemic, as described above. Additionally, also noted 12 13 above, the transition to a new CSS comes with known 14 complications and challenges. While the Company is preparing for the transition, benchmarking indicates that 15 16 there typically is a transition period as the new system stabilizes. A temporary change to the metric will allow 17 the Company to properly manage and respond to the expected 18 complications in the rate year. 19

The Company further notes that since 2014 the target has increased from 63% to 67%. Therefore, a modest decrease does not erode all of the increased expectations that have been made in this area.

Q. What target does the Company propose for the Commission
 Complaints metric?

3 The Company propose that the target for Commission Α. 4 Complaints remain at 2.0 complaints per 100,000 customers for RY1-RY3. Given the abnormal levels of arrears created 5 6 by the pandemic, the Company does not consider now an 7 appropriate time for reductions in the Commission 8 Complaints metric target. The Company's proposed target 9 assumes acceptance of the Company's proposal in this testimony that complaints that meet specific criteria 10 should be omitted from the calculation of the Commission 11 Complaints metric. 12

13 Q. Does the Company have a proposal for the revenue 14 adjustments associated with the CSPM metrics? 15 The Company proposes to maintain scaled threshold Α. Yes. 16 levels that result in increased revenue adjustments at 17 various levels above the proposed targets, in the same manner as the current CSPM. The Company proposes to 18 maintain the total maximum revenue adjustments levels in 19 its current CSPM. Please see EXHIBIT (CO-56) Proposed 20 CSPM Targets and EXHIBIT__(CO-57) CSPM Target Supporting 21 22 Data for details of the Company's full CSPM proposal and supporting historical data. 23

1	Re	esidential Termination, Uncollectibles and Arrears Incentive
2		Mechanism
3	Q.	Does the Company propose to continue the Residential
4		Terminations, Uncollectible Bills and Arrears incentive
5		mechanism during the 2023-2025 period?
6	A.	No. The Company proposes to suspend use of this mechanism
7		in light of the COVID-19 pandemic, the Parker-Mosley Act of
8		2020 and the Parker-Richardson Act of 2021, which
9		collectively resulted in an extended moratorium on
10		collections and termination activity for residential
11		customers. This moratorium - and the Company's slow
12		resumption of residential collections activity in 2022 -
13		has distorted the data used to measure the Company's
14		performance for this metric, and therefore the Company
15		believes it is not appropriate to continue during the
16		upcoming rate period.
17	Q.	Is this proposal consistent with recent Commission Orders
18		in other utilities' rate cases?
19	A.	Yes. In 2021, the Commission adopted similar suspensions
20		for Central Hudson and the National Grid downstate
21		companies.

1		VIII. Other Topics
2		Billing and Estimation Challenges
3	Q.	In addition to an impact on customers' arrears, are there
4		any other customer impacts of the COVID-19 pandemic that
5		the Company is working to address?
6	A.	Yes, the Company is working with stakeholders to address
7		billing challenges such as estimated billing that have been
8		impacted by the pandemic and other factors.
9	Q.	Can you describe the challenges and other contributing
10		factors in addition to the pandemic in more detail?
11	A.	Yes. The Company has seen an increase in the number of
12		bills that need to be estimated due to the pandemic.
13		Specifically, the Company stopped reading most non-AMI
14		meters from March 2020 through July 2020 during the height
15		of the COVID-19 pandemic to protect customer and employee
16		safety. As a result, many customers without an AMI meter
17		received estimated bills for this period, and some
18		customers incurred residual impacts to billing once the
19		Company resumed meter reading and reconciled estimated
20		bills. In addition, in 2020 and continuing through 2021,
21		higher levels of estimation for customers without AMI
22		meters have occurred due to challenges with access to
23		buildings as the COVID-19 pandemic has resulted in changes

1		to access protocols, including changes in the specific
2		personnel who control access to buildings.
3	Q.	Has estimated billing impacted any group of customers more
4		significantly than others?
5	Α.	Yes, commercial customers have generally seen a greater
6		impact for two reasons. First, access to commercial
7		buildings has generally been more challenging due to the
8		pandemic for the reasons noted above. Also, AMI meter
9		deployment was not yet completed in the Manhattan region,
10		which has a higher number of commercial customers who
11		continued to need the Company to read their meter on site.
12		In addition, because commercial billing is more complex
13		than residential billing, when bills are estimated or
14		reconciled after an actual reading, commercial accounts are
15		more likely to require employee review. This, in turn, has
16		created delays in generating or adjusting commercial
17		customer bills.
18	Q.	Are there other factors contributing to billing challenges
19		for commercial customers?

A. Yes, the Company has been working to complete its
transition to AMI meters for all customers. To accomplish
this, the Company has had to access all premises and
exchange the existing meters for new AMI meters. During
this transition, some commercial customers have experienced

1		billing estimation or delays as the Company exchanged
2		meters and set up the new meters for automated
3		communication and billing in the Company's systems. These
4		temporary challenges have been greater for commercial
5		customers with more complex billing and customers for which
6		access to install AMI meters has been a challenge.
7	Q.	What steps has the Company taken to address these
8		challenges?
9	A.	The Company has taken a number of actions to address these
10		billing challenges. First, the Company has taken
11		aggressive action to install AMI meters in customer
12		premises, and specifically worked with large customers such
13		as the City of New York to dedicate resources to installing
14		AMI meters in as many locations as possible. As a result
15		of these efforts, from June 2021 to January 2022, the
16		percentage of the City of New York's meters that are AMI
17		meters increased from 44% to 75%. In addition, the Company
18		has continued to work to optimize staff and routing to read
19		as many non-AMI meters as possible to provide billing from
20		actual readings during the AMI transition. The Company has
21		also worked with commercial customers and their
22		representatives to coordinate resolution of specialized
23		accounts where billing has been estimated, delayed, or
24		subject to adjustments. Finally, the Company has worked to

develop automation tools for the back office that allow
 bills that require adjustment or review to be resolved more
 quickly.

4 How does the Company expect these issues will be resolved? Q. The Company believes the AMI transition-related billing and 5 Α. 6 estimation challenges are a temporary issue that will 7 resolve itself in time after AMI deployment is completed. For example, as of December 2021, the Company's overall 8 9 percentage of estimated billing for accounts with AMI 10 meters was between 0.87% and 1.47% for the 12 months of 2021. Please see EXHIBIT (CO-58) 2021 AMI Estimated Bill 11 12 Percentages for additional data. In addition, the Company 13 reports the total level of estimated billing and AMI 14 deployment in the Performance Indicator Report filed in Case 15-M-0566. The data shows that in January 2021, the 15 Company estimated 15% percent of bills, and 78.5% of 16 customers had AMI meters. By December 2021, the Company 17 estimated 6.4% percent of bills and 93% of customers had 18 This data highlights the positive impact of 19 AMI meters. 20 AMI deployment on the Company's overall level of estimated Therefore, the Company expects resolution of the 21 bills. 22 billing and estimation challenges as it installs the 23 remaining AMI meters and continues to optimize the system 24 and network. The Company has proposed funding in the AMI

program, as discussed in the CES Panel's testimony to
 complete this deployment.

3 Q. Does the Company plan continued actions to address these4 challenges?

Yes, the Company will continue to take a number of actions 5 Α. 6 to address billing challenges. This includes working with 7 commercial customers to schedule access for installations 8 of AMI meters and to address accounts that have billing 9 delays or require billing adjustments. In addition, the Company will continue to optimize the AMI network for the 10 small number of customers who experience billing issues 11 after the AMI meters are installed. 12

13

Mandatory Hourly Pricing Threshold

14 In the Joint Proposal approved by the Commission in Cases Q. 16-E-0060 and 16-G-0061, the Company agreed to the 15 following: "The Company will continue its Mandatory Hourly 16 Pricing ("MHP") program 'as is' during the Electric Rate 17 Plan (i.e., no change to the threshold kW demand level). 18 The Company will expand its MHP program to include 19 customers with demands over 300kW after the Company's 20 territory-wide completion of AMI installation." 21 Does the Company have any proposals regarding its MHP 22 Q. 23 program in this rate filing?

A. The Company proposes to defer changes to its MHP threshold
 until its next rate filing.

3 Q. Why does the Company propose to defer changes to the next 4 rate filing?

5 Α. The primary factor influencing this decision is the 6 Company's transition to a new customer service system in 7 2023. It is not possible to implement a reduction in the 8 demand threshold until the new system is implemented and 9 stabilized, which could be well into a multi-year rate plan. The transition and stabilization of the new CSS is 10 of paramount importance and, given system freezes and the 11 need to prioritize its successful implementation, lowering 12 13 the MHP threshold from 500 kW to 300 kW during that process 14 is not possible.

Additionally, significant outreach and education is 15 16 required to engage customers that would be subject to MHP rates well in advance of a transition to MHP. 17 Many customers that would be subject to the lower threshold may 18 not have had an AMI meter installed for a length of time 19 that provides sufficient insight to be prepared for the 20 change to an hourly pricing rate. Providing additional 21 22 time will allow customers to more thoroughly review granular usage information and understand their usage 23 24 patterns. Doing so can also provide customers more time to

1	explore ways to manage the variability of hourly prices,
2	including through clean energy programs. For these
3	reasons, the Company does not believe it is appropriate to
4	introduce a lower demand threshold during this transitional
5	period.

6

Electric Reconnection Fees

Q. Please explain the context for the Company's forecast with
respect to revenues from reconnection fees for electric
customers.

As proposed on page 44 of the November 2015 AMI Business 10 Α. Plan, the Company is in the process of installing electric 11 AMI meters that can connect to and disconnect from the 12 13 distribution system via a remote wireless signal. (For the 14 remainder of this testimony, we refer to this functionality as "RCD-capable.") The vast majority of electric AMI 15 meters installed through 2023 will be RCD-capable, with the 16 exception being some commercial customers and customers 17 that opt out of receiving electric AMI meters. 18

As outlined in General Rule 15.2 of the Company's Schedule for Electricity Service ("Tariff"), the Company no longer charges a fee to reconnect service at the meter for electric customers with RCD-capable meters whose service was shut off for non-payment or tampering-related reasons, if the Company can restore the customer's service remotely.

1		Reconnection fees still apply for customers whose service
2		restoration requires an in-person visit from Company
3		personnel, including customers whose service is cut in the
4		street and customers whose service cannot be restored remotely
5		despite the presence of an RCD-capable meter.
6	Q.	What does the Company project in terms of other operating
7		revenue from reconnection fees in RY1?
8	A.	The Company projects that other operating revenue from
9		electric reconnection fees will be \$86,092 in RY1 because the
10		vast majority of electric customers will have RCD-capable
11		meters by 2023 and therefore are not likely to incur a
12		reconnection fee. To develop this projection, the Company
13		assumed reconnection fees would be 10 percent of the value
14		used in the 2019 rate proceeding.
15	Q.	Does this proposal impact the reconnection fee waiver
16		component of the Company's Electric EAP?
17	A.	This proposal does not directly impact the reconnection fee
18		waiver benefit for electric EAP customers. If a disconnected
19		low-income electric customer has an RCD-capable AMI meter and
20		their service is successfully restored via remote signal, then
21		that customer would not be subject to a fee or have need for a
22		fee waiver. However, due to the timing of the Company's AMI
23		meter deployment, there may still be electric EAP customers
24		that are assessed reconnection fee waivers during Rate Years
25		1-3. The Company believes it is important to continue

1		providing these customers relief from reconnection fees. As
2		such, any customer participating in the Electric EAP that is
3		charged a reconnection fee during the rate plan will still be
4		eligible for a fee waiver under the terms outlined in the
5		Energy Affordability Program section of this Panel's
6		testimony.
7	Q.	Is this proposal reflected in any other testimony or exhibits
8		included in this rate filing?
9	Α.	Yes. This proposal is reflected in the Accounting Panel
10		testimony, Exhibit AP-3, Schedule 5.
11	Q.	Does this conclude your direct testimony?

1	Contents
2	I. INTRODUCTION
3	II. PURPOSE OF TESTIMONY 13
4	II. GENERAL EQUIPMENT 16
5	XM-2, XM-5, & XM-6 New Trucks and Equipment 21
6	XM-1, XM-3, XM-5, XM-6 and XM-7 26
7	XM-2 29
8	XM-4
9	III. RESEARCH AND DEVELOPMENT
10	R&D O&M Program Changes 43
11	R&D - Electric 47
12	R&D - Gas
13	IV. CORPORATE SECURITY
14	v. human resources
15	Strike Contingency 57
16	VI. LEARNING & INCLUSION 59
17	DEI Survey
18	Transforming Learning Through Innovation
19	VII. FACILITIES AND FIELD SERVICES
20	Real Estate Strategy 66
21	Sherman Creek Service Center 67
22	Worth Street Site Master Plan 73
23	30 Flatbush Avenue Lease Exit Strategy
24	Van Nest Cable Lab Renovations
25	Critical Repairs and Upgrade Projects and Programs 86
26 27	Critical Infrastructure - Short Term Priority Projects and Programs 89
2.8	Facilities Service Center Reportion and Storeroom Modernization
29	Facility Security Program Upgrades
30	Safety and Environmental Programs and Projects
31	Energy Efficiency Program 100
32	Compliance Projects and Programs 102
33	SWSS Correction Project 104

1	Transportation Operations Projects
2	Electric Vehicle Charging Station Expansion Project
3	Gasoline and Diesel Fuel Station Upgrade 112
4	3rd Avenue Yard Transportation Garage Demolition
5	3 rd Avenue Yard Transportation Garage Rebuild 118
6	Prevailing Wage 120
7	VIII. Supply Chain 122
8	Third Party Risk Management 123
9	VIII. Emergency Preparedness 124
10	NYC Micronet 125
11	Additional Support Personnel 128
12	
13	

1 I. INTRODUCTION

2	Q.	Would the members of the Shared Services Panel
3		("Panel") please state your names and business
4		addresses?
5	A.	Our names are Joan Jacobs, La-Asia Hundley, Matthew
6		Sniffen, Lynton Scotland, King Look, and Michele
7		Campanella. Our business address is 4 Irving Place,
8		New York, NY 10003.
9	Q.	By whom are the panel members employed?
10	A.	We are all employed by Consolidated Edison Company of
11		New York, Inc. ("Con Edison" or the "Company").
12	Q.	Please explain your educational backgrounds, work
13		experience, and current general responsibilities.
14	A.	(Hundley) I am currently the Vice President of
15		Facilities and Field Services for the Company. I have
16		been employed with Con Edison since 2001, holding
17		positions of increasing responsibility in Human
18		Resources, Learning & Inclusion and Gas Operations,
19		including: Department Manager Employee & Labor
20		Relations, Director, Talent Management, and General
21		Manager of Bronx Gas Operations. Effective November
22		2020, I assumed my current position, Vice President of
23		Facilities and Field Services. As Vice President of

- 3 -

1 Facilities and Field Services, I lead an organization of over 500 diverse employees, both union and 2 3 management team members. In this role I am 4 responsible for operating and maintaining over 40 facilities (office buildings and field operations 5 б locations/service centers) within the service territories of Con Edison and Orange and Rockland 7 Utilities, Inc. ("O&R"), including: planning and 8 project management; engineering services; facilities 9 10 environment, health and safety; and office services. I am also responsible for all the garages throughout 11 Con Edison and O&R as well as Automotive Engineering 12 13 and Fleet Administration, and for providing tanker 14 support, material delivery services, and other 15 logistics and emergency support services for the Company. I hold a BS in Management from Johnson C 16 Smith University, a master's degree in Finance in 17 18 Human Resources Management from CUNY/Baruch and a juris doctorate from St. John's University School of 19 20 Law and am admitted to practice in the State of New 21 York.

22 (Sniffen) I am currently the Vice President of
23 Emergency Preparedness for Con Edison. I joined Con

- 4 -

1 Edison in 1982 as a Management Intern and subsequently 2 served in various supervisory roles in Electric Distribution, including Department Manager of the 3 Manhattan Electric Control Center. 4 My current responsibilities include, but are not 5 б limited to, the development of emergency response plans inclusive of drills and exercises designed to 7 ensure readiness for corporate emergencies for all 8 9 commodities. I currently share the Incident Commander 10 role for the Company's Pandemic Team. Prior to my 11 current role, I held the position of Chief Engineer of 12 Regional Engineering. In that role, I was responsible 13 for developing Electric Distribution's asset 14 investment strategy and justifying its capital 15 projects and programs in support of the Company's budget and general rate case processes. I was also a 16 central figure in Electric Distribution's post-Sandy 17 18 storm hardening program. I hold a Bachelor of Science in Mechanical Engineering from Manhattan College. 19 20 (Scotland) I am the Vice President Supply Chain and 21 Chief Procurement Officer at Con Edison. In this role 22 I am responsible for the Procurement, Supply Chain and

- 5 -

Stores Operations functions in support of Con Edison
 and O&R.

3 Prior to joining Con Edison, I held several executive positions with major U.S. Corporations. I was the 4 Chief Procurement officer at W.L. Gore and Associates, 5 б a global material science company, with responsibility for Procurement, Strategic Sourcing, and Logistics and 7 Global Trade. I was the Global Strategic Sourcing 8 9 Leader for the DuPont Protection Solutions business 10 within DuPont; Vice President of Operational Excellence at NRG Energy Incorporated with responsibility for the 11 12 corporate project management office and the Focus On 13 Return of Invested Capital at NRG "("FORNRG") program, 14 and was co-founder of Sustainable Star, a renewable 15 energy company engaged in the development of large scale solar photovoltaic systems and the sale of gas 16 and electricity in deregulated markets. 17

I am a Trustee Emeritus at the University of Dayton in Ohio having served on the board of the University for the past nine years. I am the former Chairman of the Board of Urban Promise Wilmington (an organization focused on youth education and leadership development in Wilmington, Delaware)

– б –

1 I am a member of the Executive Leadership Council ("ELC"), an organization of senior level black business 2 3 executives in corporate America; co-chair of the 4 Community Impact initiative and a former board member of the Executive Leadership Foundation. 5 б I earned a Bachelor of Science in Chemical Engineering from the University of Dayton; a Master of Science in 7 Statistics from Rutgers University and an MBA from the 8 University of Pittsburgh. 9 10 (Jacobs) I am currently the Vice President of Learning and Inclusion. I assumed this position in August 11 12 2014. In this role, I oversee the Company's training 13 and conference facility called The Learning Center 14 ("TLC"). I am responsible for design and delivery of 15 professional leadership and technical training 16 programs that meet the training needs of the Company. In addition to training and development, I am also 17 18 responsible for engaging the workforce in fostering diversity and inclusion throughout the Company. My 19 20 areas of responsibility include recruitment and 21 staffing, skills training, leadership and career 22 development, succession management, performance 23 management, and organizational development. I am

- 7 -

responsible for managing a staff of over 175
 professionals.

3 I have over thirty years' experience in human resource management and law. I joined Con Edison in 2001 and 4 have served as director of Talent Management, director 5 б of Human Resources Support Services, and director of Equal Employment Opportunity Affairs. Prior to 7 joining Con Edison, I worked as labor attorney at New 8 9 York Health and Human Services Union 1199. I also 10 worked in Toronto, Canada at the Ontario Human Rights 11 Tribunal, the Labor Relations Board, and the Pay Equity Commission. 12

13 I hold a bachelor's degree in political science from 14 McGill University and a Juris Doctorate from 15 University of Windsor Law School. I am currently a board member for Coro New York Leadership Center; Con 16 Edison Liaison for New York Stock Exchange Board 17 Advisory Council; Con Edison Human Resources 18 representative for New York Jobs CEO Council; member 19 20 of Edison Electric Institute Human Resources Diversity 21 and Inclusion Subcommittee; member of Clean Energy 22 Businesses' Diversity and Inclusion Executive Council;

- 8 -

1 and past liaison to National Action Council for 2 Minorities in Engineering ("NACME"). 3 (Look) I am the Director of Research and Development ("R&D"). I earned both my Bachelor of Engineering and 4 Master of Engineering degrees in Chemical Engineering 5 б from Cooper Union, a Master of Science degree in Electrical Engineering from Manhattan College, and a 7 Master in Business Administration degree in Computer 8 9 Information Systems from Baruch College. I joined Con 10 Edison in 1983 as an Intern in the Management Intern 11 Program. In 1985, I completed the Management Intern 12 Program and joined the Mechanical Engineering 13 Department as an Associate Engineer. Between 1985 and 14 2017, I worked in various departments, including 15 Mechanical Engineering, Generation Planning, Corporate Planning, Resource Planning, Gas Operations and 16 Electricity Supply and in various positions of 17 18 increasing responsibility. In December 2017, I started in my current position. In this position, I 19 20 am responsible for developing new products and 21 processes to enhance the safety, reliability, 22 efficiency, operational excellence, and customer engagement for Con Edison. I oversee fifteen 23

- 9 -

1 employees, dedicated to managing and supporting R&D 2 projects for the Company's electric, gas, and steam 3 business units. I guide the overall department 4 strategy and manage the overall R&D budget. In addition to R&D, I also took over the responsibility 5 б of overseeing the Quality Management Group starting in August 2020. The Quality Management Group, consisting 7 of three employees, is responsible for developing, 8 9 updating, and implementing a quality management 10 program to ensure excellence in the operations of the 11 Utility Shared Services Organization.

12 (Campanella) I am the Director of Corporate Security. 13 I graduated from Clarkson University with a Bachelor 14 of Science degree in Accounting in 1978 and from New 15 York Law School with a Juris Doctorate degree in 1989. I am an active member of the Security Committees for 16 the American Gas Association and the Edison Electric 17 18 Institute. I am also a member of the Domestic Security Alliance Council, which is a collaboration 19 20 between the Federal Bureau of Investigation ("FBI"), 21 Department of Homeland Security ("DHS") and private 22 industry. Prior to joining Con Edison, I was a 23 Special Agent of the FBI from 1980 to 2008. Among

- 10 -
1 other duties, I served as the Assistant Special Agent in Charge in the Washington Field Office, a position 2 3 that included oversight of the Security Branch. As 4 the Assistant Special Agent in Charge, I was responsible for the protection of the Attorney General 5 б of the United States and the Director of the FBI, the physical security of the properties within the 7 Washington Field Office territory, and the 8 investigative services related to personnel security, 9 10 including polygraphs, background investigations, and 11 clearances. Since September 2008, I have been the 12 Director of Corporate Security for Con Edison. As the 13 Director of Corporate Security, I formulate and direct 14 security policies, practices, and procedures for the 15 Company. I direct the investigative and security related activities of forty-four investigators and 16 staff; act as a liaison with Federal, State, and local 17 18 law enforcement agencies; advise senior executives on security-related matters; direct physical security 19 20 surveys of Company facilities; and make and implement 21 security recommendations throughout the Company. In addition, I develop specifications and monitor the 22 23 performance of contract guard services, oversee cyber

- 11 -

1		forensic investigations, and implement training
2		requirements for Company security personnel. I
3		maintain a Top Secret Clearance from the FBI.
4	Q.	Have any members of the Panel previously testified
5		before the New York State Public Service Commission
6		("PSC" or "Commission")?
7	A.	(Campanella) Yes, I have testified before the
8		Commission as a witness in previous electric and gas
9		rate case proceedings (Cases 09-E-0428, 13-E-0030,13-
10		G-0031, 16-E-0060, 16-G-0061, 19-E-0065, and 19-G-
11		0066).
12		(Hundley) No, I have not previously testified before
13		the Commission.
14		(Sniffen) Yes, I have testified before the Commission
15		as a witness in the previous electric rate case
16		proceeding (19-E-0065).
17		(Scotland) No, I have not previously testified before
18		the Commission.
19		(Jacobs) Yes, I have testified before the Commission
20		as a witness in previous electric and gas rate case
21		proceedings (16-E-0060, 16-G-0061, 19-E-0065, and 19-
22		G-0066).

1 (Look) Yes, I have testified before the Commission as 2 a witness in a previous steam rate case proceeding and 3 the prior gas and electric rate cases (Case 99-S-1621, 19-E-0065, and 19-G-0066). 4 5 б II. PURPOSE OF TESTIMONY What is Shared Services? 7 Q. Shared Services is the Company's utility support 8 Α. 9 organization that, among other things, provides 10 logistical support activities for both Con Edison and 11 O&R; maintains and improves the Company's supply chain 12 infrastructure; hires and trains employees and, where 13 necessary, contractors; maintains the Company's 14 properties, and provides physical and cybersecurity 15 solutions. Please explain the purpose of your testimony. 16 Q. 17 Α. Our purpose is to present the Company's proposed 18 Shared Services projects and programs and their respective funding requirements. Specifically, this 19 20 testimony covers the capital and/or O&M funding 21 requirements for the Company's general equipment, R&D, security, human resources, learning and inclusion, 22 23 facilities and field Services, supply chain, and

- 13 -

1		emergency preparedness functions. All projects and
2		programs discussed in our testimony are common to the
3		Company's electric, gas and steam businesses, and, in
4		most cases, to O&R. The Company's Accounting Panel
5		explains how costs are allocated across Con Edison's
6		businesses and, where applicable, to O&R.
7	Q.	Please summarize the Panel's testimony.
8	Α.	We describe Shared Services efforts to support
9		programs throughout the Company. Our testimony also
10		discusses efforts that Shared Services undertakes to
11		support Company priorities to reduce risk and enhance
12		public and employee safety, increase operational
13		performance, and enhance the customer experience.
14		Overall, we provide crucial support functions to
15		enable the Company to continue to provide utility
16		services in a safe, reliable, and cost-efficient
17		manner. Our testimony is set forth as follows:
18		First, we explain the Company's capital request for
19		general equipment.
20		Second, we will present several R&D initiatives in the
21		areas of gas and electric services as well as three

22 O&M program changes.

- 14 -

1 Third, we discuss Corporate Security and introduce 2 four capital projects that are confidential and for 3 Staff review. Fourth, we address the O&M costs associated with the 4 strike contingency within Human Resources. 5 б Fifth, we discuss Learning & Inclusion's Transforming 7 Learning Through Innovation and an O&M Program Change, Diversity, Equity, and Inclusion ("DEI") survey. 8 Sixth, regarding Facilities and Field Services, we 9 10 will discuss building service centers; a project to exit a lease, several critical repairs and upgrades, 11 12 including the repair of critical infrastructure of our 13 various buildings; safety and environmental projects, 14 and four Transportation Operations projects. 15 Seventh, we discuss an O&M program related to third-16 party risk management. 17 Finally, we discuss two O&M programs, one to support 18 weather monitoring and the other to support additional 19 personnel. What period does this testimony cover? 20 Q The Panel will present projects and programs planned 21 Α. 22 for the 12-month period ending December 31, 2023 ("Rate Year" or "RY1"). As discussed by the 23

- 15 -

1 Accounting Panel, the Company is not proposing a 2 multi-year rate plan in this rate case but is willing to pursue, through settlement discussions with Staff 3 and interested parties, a three-year rate plan. 4 То 5 facilitate settlement discussions, we also address б capital plant additions and other programs and initiatives for the two years following the Rate Year. 7 We will refer to the 12-month periods ending December 8 31, 2024 and December 31, 2025 as "RY2" and "RY3", 9 10 respectively.

11

12 II. GENERAL EQUIPMENT

13 Q. Please explain the Company's category of capital14 expenditures known as General Equipment.

A. General Equipment represents specific categories of capital equipment, defined below, that are classified under the Uniform System of Accounts as General Plant. In general, these items have a purchase cost equal to or greater than \$500 and have a life expectancy of more than one year, as detailed in the Company's Corporate Instruction CI-610-1.

- 16 -

1	Q.	What is the Company projecting for General	Equipment
2		expenditure levels covered by this testimor	ny over RY1
3		through RY3?	
4	Α.	We project the following capital expenditur	res:
5		• RY1 - \$72.54 million	
6		• RY2 - \$67.41 million	
7		• RY3 - \$85.31 million	
8	Q.	What are the categories of General Equipmen	nt?
9	Α.	General Equipment consists of nine main cat	egories of
10		capital plant or "tools." Con Edison commo	only refers
11		to each category as an XM, which is a uniqu	le budget
12		reference coding for the Company's General	Equipment.
13		The following is a list of the Company's XI	Ms.
14		Office Furniture	(XM-1)
15		Transportation Equipment	(XM-2)
16		Stores Equipment	(XM-3)
17		Shop Equipment	(XM-4)
18		Laboratory and Test Equipment	(XM-5)
19		Tools and Work Equipment	(XM-6)
20		Miscellaneous Equipment	(XM-7)
21		Communication Equipment	(XM-8)
22		Computer Equipment	(XM-10)
23	Q.	Will you discus each XM Category in this te	estimony?

1	A.	No. The IT Panel will discuss XM8 and XM10. We will
2		discuss all other XM categories.
3	Q.	Please generally describe the nature of and need for
4		General Equipment.
5	Α.	General Equipment is the tools and work equipment
6		employees need to perform their day-to-day job
7		functions. It includes, among other items, desks for
8		offices, bucket trucks for overhead operations,
9		shelving for storerooms, equipment for testing before
10		entering manholes, jack hammers to break the street to
11		locate underground equipment, safety hoists for
12		entering underground structures, and radio frequency
13		equipment for employees to communicate.
14		The following example illustrates the vital role
15		General Equipment plays in the Company's daily
16		operations. An underground splicing crew requires, in
17		addition to splicing equipment such as a propane torch
18		(XM-6), a van $(XM-2)$ to deploy the crew and a
19		mandatory rescue device (XM-7) for employee safety.
20		The actual work of splicing the cable requires the
21		mechanic to use cutter and crimper equipment (XM-6) to
22		install the new section of cable.

- Q. How does the Company determine when General Equipment
 needs to be replaced?
- A. Replacement for General Equipment is driven by normal
 wear and tear, changing operational requirements, and
 changes in technology, among other factors, and is
 intended to provide Company employees the tools
 necessary to complete their tasks in a safe and
 efficient manner.
- 9 Q. How did the Company develop the XM equipment requests10 included in this rate request?
- Con Edison bases XM Equipment requirements on the 11 Α. 12 historical spend, adjusted for forecasted work needs. 13 Forecasted work needs can include emergent work. For 14 example, as discussed later in this testimony, there 15 is a significant increase in the request for utility trucks in Transportation Equipment (XM-2), based 16 several different emergent needs. 17
- 18 Q. Please discuss the manner in which General Equipment19 spend is developed and budgeted throughout the year.
- 20 A. Facilities prioritizes projects via a Capital
- 21 Optimization methodology to develop an optimal project 22 portfolio that aligns with the Company's strategic 23 goals. The Facilities Governance Committee, comprised

1		of officers that review and oversee capital
2		expenditures under the Utility Shared Services group,
3		reviews and approves the capital optimization. The
4		Company then allocates to and procures the required
5		Equipment for the list of prioritized projects. The
6		Facilities Governance Committee meets quarterly to
7		review the status of all projects and make changes in
8		the Utility Shared Services portfolio. The Company
9		follows a different process for Transportation
10		Equipment (XM-2) which we discuss further in this
11		testimony.
12	Q.	Do the projected spending levels included in this case
13		reflect any efforts by the Company to minimize
14		expenditures for these tools, equipment, and
15		furniture?
16	A.	Yes. We evaluate tools, equipment, and furniture
17		before replacing them; only those that are deemed un-
18		repairable or uneconomic to repair are replaced,
19		except when the equipment is purchased due to
20		operating or work practice changes requiring a new
21		type of device. As a general practice, desks, chairs,
22		and office partitions are reused within the Company
23		whenever possible. In addition, most contracts for

- 20 -

1		new tools, equipment and furniture are competitively
2		bid and, where possible, XM orders are consolidated to
3		take advantage of volume discounts. For example, in
4		2021 the Company consolidated many Tools and Equipment
5		(XM-6) contracts under one main vendor to take
6		advantage of the vendor's competitive purchase pricing
7		and tool repair services.
8	Q.	Was a document, entitled "Shared Services - General
9		Equipment - Capital," Exhibit(SSP-2), that
10		explains each category of General Equipment contains
11		Corporate Instruction CI-610-1, prepared under your
12		direction and supervision?
13	A.	Yes, it was.
14		MARK FOR IDENTIFICATION AS EXHIBIT (SSP-1)
15	Q.	What does this Exhibit show?
16	A.	This Exhibit shows the expenditures for all General
17		Equipment categories from RY1 through RY3.
18		XM-2, XM-5, & XM-6 New Trucks and Equipment
19	Q.	Earlier in your testimony, you indicated that the
20		Transportation Equipment category (XM-2) was managed
21		differently than other equipment categories. Please
22		explain the XM-2 category and any challenges facing
23		the Company for the rate plan.

- 21 -

1	Α.	The XM-2 equipment category covers the Company's
2		capital vehicle replacement program and provides for
3		the annual replacement of mobile equipment such as
4		cars, SUVs, heavy trucks, cranes, and construction
5		equipment used for Con Edison operations. The Company
б		will need to significantly increase the number of
7		vehicles purchased in the XM-2 category during a
8		three-year rate plan. The Company's request falls into
9		three categories: 1) trucks to meet current employee
10		needs, 2) bucket trucks for storm response, and; 3)
11		vehicles for new hires required to meet the increased
12		capital spend by Electric Operations.
13	Q.	Please describe the trucks for current employees.
14	Α.	In 2022, the Company had planned to purchase 52
15		additional trucks to provide vehicles for current
16		employees. The Company will not be able to purchase
17		those trucks in 2022 due to nation-wide supply chain
18		constraints on this type of construction equipment.
19		As a result, the Company is seeking \$12 million in
20		2023 to purchase these vehicles.
21	Q.	Please explain the bucket trucks for storm response.
22	Α.	The Company plans to use reasonable business efforts

23 to purchase up to 100 additional overhead bucket

- 22 -

1		trucks for storm response contractors who arrive by
2		plane from out-of-State. The Electric Storm Response
3		and Resilience panel explains the need for the trucks.
4	Q.	What is the Company's plan for purchasing the trucks?
5	Α.	As more fully discussed by the Electric Storm Response
б		and Resilience panel, the Company will seek to
7		purchase 30 trucks in RY1, 30 in RY2 and 40 in RY3.
8	Q.	Are these trucks included in the Company's revenue
9		requirement?
10	Α.	No. As noted above, there are nation-wide supply
11		chain shortages for utility construction equipment
12		with no availability in 2022. The Company currently
13		estimates that the three-year total cost of purchasing
14		up to 100 trucks will be \$31 million. The Company is
15		continuing to refine its estimate regarding the cost of the
16		trucks and will include its capital request in the revenue
17		requirement at the preliminary update stage of this
18		proceeding.
19	Q.	What about O&M expenses for the trucks?
20	Α.	The Electric Storm Response and Resilience panel
21		addresses the O&M costs for the new storm vehicles,
22		including the effect of the settlement agreement
23		approved by the Commission in Case 20-E-0422.

- 23 -

Q. Please describe the new vehicle requirements for new
 hires.

A. As more fully explained by the Company's Electric
Infrastructure and Operations panel, the Company will
require at least 200 additional employees to perform
the capital work related to the Company's core, clean
energy, and resilience investments. The Company will
need to provide these employees with vehicles for this
work.

10 Q. How many new vehicles is the Company planning to11 purchase?

A. Once EIOP finalizes the required number of employees,
Shared Services will develop the capital and O&M needs
for new trucks and required equipment, provide an
updated white paper, and an update to the revenue
requirement in the preliminary update.

17 Q. Are other XM categories impacted by the Company's18 plans for new vehicles?

19 A. Yes. Con Edison will need to equip the new vehicles 20 with Laboratory and Test Equipment (XM-5), such as 21 ground fault and air monitoring equipment, and Tools 22 and Work Equipment (XM-6), such as chain hoists and 23 emergency personnel retrieval devices.

- 24 -

1	Q.	Please detail the cost for the Laboratory and Test
2		Equipment (XM-5) and Tools and Work Equipment (XM-6)
3		required for three categories of new vehicles.
4	A.	For category 1) trucks to meet current employee and
5		needs, the estimate is \$1.13 million (XM5) and \$6.48
6		million (XM6). The Company included this request in
7		the revenue requirement.
8		For category 2, bucket trucks for storm response, the
9		Company will provide an update to the revenue
10		requirement in the preliminary update. The Current
11		estimate for the new storm response trucks is provided
12		in the Company's White paper (SSP-1 XM-5 and XM-6).
13		The projected spend for XM5 is \$0.7 million in 2023,
14		\$0.7 million in 2024, and \$0.9 million in 2025. For
15		XM6 the projected spend is \$3.1 million in 2023, \$3.1
16		million in 2024, and \$4.1 million in 2025.
17		For category 3) as previously discussed the company
18		will provide costs to equip the vehicles for new hires
19		required to meet the increased capital spend by
20		Electric Operations in in the preliminary update.
21		

1		XM-1, $XM-3$, $XM-5$, $XM-6$ and $XM-7$
2	Q.	Please describe the categories of equipment controlled
3		by Facilities and Field Services.
4	A.	Facilities and Field Services is the Control Agency
5		for Office Furniture (XM-1), Stores Equipment (XM-3),
б		Laboratory Equipment (XM-5), Tools and Work Equipment
7		(XM-6), and Miscellaneous Equipment (XM-7).
8	Q.	What is the projected spending in RY1 through RY3 for
9		these General Equipment categories (XM-1, XM-3, XM-5,
10		XM-6, and $XM-7$)?
11	A.	The projected spending levels for these General
12		Equipment categories is \$16.65 million in RY1, \$9.0
13		million in RY2, and \$9.0 million in RY3. The spending
14		levels for each separate category are listed in
15		Exhibit(SSP-1)
16	Q.	Describe the XM categories in more detail.
17	A.	Under the XM-1 budget category Con Edison purchases
18		chairs, desks, workstations, modular office
19		partitions, laptop charging cabinets and other general
20		office furniture.
21		Under the XM-3 budget category Con Edison replaces
22		warehouse and material handling equipment, including
23		storage bins, pallet racks, pipe racks, shelving, and

- 26 -

1		strapping/wrapping equipment. The Company maintains a
2		central warehouse to provide materials needed in the
3		routine maintenance and construction of the Company's
4		electric, gas, and steam transmission and distribution
5		systems and infrastructure. It also operates
6		approximately fifteen smaller satellite locations at
7		major workout centers. Some of the key satellite
8		locations are located at Van Nest (Bronx), College
9		Point Boulevard (Queens), Third Avenue Yard
10		(Brooklyn), and Neptune Avenue (Brooklyn).
11	Q.	Please continue.
12	A.	Under the XM-5 budget category Con Edison replaces
13		both laboratory and testing equipment.
14	Q.	Please describe laboratory and testing equipment.
15	A.	Laboratory and testing equipment includes volt meters,
16		gas detectors, recorders, test boxes, and pressure
17		gauges. Con Edison field forces use these devices to
18		test and evaluate electric, gas, and steam system
19		components, including gas levels in the atmosphere
20		when a worker descends into a manhole or in
21		excavations.
22	Q.	What is in the XM-6 budget?

The XM-6 budget category is designated for the 1 Α. replacement of tools and equipment, including portable 2 3 pumps, chainsaws, and hydraulic jacks, pneumatic hammers, parts washers, and tire repair equipment. 4 Con Edison field forces use this equipment to install, 5 б repair, and maintain electric, gas, and steam system components as well as to repair fleet vehicles. 7 This category also includes devices that are critical to 8 9 the safety of our employees, such as lifting devices 10 that allow employees who are overcome in a confined 11 space to be lifted out by fellow employees from above, 12 and Self-Contained Breathing Apparatus and Respirators 13 with escape bottles to allow employees to enter 14 underground structures and confined spaces when the 15 atmosphere is unable to support human life. Please continue. 16 Q.

A. The XM-7 budget category represents the Company's
miscellaneous equipment, such as, safety and training
equipment, fire protection, and audio visual and
photographic equipment, which includes security
cameras and recorders and kitchen equipment.

- 28 -

1	Q.	What is the procedure or process associated with the
2		replacement requirements for XM-1, XM-3, XM-5, XM-6,
3		and XM-7 categories?
4	Α.	We typically replace items covered under the XM-1, XM-
5		3, XM-5, XM-6, and XM-7 categories when they are
6		deemed beyond economical repair. In the past, tools
7		and equipment have also been replaced due to procedure
8		and/or specification changes. Operating departments
9		usually initiate these changes due to operating or
10		work practice changes, new tasks, or improvements in
11		safety, quality, or productivity.
12	Q.	Can you provide an example of these changes?
13	Α.	Yes. In 2021, Distribution Engineering introduced
14		specifications for battery-operated cable cutters and
15		crimpers used by Electric Operations, which fall under
16		the XM-6 category. The Company increased the use of
17		the battery-operated tool rather than the hydraulic
18		counterpart due to the improved ergonomics. These
19		battery-operated tools are lighter and portable,
20		allowing work to be performed more efficiently.
21		XM-2
22	Q.	Please discuss the Transportation Equipment (XM-2)
23		category.

- 29 -

1	Α.	The XM-2 category provides for the purchase of mobile
2		equipment, such as trucks, cars, cranes, construction
3		equipment and forklifts that we use in our operations.
4		Facilities and Field Services' Automotive Engineering
5		group manages this equipment category for the Company.
6		Under this category of expenditures, the Company owns
7		approximately 4,200 vehicles, including passenger
8		vehicles, bucket trucks and tractors. Factoring in
9		other pieces of mobile equipment, like backhoes,
10		forklifts and trailers used to move equipment and
11		materials, the Company owns close to 5,200 items of
12		transportation equipment. This figure includes
13		highway, non-highway powered equipment, trailers and
14		equipment for tracking purposes.
15	Q.	What is the projected spending from 2023 to 2025 for
16		XM-2?
17	A.	The White Paper entitled "XM-2" in Exhibit (SSP-1)
18		sets forth historical and projected XM-2 expenditures
19		related to the replacement of existing equipment. We
20		project to spend \$55.53 million in 2023, \$58.02
21		million in 2024, and \$75.91 million in 2025.
22	Q.	Please describe the manner in which General Equipment
23		XM-2 "Transportation Equipment" is budgeted.

- 30 -

1 Α. The Company has a pre-determined methodology for 2 selecting vehicles and mobile equipment(based on cost, 3 age, maintenance, and residual value). This 4 methodology, referred to as the lifecycle model, uses factors related to capital cost, residual value, cost 5 б of maintenance and use over the life of a representative asset to determine an appropriate point 7 at which it makes financial sense to replace such 8 The Company maintains a database of these 9 asset. 10 assets and their associated operating costs. 11 Annually, Automotive Engineering identifies vehicles 12 and mobile equipment that are at or beyond lifecycle 13 for the specified budget year. This serves as a 14 starting point for its vehicle replacement decisions. 15 The Company also employs its judgment and experience, as well as case-by-case evaluations of certain assets, 16 17 in making its replacement decisions. 18 Can you please explain in more detail the methodology Ο. employed for that review? 19 20 The Company uses historical, actual and expected Α. 21 maintenance data, as well as vehicle use data, to 22 determine when it is most economical to replace an 23 asset rather than incur increasing maintenance costs

- 31 -

and risk. The lifecycle model takes into account the change in maintenance costs as the asset ages and, more specifically, the rate-of-change for maintenance costs. This optimizes the Company's overall cost to own and maintain these assets. The lifecycle model identifies the optimum time to replace a deteriorating asset.

How is that analysis used to budget from year to year? 8 Ο. The Company maintains a database of various asset-9 Α. 10 types and their ideal/economic replacement age. This is a starting point and is further refined by looking 11 12 at the specific assets chosen as candidates for 13 replacement. Based on that review, the Company may 14 either retain an asset that has performed better than 15 its peer group or accelerate the replacement of an asset that is performing poorly. For instance, the 16 17 current expected life-cycle analysis for utility 18 trucks indicates it is efficient to replace them roughly every eight years. 19

20 The Company considers age, maintenance, history, 21 usage, and technology advances in considering 22 replacements. Therefore, a utility truck in Manhattan 23 used seven days a week for three shifts could be

- 32 -

1		replaced before an older vehicle in Westchester that
2		has two shifts of usage in a typical week because of
3		higher usage/mileage. The final selection is made
4		jointly by Facilities and Field Services and the
5		operating areas.
6	Q.	Is there any other analysis that is performed to
7		determine which vehicles should be replaced?
8	Α.	Yes. Con Edison incorporates the factors identified
9		above into a prioritization model for XM-2 spending.
10		In the prioritization model, the vehicles identified
11		as "beyond life-cycle" are rated using transportation
12		criteria (which includes vehicle life cycle age,
13		reliability, use, and cost impacts) and are then
14		prioritized for replacement.
15		The highest priority are critical heavy-duty vehicles
16		that are due for replacement and/or equipment that
17		would likely be condemned by the local repair facility
18		if a major component were to fail. Loss of this
19		equipment would result in significant incremental
20		maintenance costs and lost productive field time.
21		The next priority includes medium and light-duty
22		trucks that are past-due for replacement and would
23		impact cost and productivity, but to a lesser extent.

- 33 -

1		And finally, passenger vehicles that are past their
2		normal replacement cycle represent the lowest
3		priority.
4	Q.	How does the Company's Transportation group approach
5		these investments?
6	A.	Yes, the Company's Transportation group periodically
7		evaluates the life-cycle model described earlier. In
8		some cases, Transportation employees have been able to
9		work with manufacturers and engineers to improve
10		designs and remove common causes of failures. For
11		instance, in 2019, Con Edison's engineers improved the
12		design of its utility trucks with a built in winch.
13		The improved design, which incorporated a smaller
14		chassis and body design, allowed for the purchase of a
15		lower gross vehicle weight rated (GVWR) chassis and
16		reduced the overall procurement cost by approximately
17		9 percent per vehicle. In addition, by competitively
18		bidding large contracts to multiple vendors and
19		negotiating volume discounts with the major original
20		equipment manufacturers, the Company leverages its
21		buying power, reducing the up-front cost of the
22		equipment for both Con Edison and O&R. These factors
23		reduce initial cost and maintenance, all of which

- 34 -

1 translate into being able to prolong the life of our 2 assets and/or maximize the effect of our capital 3 replacement programs. Furthermore, we continue to 4 monitor and analyze our fleet size and seek to rightsize the number of vehicles in our fleet. 5 б Are there any factors that increase the initial Ο. purchase cost of Transportation assets? 7 Yes, the EPA continues to require diesel-emission 8 Α. 9 engine control equipment for new vehicles, the most 10 recent changes being 2021. In previous years, these 11 diesel emissions components added approximately 12 \$15,000 to the purchase price of every diesel vehicle. 13 The Company annually purchases about 150 diesel 14 vehicles that are affected by these regulations, which 15 have added a total cost of approximately \$2.0 million annually. In addition, new safety and operational 16 features, such as, cameras, sensors and fall 17 18 protection, have added additional cost to the medium and heavy duty fleet. Finally, to comply with the NYS 19 20 Zero Emissions 2035 goal and the Company's clean 21 energy commitment, we have developed a strategy to 22 electrify all light-duty vehicle by 2035, with 80% 23 electrified by 2030. We have identified approximately

- 35 -

1		600 light-duty vehicles that we will seek to electrify
2		in RY1 to RY3. This program incurs addition capital
3		vehicle cost, up to 200% per unit, verses a
4		conventional gasoline powered counterpart.
5		ХМ-4
6	Q.	Please describe the category of equipment known as XM-
7		4.
8	A.	Under the XM-4 Budget Con Edison replaces Shop
9		Equipment at the Van Nest Shops Operations Facility,
10		the Transformer Shop in Astoria, the Transportation
11		Garages and the Electric Operations Metering Facility
12		located at Van Dam Street in Long Island City. The
13		equipment includes floor grinders, compressors,
14		lathes, milling machine, scribers, brazing and welding
15		equipment, Computerized Numerical Control (CNC)
16		machinery, jib cranes and hoists.
17	Q.	How much does the Company plan to spend from RY1 to
18		RY3 in this category?
19	A.	We expect to spend approximately \$0.36 million
20		annually in RY1, RY2 and RY3 for XM-4 equipment. The
21		spending levels for each separate category are listed
22		in the White Paper entitled "XM-4" in Exhibit(SSP-
23		1).

1 III. RESEARCH AND DEVELOPMENT

2 Q. Please describe the R&D organization.

3 The R&D organization conducts R&D efforts for Con Α. 4 Edison and O&R. R&D is organized by energy commodity, with an emphasis on projects that align with the 5 б Company's Clean Energy Commitment while also furthering the Company's objectives: (1) reduce risk 7 and enhance public and employee safety; (2) increase 8 9 operational performance and flexibility; and (3) 10 enhance customer experience and engagement. R&D, 11 guided by corporate goals and objectives, and in 12 consultation with other Company organizations, 13 determines priorities, and develops the portfolio. 14 Q. What is the purpose of Con Edison's R&D program? 15 Con Edison's energy systems require continual Α. modernization and reinforcement at all levels, 16 including transmission and distribution, to provide 17 18 safe and reliable service and facilitate the clean energy future. R&D assesses projects that consider 19 20 factors that are unique to our system, such as the 21 significant population and energy infrastructure 22 density of the Company's service area. Enerqy 23 infrastructure density refers to the significant

1		underground urban congestion of high-load density,
2		large underground secondary network electric systems,
3		and the multi-layered underground infrastructure of
4		gas and steam pipes. This, in addition to their close
5		proximity to water lines, telecommunication lines,
6		sewer piping, subway infrastructure, and vehicular
7		infrastructure, make any improvement or repair more
8		complicated and time consuming.
9	Q.	Why does the Company itself undertake R&D?
10	A.	It has been the Company's experience that
11		manufacturers are not willing to unilaterally develop
12		technologies for challenges unique to the Company
13		without any broader market potential. To stimulate
14		development, the Company has found that it needs to
15		fund research, often through full-scale demonstrations
16		and pilot programs, in collaboration with partners
17		where possible, to prove feasibility for concepts of
18		value to the Company and its customers.
19	Q.	Was a document, entitled "Shared Services - Research &
20		Development - O&M," Exhibit(SSP-2), prepared under
21		your direction and supervision?
22	A.	Yes, it was, MARK FOR IDENTIFICATION AS
23		EXHIBIT(SSP-2)

1 Q. How is the R&D portfolio developed?

2 R&D develops and prioritizes a combination of internal Α. and external R&D projects in conjunction with the 3 4 operating organizations. In addition to evaluating past successes and/or failures, Con Edison continually 5 б refines the portfolio to reflect new challenges to the Company and to better define needs, such as improving 7 resiliency or planning for distributed generation, 8 9 storage, and building management systems. 10 Q. Please explain how Con Edison's R&D portfolio is established and managed. 11 12 First Con Edison determines whether a project meets Α. 13 the Commission's definition of R&D. R&D analyzes each 14 potential project, with expected advantages reviewed 15 against financial resources required for successful project development. The analysis considers: 16 (1) The probability of achieving success in a 17 18 reasonable time period; 19 (2) the qualitative and quantitative benefits of 20 conducting the project(s); 21 (3) the cost of deploying the project if the 22 research is successful.

1 Con Edison uses these and other metrics, such as risk 2 mitigation, to select and prioritize projects. Con 3 Edison concurrently develops and reviews Electric, Gas 4 and Steam R&D activities, and their programs and budgets, to avoid duplication and identify potential 5 б synergies with other R&D programs. There are, for example, potential synergies across commodities for 7 EH&S tools, inspection techniques, damage assessment, 8 weather impact forecasting, sensors, and 9 10 communications. The project portfolio is then reviewed and approved by the R&D Leadership Team. 11 How often is the portfolio reviewed? 12 Q. 13 Con Edison reviews the R&D portfolio on a quarterly Α. 14 basis to assess the status of existing projects and 15 the potential to include new ones. Please provide recent examples of successful R&D 16 Q. 17 projects. 18 The Company has a long history of successful R&D Α. project completions. Projects that have improved our 19 20 Electric operations in the past two years include: 21 Developed and demonstrated the use of factory-1. 22 pre-made Carbon Fiber Wrap (CFW) Sleeve to 23 replace the manually intrusive CFW repair process

- 40 -

1			for dielectric fluid leak in underground High-
2			Pressure Fluid-Filled Transmission (HPFF) pipes.
3			The use of this repair sleeve provides benefits
4			that include quality and productivity
5			improvements in the CFW repair process.
б		2.	Developed and demonstrated the use of a remote
7			breaker racking system, which will protect
8			station operators from arc flash hazards and
9			possible soft tissue injuries when handling
10			medium voltage circuit breakers that weigh up to
11			800 pounds. The semi-autonomous robotic device
12			was demonstrated in a substation, and at
13			DistribuTECH 2020, a leading electric
14			transmission and distribution event.
15		3.	Developed and demonstrated the use of a safety
16			device that can be placed inside medium voltage
17			switchgear cubicle to safely and efficiently
18			perform cubicle inspections, maintenance and
19			repairs, without taking bus outages. This device
20			was also demonstrated at DistribuTECH 2020 and is
21			now deployed for use at Company substations.
22	Q.	Plea	se describe some recent successful gas projects
23		cond	lucted under the current program.

- 41 -

- A. Successful gas R&D projects in the past two years
 include the following:
- 3 1. Evaluated the Zero Emission Vacuum and Compressor (ZEVAC) on medium and high-pressure main 4 replacements as a means of avoiding releasing 5 б natural gas to the environment. The device was determined to be effective and additional units 7 were purchased by Gas Operations for deployment. 8 Developed the Emergency Main Shut-Off System 9 2. 10 ("EMSOS") for large diameter, low-pressure 11 metallic mains. EMSOS serve as a lower cost 12 alternative to installing isolation valves by 13 providing an alternative means for main isolation 14 during emergencies. Con Edison also completed 15 the final technology deployment and commercialization phase for EMSOS that includes 16 creating O&M procedures and engineering diagrams, 17 18 conducting training activities, and supporting initial field deployments. 19 20 Tested and evaluated a thermally activated gas 3. 21 shutoff safety device for customer meter

22 installations. The device automatically shuts23 off gas flow upon sensing heat from events such a

- 42 -

1		fire. The device was determined to be effective
2		and is now integrated into our gas meter set
3		standards providing medium and high-pressure
4		service.
5	Q.	Are all R&D projects successful?
6	A.	No. Because of the nature of R&D, some projects do
7		not result in a successful product and the Company
8		cannot know in advance how any project will turn out.
9		To address that challenge, most projects are conducted
10		in phases to reduce the risk of overcommitting
11		resources in advance.
12		R&D O&M Program Changes
12 13	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures
12 13 14	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of
12 13 14 15	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30,
12 13 14 15 16	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")?
12 13 14 15 16 17	Q. A.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")? Yes. We are requesting increases of \$2.50 million in
12 13 14 15 16 17 18	Q. A.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")? Yes. We are requesting increases of \$2.50 million in RY1, \$2.25 million in RY2 and \$1.75 million in RY3 in
12 13 14 15 16 17 18 19	Q. A.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")? Yes. We are requesting increases of \$2.50 million in RY1, \$2.25 million in RY2 and \$1.75 million in RY3 in the electric R&D funding level for implementing two
12 13 14 15 16 17 18 19 20	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")? Yes. We are requesting increases of \$2.50 million in RY1, \$2.25 million in RY2 and \$1.75 million in RY3 in the electric R&D funding level for implementing two program changes. We are not requesting an increase in
12 13 14 15 16 17 18 19 20 21	Q.	R&D O&M Program Changes Is Con Edison projecting a change in R&D expenditures for RY1, RY2, and RY3 in relation to the level of expenditures in the twelve months ending September 30, 2021 ("Historic Year")? Yes. We are requesting increases of \$2.50 million in RY1, \$2.25 million in RY2 and \$1.75 million in RY3 in the electric R&D funding level for implementing two program changes. We are not requesting an increase in the gas R&D funding level in RY1, RY2 and RY3.

- 43 -

1	A.	They are: (1) development of a prototype of an all-
2		electric version of three medium/heavy duty trucks,
3		i.e., a digger derrick truck, flush truck, and cable
4		truck; and (2) development of an underground primary
5		distribution feeder splicing machine.
б	Q.	On the first program volume change, why is there a
7		need to develop electric prototypes of medium/heavy
8		duty trucks?
9	A.	Con Edison has committed to electrify 100% of its
10		light-duty vehicle fleet by 2035, with 100% of our new
11		light-duty vehicles purchases being electric vehicles.
12		To fully eliminate the use of fossil fuels for our
13		vehicle fleet, however, we need to address our
14		medium/heavy duty utility trucks. Currently, there
15		are no electric medium/heavy duty utility trucks
16		commercially available in the market for purchase. As
17		a result, Con Edison seeks to lead the industry and
18		also move towards our clean energy commitment of fleet
19		decarbonization by pursuing the development of a
20		prototype of three of the most commonly used
21		medium/heavy duty utility trucks, which are the digger
22		derrick truck, flush truck, and cable truck. The
23		funding requested would allow Con Edison to be part of

- 44 -

the development and design process for these types of
 trucks.

3 Please describe specifically how Con Edison will be Q. 4 part of the design and development process. 5 Con Edison will work closely with one or more vendors Α. 6 to design and develop the electric truck prototypes. In designing these trucks, we will specify their 7 requirements, such as minimum hours of continuous 8 9 operations under various operating modes, maximum 10 allowable time for recharging, and the need to be at 11 least comparable in performance to their conventional fossil-fueled counterpart. In the development phase, 12 13 we will oversee the activities of the vendor(s) to

14 ensure the development will result in the final

15 products as designed.

16 Q. Do you have an exhibit that provides additional 17 information on the development of a prototype of an 18 all-electric version of three medium/heavy duty 19 trucks?

20 A. Yes. Additional information is shown in Exhibit _____
21 (SSP-2) on the pages entitled "Medium Heavy Duty
22 Electric Truck."

- 45 -

1	Q.	On the second program change, please describe the
2		initiative to develop the underground primary
3		distribution feeder splicing machine.
4	Α.	In this initiative, Con Edison, Exelon, and Prysmian
5		will partner together on a multi-year project to
6		develop an industry first autonomous splicing machine
7		that will perform at minimum a one-way, one-way
8		straight splice.
9	Q.	What are the benefits of this splicing machine?
10	Α.	Benefits include: (1) enhancing the safety of
11		employees, (2) improving the quality and longevity of
12		splices by producing consistent quality products with
13		less variation than those completed by human beings,
14		and (3) significantly reducing the amount of time
15		workers must spend in underground electrical enclosed
16		spaces.
17	Q.	Do you have an exhibit that provides additional
18		information regarding the development of an
19		underground primary distribution feeder splicing
20		machine?
21	Α.	Yes. Additional information is shown in Exhibit
22		(SSP-2) on the pages entitled "Underground Primary
23		Distribution Feeder Splicing Machine."

- 46 -
| 1 | | R&D - Electric |
|----|----|--|
| 2 | Q. | You mentioned that the Company works on R&D projects |
| 3 | | with others. Please describe the Company's |
| 4 | | collaborative research efforts in the electric sector. |
| 5 | A. | Con Edison works extensively with research |
| 6 | | collaboratives that include other electric companies |
| 7 | | in and outside the U.S. We work predominantly with |
| 8 | | EPRI, the Center for Energy Advancement through |
| 9 | | Technological Innovation ("CEATI"), and the National |
| 10 | | Electric Energy Testing, Research & Applications |
| 11 | | Center ("NEETRAC"). |
| 12 | | Our EPRI collaborative focuses on four technical |
| 13 | | areas: transmission and distribution, energy and the |
| 14 | | environment, generation, and cyber security. |
| 15 | | Through our CEATI collaborative, we participate in |
| 16 | | interest groups and task forces that cover |
| 17 | | distribution, transmission and substations equipment |
| 18 | | design, asset management, and system operation and |
| 19 | | planning. |
| 20 | | Our NEETRAC participation allows us to participate in |
| 21 | | projects that focus on transmission and distribution |
| 22 | | operations across our industry, with the option to |
| 23 | | initiate direct-placed projects whose focus and scope |

- 47 -

1 we can exclusively define, for example in helping us 2 to conduct important root cause analysis of feeder 3 failures. In addition, our R&D staff maintains regular contact 4 with other utilities, electric trade groups, 5 б universities, technology developers and the National 7 Laboratories. Please provide some examples of collaborative research 8 Q. 9 for the electric sector. 10 Α. Working collaboratively with EPRI, a working model of 11 an electronic job briefing application was developed 12 and demonstrated, providing the capability to conduct 13 live multi-user interactive job briefings with data 14 storage and retrieval. This job briefing application 15 addresses the social distancing requirements associated with COVID-19 and the administrative burden 16 of preparing and filing paper documentation by 17 18 allowing for real time data entry. The application allows the user to upload real time inputs of 19 20 supporting photos, notes, and history of prior work. It also requires user interaction so that the user 21 22 understands the job and required safety requirements. 23 Finally, the application also allows the job briefing

- 48 -

1 document to be electronically filed and easily 2 referenced for future review. The Company will pilot 3 this application with Electric Operations to gain experience. Other collaborative research projects with 4 EPRI, CEATI and NEETRAC include: advancing distributed 5 б energy resources and energy storage technologies to facilitate their expansion on the electric grid, 7 enhancing the resiliency of our electric system 8 9 against climate change and geo- and electromagnetic 10 events, and minimizing the environmental impact of 11 dielectric fluids.

12 Q. Please describe the Company's internal R&D program for13 the electric sector.

14 Α. Con Edison's internal electric R&D program primarily 15 focuses on problems that are unique to the Company's electric system. The program also focuses on the 16 development of products that the Company may need to 17 18 deploy in a timeframe that is earlier than that required by others in our industry, such as the 19 20 development of the infrared borescope camera for 21 through cover inspection of our underground secondary 22 structures.

- 49 -

1	Q.	Please provide some examples of the projects in the
2		Company's electric internal R&D program to be
3		undertaken in the rate years.
4	A.	Projects in the Company's electric internal R&D
5		program include:
6		• Develop and demonstrate new technologies to
7		prevent, detect or mitigate dielectric oil leaks
8		from transmission cables and transformers.
9		• Explore and demonstrate new technologies, such
10		as, modeling and forecasting techniques, energy
11		storage and hydrogen to facilitate the
12		integration of large-scale renewables in support
13		of New York State's Climate Leadership and
14		Community Protection Act (CLCPA).
15		• Develop and demonstrate new technologies to
16		enable a smarter and more resilient distribution
17		system. This may include expanding the use of
18		the Company's Advanced Metering Infrastructure
19		(AMI) and developing sensors, algorithms, and
20		communication protocols to identify and locate
21		faults and manage loading on the distribution
22		system.

1		R&D - Gas
2	Q.	Please describe the Company's collaborative research
3		efforts in the gas sector.
4	A.	Con Edison works extensively with two research
5		collaboratives that include other gas companies in the
6		U.S. and Canada. These collaboratives are NYSEARCH,
7		which began in New York, and Operations Technology
8		Development ("OTD") that is part of the Gas Technology
9		Institute ("GTI"). NYSEARCH and OTD both consist of
10		member gas companies, some of which are members of
11		both groups, such as Con Edison. The Company also
12		works with the American Gas Association ("AGA") as
13		well as the United States Department of Transportation
14		Pipeline of Hazardous Materials Safety Administration
15		("PHMSA"). Like the collaborative research on
16		electric, the R&D staff also maintains regular contact
17		with other utilities, gas trade groups, universities,
18		technology developers, and the National Laboratories.
19	Q.	Please provide some examples of collaborative research
20		for the gas sector.
21	Α.	Working collaboratively with NYSEARCH, utilities
22		throughout the nation and government agencies, the

23 EXPLORER robots have been developed for in-line

- 51 -

1 inspection of our gas transmission mains. These robotic tools enable the inspection of un-piggable 2 transmission mains without disruption in service. Un-3 4 piggable mains are those that are designed with plug valves and/or complex pipe bends that make using 5 б standard in-line inspection tools impossible. In addition, we have researched the advancement of 7 residential methane detectors, and the development of 8 9 non-destructive inspection and repair technology for 10 the Company's polyethylene distribution 11 infrastructure. The collaborative members for these 12 projects are GTI through its OTD program, NYSEARCH, 13 and AGA. 14 Q. Please describe the Company's internal R&D program for 15 the gas sector. Like the Company's internal electric R&D program the 16 Α. internal gas R&D program focuses on problems that are 17 18 unique to the Company's gas system and on the development of products that the Company may need to 19

21 advanced methane detectors.

20

- 52 -

deploy before others in our industry do, such as

1	Q.	Please provide some examples of the projects in the
2		Company's gas internal R&D program to be undertaken in
3		the rate years.
4	Α.	Projects in the Company's gas internal R&D program
5		include:
6		• Pursue opportunities to increase the viability of
7		low carbon fuels.
8		• Develop materials and procedures to minimize the
9		risk of a burnout from the electric system
10		impacting the gas system.
11		• Develop advanced metering infrastructure ("AMI")
12		capable devices to monitor for corrosion control
13		related field function, intrusion detection, and
14		pressure monitoring.
15	Q.	Is R&D funding currently subject to a reconciliation
16		mechanism?
17	Α.	Yes, under the current Gas Rate Plan, Gas R&D funding
18		is subject to a downward-only reconciliation
19		mechanism.
20	Q.	Is the Company proposing that Gas R&D expenditures
21		continue to be subject to reconciliation during the
22		Rate Year?
23	A.	No.

1 Q. Please explain why.

2	Α.	The Company does not believe that there is a
3		reasonable basis for subjecting this individual
4		element of Company expense to reconciliation and
5		certainly not to downward-only reconciliation. A
6		downward reconciliation of these programs impacts our
7		ability to pursue technological advancements by
8		reducing funding for future efforts due to short term
9		decline in expenditures.

10

11 IV. CORPORATE SECURITY

Q. Please explain the responsibilities of Corporate
 Security.

A. Corporate Security's core mission is to maintain a
comprehensive security program that proactively
partners with internal groups, law enforcement, and
governmental and regulatory agencies.

18 To meet our mission, we have incorporated

19 comprehensive security processes to protect critical

20 infrastructure. These processes encompass a wide

- 21 array of functional responsibilities including:
- 22 policies and procedures, investigative and tactical
 23 response, cyber forensic investigations, electronic

- 54 -

1 security systems, physical security measures, central 2 station monitoring, compliance with governmental and 3 regulatory initiatives and standards, security 4 awareness training, and regular interaction with law enforcement. We also provide oversight and quidance 5 б to both Facilities and operating organizations regarding physical security measures and contract 7 guard services at Company locations. Con Edison 8 9 recognizes its electric, gas and steam systems are a 10 critical component of the infrastructure of New York 11 City and Westchester County. To adequately safeguard 12 its facilities, Con Edison continues to incorporate 13 comprehensive security processes to protect the 14 Company, its employees, and its physical assets. 15 What are the security-related projects that the Q. Company is proposing? 16 The Company is proposing four capital projects. 17 Α. 18 What are the forecasted capital expenses for Security Q. 19 programs? 20 The Company plans to spend approximately \$6 million in Α. 21 RY1, \$6 million in RY2, and \$6 million in RY3 in 22 capital for four security programs.

1	Q.	Do you have an exhibit that detail the four projects
2		listed above?
3	A.	Yes, this exhibit was submitted to the Commission's
4		Records Access Officer for Staff Only review.
5	Q.	Was this exhibit prepared under your direction and
6		supervision?
7	A.	Yes.
8	MAF	RK FOR IDENTIFICATION AS EXHIBIT (SSP-3) and (ITP-7)
9		
10	V. H	IUMAN RESOURCES
11	Q.	What is the HR organization responsible for?
12	A.	The HR organization consists of the following groups:
13		Benefits, Compensation, Employee and Labor Relations,
14		HR Support and Employee Wellness Center ("EWC"). The
15		mission of HR is to "Advance workplace solutions,
16		safety, and services through our commitment to
17		excellence, innovation, engagement and wellness." Our
18		priorities of Ensuring Operational Excellence through
19		Process Improvements, Productivity and Compliance and
20		of Improving Safety support this mission and continue
21		to be the basis for our initiatives, programs,
22		services, and performance measures.
23	Q.	What programs is HR sponsoring in this testimony?

- 56 -

1	A.	HR is sponsoring one O&M program change: strike
2		contingency.
3	Q.	What are the forecasted expenditure levels for the
4		strike contingency O&M program change?
5	Α.	The Company plans to allocate \$450,000 per rate year.
6	Q.	Was a document, entitled "Shared Services - Human
7		Resources - O&M," Exhibit(SSP-4), prepared under
8		your direction and supervision?
9	Α.	Yes, it was.
10		MARK FOR IDENTIFICATION AS EXHIBIT(SSP-4)
11		Strike Contingency
12	Q.	Please generally describe the Company's strike
13		contingency efforts.
14	Α.	The Company and its two local unions, IBEW Local 3 and
15		UWUA Local 1-2 employees, have collective bargaining
16		agreements. The Local 1-2 agreement will expire in
17		June 2024 and Local 3's agreement will expire in June
18		2025. In the event of a labor stoppage, the Company
19		has a planned approach to provide for the continued
20		safe operation of its facilities and its services.
21	Q.	Are there costs associated with these preparations?
22	Α.	Yes. The Local 1-2 and Local 3 Contingency Programs
23		are ongoing initiatives that the Company has

- 57 -

1 traditionally implemented once every four years to 2 align with the end of the collective bargaining 3 agreement period. If a three-year rate plan is 4 developed, each of these contracts will potentially expire during the rate plan. As a result, and since 5 б recent contracts have been for four years, the Company collects one-fourth of the estimated cost (i.e., 7 \$450,000) each year. The estimated cost for strike 8 9 contingency is \$1.6 million for Local 1-2, and 10 \$200,000 for Local 3, or a total of \$1.8 million as 11 shown in Exhibit (SSP-4). This is based on our 12 experience with the contingency planning that occurred 13 in 2016 for Local 1-2, and in 2017 for Local 3. We 14 did not rely on the negotiations in 2020 and 2021 15 since they were conducted in abnormal conditions due to the COVID-19 pandemic. Due to social distancing 16 17 measures, most meetings and training sessions were 18 conducted remotely, therefore the Company spent much less on hotels and training. One-fourth, or \$450,000, 19 20 will be included in each rate year. The Accounting 21 Panel will address the proper allocation of these O&M 22 costs.

23

1 VI. LEARNING & INCLUSION

2 What is the Learning and Inclusion ("L&I") 0. 3 organization responsible for? The L&I organization consists of the following groups: 4 Α. 5 Talent Management, the office of Diversity and б Inclusion, and TLC. The vision of L&I is: "To be a leader in delivering innovative training and 7 development solutions that inspires employees to be 8 9 engaged and deliver their best performance to achieve 10 business excellence." We will accomplish our Vision through the following 11

Mission, which is to: Deliver relevant, state-of-the-12 13 art training and development options; advance 14 meaningful performance and career development 15 planning; implement optimized sourcing and recruiting results; enhance technical and leadership skills and 16 competencies of our employees; foster a culture of 17 18 inclusion, equity and respect for all; and engage employees to demonstrate behaviors that support our 19 20 company values

21 Our Key Areas of Focus are to: Inspire a New Culture 22 of Learning and Development; embrace innovative 23 technologies and tools; respond flexibly to learning

- 59 -

1		needs; value diversity, foster equity and advance
2		inclusion.
3		We are responsible for delivering innovative training
4		and development solutions that inspire employees to be
5		engaged and deliver their best performance to achieve
6		business excellence. Our mission is to deliver
7		relevant, state-of-the-art training and development
8		options to;
9		Enhance technical and leadership skills and
10		competencies of our employees
11		Foster a culture of inclusion, equity and respect
12		for all
13		Engage employees to demonstrate behaviors that
14		support our company values
15		Advance meaningful performance and career
16		development planning
17		Implement optimized sourcing and recruiting
18		results
19	Q.	Was a document, entitled "Shared Services - Learning
20		and Inclusion - O&M," Exhibit(SSP-5), prepared
21		under your direction and supervision?
22	Α.	Yes, it was.
23		MARK FOR IDENTIFICATION AS EXHIBIT(SSP-5)

1		DEI Survey
2	Q.	What program is L&I sponsoring in this testimony?
3	Α.	L&I is sponsoring the Diversity, Equity and Inclusion
4		("DEI") Survey.
5	Q.	What are the projected costs for this program?
б	Α.	The projected O&M request is \$150,000 per rate year.
7		The White Paper "DEI Survey" can be found in Exhibit
8		(SSP-5).
9	Q.	Why is the project important to the Company?
10	Α.	The DEI survey enables the Company to:
11		Hear directly from our employees and gain their
12		insights about our diversity, equity, and
13		inclusion strategy
14		Identify areas where we are making and have made
15		progress and then opportunities for improvement
16		The results of the survey also provide us with a
17		measure for our ongoing efforts and performance.
18		An inclusive culture is critical for us to
19		understand and serve our customers. A diverse
20		workforce with varied experience fosters
21		innovation, which fuels improvements in safety,
22		operational excellence, and the experience of our
23		customers.

- 61 -

1 To that end, the experience of inclusion survey 2 represents one of our efforts to create a culture 3 where employees can work to their full potential, feel 4 valued and a sense of belonging. Con Edison employs more than 14,000 employees with 49% diverse and 21% 5 б women - we must continue to advance our efforts to have our workforce reflects the demographics of the 7 markets we serve. Similarly, measuring the level of 8 9 employee inclusion enables the Company to better 10 support our current and future employees and fully leverage talent across all dimensions of diversity. 11 12 Transforming Learning Through Innovation 13 What program is L&I sponsoring in this testimony? Q. 14 Α. L&I is sponsoring one capital funding request: 15 "Transforming Learning Through Innovation." Do you have an exhibit with the White Paper titled 16 Q. "Learning Inclusion Digital Learning Transformation" 17 18 detailing this initiative and its associated costs? 19 Α. Yes. Was it prepared under your direction and supervision? 20 Q. 21 Yes, it was. Α. 22 What are the projected costs for this capital project? Ο.

The projected capital request is \$5.0 million for RY1, 1 Α. 2 \$4.25 million in RY2, and \$3.1 million in RY3. The O&M 3 request is \$0.6 million in RY1, \$1 million in RY2, and \$1 million in RY3. 4 5 MARK FOR IDENTIFICATION AS EXHIBIT (ITP-3). 6 Why is the project important to the Company? 0. 7 Con Edison will develop and implement a learning model Α. that imparts technical proficiency and leadership 8 9 skills to the employee through various learning 10 channels that will increase engagement, knowledge 11 retention and compliance while offering cost effective training solutions across a variety of delivery 12 13 channels. Employees will have the flexibility to 14 learn quickly to meet the demands of changing 15 regulatory, industry, and technology environments. The project includes integrating a mobile video 16 training platform (Cloud based) a content management 17 18 platform and ultimately the replacement of the existing enterprise Learning Management System 19 20 (eTrain). The goal to have a state-of-the-art 21 learning program that blends our current successful 22 learning process with the appropriate digital learning 23 technologies to achieve high levels of performance.

- 63 -

1 VII. FACILITIES AND FIELD SERVICES

Q. Please explain the role of Facilities and Field
 Services.

Facilities and Field Services is a support 4 Α. 5 organization comprised of three major groups: б (1) Facilities, which provides logistical support activities and maintains the Company's properties; 7 (2) Transportation Operations, which provides 8 9 maintenance and repairs to the corporate fleet and 10 manages the fleet vehicle replacement program; and 11 (3) Astoria Operations, which provides crane and 12 rigging services, tanker support, technical services, 13 Company-wide material delivery services, and manages 14 and operates a hazardous waste storage facility in 15 Astoria. The organization also provides logistical and support services during contingent and emergency 16 situations. 17

18 Q. What projects and programs are Facilities and Field19 Services sponsoring?

A. Facilities and Field Services is sponsoring fifteen
capital projects and programs and one O&M program,
which we have grouped into five separate project
categories:

- б4 -

1	•	Real Estate Strategy (four projects)
2	•	Critical Repair and Upgrade programs and projects
3		(four projects/programs)
4	•	Safety and Environmental Programs and Projects (three
5		projects/programs)
6	•	Transportation Operations Projects (four projects)
7	•	Prevailing Wage (one program)
8	Q.	Have you prepared exhibits titled "Shared Services -
9		Facilities and Field Services - Capital and O&M"?
10	Α.	Yes, we have.
11	Q.	Were these exhibits prepared under the Panel's
12		direction and supervision?
13	A.	Yes, they were.
14		MARK FOR IDENTIFICATION AS EXHIBITS (SSP-6)
15	Q.	What are the forecasted expenditures for your
16		Facilities and Field Services Capital projects and
17		programs during RY1 through RY3?
18	Α.	The Company expects to spend approximately \$203.17
19		million in RY1, \$120.09 million in RY2, and \$117.62
20		million in RY3 for Facilities Capital projects and
21		programs.
22	Q.	What steps does Facilities and Field Services take to
23		control costs?

- 65 -

For Facilities and Field Services projects, a team 1 Α. 2 consisting of Engineering, Project Planning, Finance 3 Planning and Analysis, and the Department's General Managers, Vice President and Senior Vice President 4 meet on a monthly basis to review the Facilities 5 б project portfolio, current working estimates, construction status, and to discuss any projected cost 7 under/over-runs in order to best manage the project 8 portfolio. A similar team also meets with the 9 10 Construction Services Department monthly to discuss project cost and construction status. These meetings 11 12 provide an understanding of the relative position of 13 each project in the Facilities' portfolio and help to 14 allocate resources to keep projects on track and costs 15 under tight control. 16 Real Estate Strategy 17 Q. What does the first category of Facilities and Field 18 Services project plan support? The Real Estate Strategy category consists of four 19 Α. 20 projects: (1) the Sherman Creek Service Center project, 21 (2) the Worth Street Site Master Plan, (3) the 30 22 Flatbush Lease Exit Strategy, and (4) and the Van Nest 23 Cable Lab Renovation.

- 66 -

1		Sherman Creek Service Center
2	Q.	What are the forecasted expenditures for the Sherman
3		Creek project during RY1 through RY3?
4	Α.	The total estimated project cost based on engineering
5		conceptual estimates is \$184 million. The Company
6		expects to begin construction of this project this
7		year and complete it in 2024. We plan to spend \$89.02
8		million in RY1 and \$16.16 million RY2.
9	Q.	Do you have a White Paper entitled "Sherman Creek?"
10	A.	Yes. Please see Exhibit SSP-6.
11	Q.	What is the status of the Company's project to build a
12		new service center at Sherman Creek in northern
13		Manhattan?
14	A.	As outlined in the Sherman Creek White Paper, the
15		Company is now in final negotiations with New York
16		City to construct a new service center on Company-
17		owned property in Northern Manhattan. As discussed in
18		more detail in the whitepaper, the facility is needed
19		to provide congestion relief to the existing Manhattan
20		and Bronx service centers.
21	Q.	The Company first proposed this project in the 2016
22		Rate Case filing and then again in the 2019 Rate Case.
23		Why has the Company postponed the project?

- 67 -

During its initial planning for the facility, the 1 Α. 2 Company was approached by the City of New York with a 3 proposal to include the Company's planned facility in the City's rezoning of the Inwood neighborhood where 4 the facility is located. The rezoning proposal 5 б provided for increased development rights on the Company's two largest parcels, thereby permitting a 7 consolidation of the planned facility and for the sale 8 9 (once the new facility came online) of the other 10 Company-owned parcels that had originally been planned 11 as part of the new facility. By postponing design 12 development, the Company was able to work with the 13 City and achieve a significant enhancement in the 14 design. 15 Why did the City approach Con Edison to make this Q. 16 change? In early 2017, the City advised Con Edison that it was 17 Α.

proceeding with a District re-zoning plan for Inwood, which would include six Con Edison owned lots located on either side of 9th Avenue between West 202nd and West 205th Street. Under the re-zoning plan, the City proposed zoning modifications that would allow Con Edison to consolidate the construction of the new

- 68 -

1 Sherman Creek service center from five lots as 2 initially designed onto two lots (Lots 1 & 20) to the 3 east of 9th Avenue. This benefitted the City in three 4 ways. First, due to Con Edison consolidating the new service center onto two lots, the City would be able 5 б to "upzone" three of the remaining four lots from manufacturing to mixed use/residential use. Upon 7 completion of the new Service Center, Con Edison 8 agreed to market the remaining surplus lots for sale 9 10 at (the increased) fair market value for development by others, including for affordable housing, which was 11 12 a key objective of the re-zoning plan. Second, 13 consolidating Con Edison's operations onto the two 14 lots to the south of 204th Street would help the City 15 to create a 'buffer' between manufacturing type uses to the south of Inwood and commercial and residential 16 17 uses to the north. Lastly, Con Edison and the City 18 negotiated the transfer of various property rights, including Con Edison granting the City an easement 19 20 along the waterfront of Con Edison owned lots between 21 Academy Street and West 202nd Street to improve public 22 access to the Harlem River. This will facilitate the

City's future construction of a waterfront esplanade
 for the neighborhood's residents.

3 The City's District Rezoning application was formally 4 certified in January 2018, which initiated a formal seven-month Uniform Land Use Review Procedure 5 б ("ULURP") process that culminated with an approval of 7 the Inwood rezoning proposal in August 2018. However, in December 2018, a local advocacy group 'Inwood Legal 8 9 Action' filed a lawsuit challenging the Inwood 10 District Rezoning and in December 2019 the State 11 Supreme Court ruled against the City and vacated the rezoning. In January 2020, in response to the ruling, 12 13 Con Edison cancelled the Design-Build procurement and 14 put all project activities on hold pending appeal. In 15 July 2020, the Appellate Division of the State Supreme Court reinstated the Inwood District rezoning. 16 The NY State Court of Appeals denied further review. 17 18 Accordingly, the District rezoning was fully reinstated in November 2020. The next month Con 19 20 Edison Supply Chain re-started the Design-Build 21 procurement process by re-engaging with the low-bid 22 Design-Builder subject to the vendor standing by the 23 commercial terms previously negotiated during the

- 70 -

1		competitive bid selection process. Con Edison also
2		immediately re-engaged with Economic Development
3		Corporation ("EDC") to negotiate and document the
4		transfer of the various property interests between the
5		City and Con Edison approved under the Inwood District
6		Rezoning, including an easement to be granted to Con
7		Edison to construct a bridge over 203 rd
8		Street that is critical for connecting the two service
9		center buildings.
10	Q.	What is the current status of the project and when is
11		the anticipated project completion date?
12	Α.	As of November 2021, Con Edison continues to negotiate
13		with the City with the goal of finalizing the transfer
14		of the various property interests in the first quarter
15		of 2022. Assuming a Purchase Order ("PO") award to
16		the Design-Builder in the second quarter 2022, the
17		anticipated project completion is now mid-2024.
18	Q.	What was Con Edison's estimated cost for Sherman Creek
19		in its 2019 rate filing?
20	Α.	Con Edison forecasted a spend of \$110 million for 2020
21		to 2022. Due to the delays discussed above, Con
22		Edison spent \$36,723 in 2020 and \$169,737 in 2021.

- 71 -

1	Q.	Do you	anticipate	using	any	funds	in	2022	for	Sherman
2		Creek?								

A. Yes, the Company plans to spend \$75.6 million in 2022.
Q. Has the Company reallocated the remaining funds?
A. The remaining funds were shifted to infrastructure
projects following the Company's capital allocation
process.

The estimated project cost has increased from the 8 Q. 9 estimate in the last rate case filing. Why? 10 Α. As of November 2021, the capital project budget has 11 increased from \$155 to \$184 million, based on updated 12 cost estimates submitted by the low-bid design-builder 13 for the design and construction of the facility 14 following a competitive Request For Proposal ("RFP") 15 process. The cost increased due to these additional scope items: seismic foundation design as required by 16 Code based on geological site conditions; all-electric 17 18 HVAC aligned with Con Edison's sustainability goals; the cost to maintain two separate tax lots, which 19 20 requires separate incoming utilities and building 21 systems; and cost escalation due to pandemic-related 22 supply chain constraints.

1	Q.	Are there any O&M costs associated with the proposed
2		Sherman Creek Service Center?
3	A.	Yes. Once built, this new facility will require
4		maintenance associated with the capital project. The
5		projected O&M costs are $$1.8$ million in 2024 and $$2.5$
6		million in 2025.
7		Worth Street Site Master Plan
8	Q.	Please explain the Worth Street Site Master Plan.
9	A.	The Worth Street Site Master Plan is a two-stage
10		evaluation of the approximately eight-acre Company-
11		owned site at 267 Saw Mill River Road, Yonkers
12		(commonly known as 'Worth Street'). Stage One
13		comprised a comprehensive site analysis to document
14		existing site conditions including zoning, topography,
15		site drainage and geotechnics. Stage Two will provide
16		the blue-print to develop coordinated engineering,
17		filing and construction packages for: (1) the
18		relocation and construction of a new service center
19		building (\$25 million) out of the flood plain; (2) re-
20		location of the fuel station to improve site
21		circulation, if warranted following further
22		investigation(\$4 million); (3) improved site ingress
23		and egress to address congestion and delays at peak

- 73 -

1		hours(\$4 million); (4) site security improvements,
2		including perimeter fencing (\$6 million); (5) site
3		drainage improvements (\$5.2 million); and (6) other
4		improvements to improve vehicular and pedestrian
5		safety (\$9.1 million). The service center program
6		will also incorporate the primary Gas Control Center,
7		currently located at another Company location.
8	Q.	How much will the Site Master Plan cost?
9	A.	The current working estimate based on preliminary
10		square footage program information and historic costs
11		for similar work at other Company locations is
12		approximately \$59.5 million. The cost estimates of
13		the project elements comprising the Site Master Plan
14		will be further refined during stage two of study.
15	Q.	What are the projected rate year costs?
16	A.	The projected cost is \$15.43 million for RY1, \$25.07
17		million for RY2, and \$7.27 million for RY3.
18	Q.	Do you have a White Paper entitled "Worth Street
19		Master Plan New Construction?"
20	A.	Yes. Please see Exhibit SSP-6.
21	Q.	How does the Worth Street Site Master Plan fit into
22		the Company's overall strategy?

1	Α.	The Site Master Plan is aligned with the Company's
2		real estate strategy to optimize Company-owned
3		property assets. The proposed construction of a new
4		service center provides the opportunity to locate the
5		building above the flood zone in accordance with Con
6		Edison's Climate Change Planning and Design Guideline.
7		The Site Master Plan will also align with the
8		Company's sustainability goals. For example, the HVAC
9		system for the new service center building will be
10		all-electric. In addition, the site infrastructure
11		will be upgraded as needed to support the planned
12		electrification of the Company's small vehicle fleet.
13		The potential for battery storage and solar
14		installations on site will be evaluated during the
15		Stage Two Site Master Plan Study.
16	Q.	Why are you requesting funding for the Worth Street
17		Site Master Plan itself and not for the individual
18		projects themselves?
19	Α.	We are requesting funding for the Site Master Plan as
20		the individual projects are inter-connected and must
21		be presented to the City of Yonkers and New York State
22		Department of Environmental Conservation ("NYSDEC")
23		under the State Environmental Quality Review Act

- 75 -

1 (SEQRA) as a cohesive site plan application. Separate applications for individual projects under a planned 2 3 site development, termed 'segmentation', are 4 prohibited under SEQRA. 5 Please explain why you are not renovating the existing Ο. б service center building rather than incurring the cost to demolish and construct a new building? 7 Initially, the capital project plan for Worth Street 8 Α. 9 anticipated the renovation of the existing service 10 center (known as 'Building One'). However, in 2019, after receiving renovation bids and out of concern 11 that costs would increase, the Company suspended 12 13 renovation. Specific concerns included the potential 14 significant cost to repair severely frost/water 15 damaged exterior brickwork; replace life-expired roof covering; the mitigation of widespread mold to 16 bathrooms and occupied offices and the known presence 17 18 of asbestos throughout the premises. The renovation bid costs (not including possible additional costs 19 20 that may be incurred as the structure was fully 21 exposed as the work progressed) were comparable to the 22 estimated cost to build a new facility (currently 23 estimated at \$1,000/SF for budgeting purposes). As

- 76 -

1 such, the Company decided to evaluate alternative new-2 build options for a modern service center, ideally located outside the Saw Mill River flood zone, that 3 was not constrained by the limiting layout and 4 condition of the original 1920's building. 5 6 Where are the employees being accommodated while you Q. plan for the new service center construction?? 7 In planning for the renovation of Building One, the 8 Α. 9 project plan originally anticipated the need to 10 temporarily relocate employees into 'swing space' 11 accommodation during the gut renovation work. 12 However, due to the deteriorating condition of the 13 building and concern for the health and safety of our 14 employees due to damp and mold conditions, the 15 decision was made to pursue the original plan to vacate the building and locate employees in temporary 16 accommodation pending the construction of the new 17 18 service center.

19 Q. Why can't the employees remain in the temporary office20 accommodation indefinitely?

A. The City of Yonkers granted temporary approval for the
office and bathroom accommodation on the understanding
the facilities were only required as an interim

- 77 -

1		measure until the project construction work is
2		complete. The associated permit is currently being
3		extended every six months. Upon completion of the
4		project, we are required under the terms of the permit
5		to remove all temporary accommodation in compliance
6		with City code.
7	Q.	How long do you anticipate the Site Master Plan
8		process will take?
9	A.	Assuming the Site Master Plan is approved in mid-2022,
10		the current schedule assumes engineering in 2023, with
11		phased construction activities through to 2026. The
12		phasing of each project element will be subject to
13		review upon completion of the Stage 2 Site Master Plan
14		Study.
15	Q.	Why is Worth Street an important location for the
16		Company?
17	A.	Worth Street is ideally located to provide access to
18		both Southern Westchester and northern Bronx. At
19		approximately eight acres, the site can safely
20		accommodate multiple uses including employees with
21		vehicle parking and material lay-down requirements.

- 78 -

1		30 Flatbush Avenue Lease Exit Strategy.
2	Q.	Please explain the 30 Flatbush Avenue Lease Exit
3		Strategy project?
4	A.	The 30 Flatbush Ave Lease Exit Strategy project
5		comprises the work required to be able to exit the
6		leased premises at 30 Flatbush Avenue, Brooklyn in
7		advance of the lease expiration in November 2027. In
8		summary, the project scope comprises the relocation of
9		the Regional Electric Control Center to a Company-
10		owned location; the migration of Customer Operations
11		Call Center Operations to a virtual operating model
12		and various alterations and upgrades to Company-owned
13		facilities to receive approximately 420 employees from
14		30 Flatbush before the end of the current lease.
15	Q.	What are the projected rate year costs?
16	A.	The projected cost is \$5.48 million in RY2, and \$35.84
17		million in RY3.
18	Q.	Do you have a white paper entitled "30 Flatbush Avenue
19		- Lease Exit Strategy"?
20	A.	Yes. Please see Exhibit SSP-6.
21	Q.	Can you please explain why the Company has decided to
22		exit the lease at 30 Flatbush Avenue, Brooklyn, NY at
23		the end of the current term in November 2027 rather

- 79 -

than exercise its final option to extend its tenancy 1 2 through 2037? There are four main reasons for the decision to exit 3 Α. the lease at the end of the current term in 2027: 4 5 1. Occupancy Cost forecast to Increase - the current б annual cost to occupy 30 Flatbush Avenue, including rent, taxes and Facilities' related costs is 7 approximately \$10 million. However, if the Company 8 9 exercises the option to extend the lease for another 10 ten years, it is anticipated that the office rent 11 (currently below market) will be reset to 95% of fair 12 market value. Assuming a step-increase in rent and 13 anticipated increases in other Facilities' related 14 costs, the annual occupancy cost is forecast to 15 increase from \$10 million to approximately \$15 million in 2027. The aggregate cost to extend our occupancy 16 through 2037 would then be approximately \$200 million. 17 18 2. Cost Risk associated with Triple Net ("NNN") Lease -19 The lease is on NNN terms and Con Edison is 20 responsible for all repairs and maintenance required, 21 including any improvements required to remain in 22 compliance with updated building code and local laws. 23 Due to the age and type of construction of the

- 80 -

1 building, there is significant additional cost risk to 2 Con Edison if our occupancy were extended through 2037. For example, if Con Edison does not exit this 3 lease in 2027 and extends the lease to 2037, the 4 Company may be liable for building upgrades required 5 б to achieve emissions reductions and energy efficiency goals by 2030 to comply with Local Law 97. Con Edison 7 currently estimates that the cost of bringing 30 8 9 Flatbush into compliance is \$10 million; however, the 10 potential cost risk associated with extending the 11 lease could range significantly depending on the outcome of further engineering studies and 12 negotiations with the landlord. 13 14 3. Landlord's Development Plans - In 2019, the Landlord's 15 interest was acquired by Robert L. Stark Enterprises, Inc., a Cleveland-based real estate development 16 company. Before the pandemic, Stark indicated to Con 17 18 Edison its intention to further develop the site, including possibly renegotiating Con Edison's lease to 19 20 allow the developer to add floors to the existing

21 building in order to maximize the available

22 development rights. Stark's development plans for the

- 81 -

1		property, and any impact on the Company's tenancy,
2		remain uncertain at this time.
3	4	. <u>Less Office Space Required</u> - currently, approximately
4		950 Con Edison employees report out of 30 Flatbush
5		Avenue. However, the Company's office needs continue
6		to evolve in response to the pandemic and
7		technological advances that have supported remote
8		working successfully for the past two years and which
9		are expected to continue as the Company adopts more
10		flexible 'hybrid' work arrangements. It is
11		anticipated that approximately 500 customer service
12		representatives or 56% of the current 30 Flatbush
13		Avenue headcount will continue a `home-agent' work
14		arrangement, greatly reducing the need for office
15		space. In addition, Con Edison continues to evaluate
16		more flexible office-based practices and it is
17		anticipated that the overall need for office space
18		will reduce as employees adopt a hybrid work model.
19	Q.	What is your strategy to relocate the Regional
20		Electric Control Center currently located at 30
21		Flatbush Avenue?
22	Α.	Electric Operations is currently evaluating
23		alternative Company-owned locations to construct a new

- 82 -
| 1 | | Control Center in support of the lease exit strategy. |
|----|----|--|
| 2 | | The Company-owned locations currently being considered |
| 3 | | to receive the Regional Electric Control Center |
| 4 | | include Rye Headquarters and Third Avenue Service |
| 5 | | Center. The estimated cost to construct a new 15,000 |
| 6 | | square foot control center, including associated IT |
| 7 | | infrastructure at the selected location, is |
| 8 | | approximately \$38.5 million. |
| 9 | Q. | What is your strategy to relocate the Customer Call |
| 10 | | Center including approximately 500 customer |
| 11 | | representatives? |
| 12 | A. | Currently, approximately 500 Customer Operations |
| 13 | | employees report out of 30 Flatbush Avenue. The |
| 14 | | Organization successfully implemented a `home agent' |
| 15 | | operating model and Customer Operations recently |
| 16 | | reached an agreement with Local 1-2 Leadership to |
| 17 | | continue the home agent model and plans to move |
| 18 | | permanently to a virtual operation in the future. |
| 19 | | This project includes the cost to relocate existing IT |
| 20 | | infrastructure from 30 Flatbush Avenue to other |
| 21 | | Company-owned location(s) to support a virtual call |
| 22 | | center operation. The estimated cost to relocate and |
| 23 | | upgrade existing IT infrastructure serving 30 Flatbush |

- 83 -

- Avenue and migrate to a virtual call center model is
 approximately \$12.6 million.
- 3 Q. In addition to the employees associated with both the 4 Regional Electric Control Center and the Customer Call 5 Center, what is your strategy to relocate the balance 6 of employees who currently report out of 30 Flatbush 7 Avenue?

A total of approximately 950 employees currently 8 Α. 9 report out of 30 Flatbush Avenue - approximately 500 10 working in Customer Operations and 450 primarily in 11 Electric Operations. Following the permanent move to a virtual call center model, Customer Operations 12 13 anticipates that approximately 450 employees will work 14 remotely full-time. This project includes minor 15 alterations and upgrades at other Company-owned properties to be able to receive approximately 50 16 Customer Operations employees who will likely continue 17 18 to report to an office location. In addition, this project includes for other alterations and upgrades to 19 20 make-ready Company-owned properties to receive the 21 balance of the approximately 420 employees, (excluding 22 those employees assigned to the Regional Control Center), who currently report out of 30 Flatbush 23

1 The full scope of alterations and upgrades Avenue. 2 required to prepare receiving locations is currently 3 being evaluated but is anticipated to include internal 4 alterations and upgrades including architectural, lighting, fire protection, HVAC improvements and new 5 б furniture at Third Avenue and internal architectural alterations, restacking and new furniture at other 7 potential locations including 4 Irving Place, Rye HQ 8 and Davis Avenue. Based on early concept plan layouts 9 10 and approximate \$/square foot costs using adjusted 11 historic costs for similar scope of work, the estimated cost to receive employees at receiving 12 13 locations is approximately \$33.8 million. 14 Van Nest Cable Lab Renovations 15 Why is this project required? Q. 16 Α. This project will allow for an exit of the 1601 17 Bronxdale Avenue leased premises no later than 18 February 2023 to support the Company's real estate 19 strategy to optimize the use of Company-owned facilities, reduce lease costs and to coincide with 20 21 the landlord's planned redevelopment of the property. 22 Relocation space is needed to receive the approximately 440 office and field employees in 23

- 85 -

1		Bronx/Westchester Electric Operations, Customer
2		Operations, Construction, Gas Engineering, Meter and
3		Test, Corporate Security, and Facilities and Field
4		Services that are currently housed at that leased
5		location.
6	Q.	What are the estimated annual costs that will be
7		avoided by exiting the 1601 Bronxdale Avenue lease?
8	A.	The current annual cost to lease 1601 Bronxdale Avenue
9		is approximately \$1.3 million. If the equivalent
10		space were to be leased from 2023, (assuming suitable
11		space were even available locally), the projected rent
12		would likely increase significantly. The use of
13		Company-owned space avoids such lease costs.
14	Q.	What are the projected rate year costs?
15	A.	The projected cost is \$5.52 million in RY1.
16	Q.	Do you have a white paper entitled "Van Nest
17		Renovations"?
18	A.	Yes. Please see Exhibit SSP-6.
19		Critical Repairs and Upgrade Projects and Programs
20	Q.	What does the next category of Facilities and Field
21		Services capital spending plan support?
22	Α.	The capital spending plan supports:

1		o Critical Infrastructure - Short Term Priority
2		Projects and Programs
3		o Roof Program Projects
4		o Service Center Renovation and Storeroom
5		Modernization Program
6		o Facility Security Program Upgrades
7	Q.	Please explain the critical repair and upgrade
8		activities of the Facilities group.
9	A.	Facilities plans, directs, and controls the
10		maintenance of all building systems and the day-to-day
11		building and yard operations at Company-owned and
12		leased office buildings and service centers. With the
13		assistance of Central Engineering - Facilities
14		Engineering, we also perform periodic assessments and
15		inspections of all buildings and, if necessary,
16		prepare corrective action plans, so that critical
17		building systems are operated and maintained
18		appropriately.
19	Q.	Please discuss the projected Facilities capital
20		spending level and why it is necessary to modernize,
21		upgrade, and improve the Company's facilities.
22	A.	Most of the Company's facilities were constructed
23		between 20 and 65 years ago or more. Projects set

- 87 -

1 forth in the Exhibit are needed to correct potentially unsafe conditions, address environmental issues, 2 3 comply with local, state, or federal regulatory requirements/building codes, maintain the structural 4 integrity of the buildings, improve the overall 5 condition of the buildings, and guarantee that the б various equipment and systems required to operate 7 these facilities are functional, economical, and 8 9 practical. 10 Q. How does Facilities minimize costs? Facilities minimizes costs in two ways; both relate to 11 Α. 12 the proper identification and then strict monitoring 13 of projects and their associated costs. With the 14 assistance of Central Engineering - Facilities 15 Engineering, Facilities identifies its projects via periodic programmatic assessments, such as the 16 Facilities Roof Inspection, Steel/Concrete/Façade 17 18 Inspection, Emergency Diesel Generator and Electrical System, Bathroom/Locker Room and HVAC Evaluation 19 20 Programs, which the Company periodically performs. 21 The Company also uses the Engineering Service Request 22 ("ESR") process, which evaluates a particular problem, 23 assesses various solution options, and then provides a

- 88 -

1		conceptual scope of work/budgetary order of magnitude
2		cost estimate. Facilities uses this information to
3		prioritize projects according to the following program
4		categories: "compliance", "critical infrastructure -
5		short term priority", "critical infrastructure -
6		programs", "roof,", "energy efficiency", and "service
7		center renovation". By studying, evaluating, and
8		assessing the condition of equipment and systems,
9		developing work scopes and cost estimates, and
10		categorizing and prioritizing projects accordingly,
11		Facilities develops an understanding of where to most
12		effectively allocate its project funding and
13		resources.
14		<u>Critical Infrastructure - Short Term</u>
15		Priority Projects and Programs
16	Q.	Are there additional categories of projects that need
17		to be undertaken?
18	A.	Yes. There are two categories of work performed under
19		Facilities Buildings and Yards - Critical
20		Infrastructure, which are broken down into either
21		Short-Term Priority "Projects" or "Programs". This
22		category has a white paper included in Exhibit

1		(SSP-6), entitled "Facilities Critical Infrastructure
2		Short Term Priority/Program".
3	Q.	How much is the Company planning on spending in this
4		critical infrastructure category for short term
5		priority projects and other programs during RY1
6		through RY3?
7	A.	In RY1, we project expenditures of \$16.98 million; in
8		RY2, we project to spend \$16.98 million; and in RY3,
9		we project to spend \$20.58 million.
10	Q.	Do you have a White Paper entitled "Facilities
11		Critical Infrastructure Short Term Priority/Programs"?
12	A.	Yes. Please see Exhibit SSP-6.
13	Q.	Please first describe the projects under Critical
14		Infrastructure - Short Term Priority Projects
15		(emergent).
16	A.	These are projects that we have initiated because they
17		are deemed necessary to maintain the structural
18		integrity of the Company's Facilities' buildings, to
19		allow them to operate as designed, or to protect
20		critical equipment (e.g., high maintenance or obsolete
21		HVAC systems, LAN Room AC Installations, Yard Paving).
22		We add Critical Infrastructure Short Term Priority
23		projects to the list as ESRs are completed, equipment

- 90 -

1		nears end-of-life, or programmatic assessments are
2		performed that deem these projects as high priority.
3	Q.	Can you please provide examples of some of these
4		short-term priority projects?
5	A.	Yes. Examples of projects in this category involve
6		rehabilitating severely corroded building and yard
7		drainage systems and roof parking access ramps,
8		rehabilitating building envelopes such as facades,
9		windows, and exterior walls, performing yard paving
10		and/or resurfacing, and replacing or refurbishing
11		failing and problematic HVAC systems. There are
12		several projects currently listed in this category for
13		the rate years, however history has shown that
14		additional projects may arise that need to be
15		undertaken on an expedited basis. The Critical
16		Infrastructure Short-Term Priority projects category
17		is a contingency fund for such emergency situations.
18		Examples of past short-term priority capital projects
19		include:
20		• 3rd Ave Yard Stores Building 1 - Remediation of
21		Cracks on Building Walls for \$2.4 million.
22		• Irving Place - Sidewalk Concrete/Structural
23		Rehabilitation and Water Intrusion for \$0.4 million

- 91 -

1		• Irving Place - Replacement of Chilled Water
2		Distribution Risers and add Strainers for \$1.24
3		million
4	Q.	Now, please describe the projects under Critical
5		Infrastructure - "Programs" (programmatic, lower
6		priority).
7	A.	These capital programs are also intended to maintain
8		and improve overall conditions at the buildings and
9		yards as well as maintain the facilities.
10		We list projects in the Critical Infrastructure -
11		Programs Category either as a result of a completed
12		ESR or program assessment or based on engineering or
13		historical knowledge of the systems and equipment
14		(e.g., since the expected life of a Freon-based HVAC
15		system is approximately 20 to 25 years, units that are
16		15 years or older will be listed in the five-year
17		plan). A completed ESR provides a scope of work and
18		budgetary order of magnitude cost estimate required to
19		address a system problem. The full scope and examples
20		of these projects is outlined in the white paper
21		entitled "Facilities Critical Infrastructure Short-
22		Term Priority/Programs".

1	Q.	Does Exhibit (SSP-6) detail the expected critical
2		infrastructure programs to be undertaken in the next
3		several years?
4	A.	Yes. Exhibit (SSP-6) lists these upcoming
5		programs.
6	Q.	Do you have an example of how Facilities Engineering
7		studied, evaluated, and assessed the condition of
8		equipment/systems and then developed the most
9		efficient solution to address a problem?
10	Α.	Yes. One example of the process described above is
11		the recently completed Rye Headquarters HVAC
12		Replacement Project. Facilities Engineering weighed
13		different design options, analyzing equipment age,
14		configuration, condition/maintenance history and
15		environmental impacts before choosing an effective,
16		cost-efficient replacement strategy. The final design
17		centralized heating and cooling equipment into a
18		packaged system, which minimized purchased equipment,
19		piping, and structural installation costs. In
20		addition, existing condenser water distribution piping
21		was re-purposed/converted for chilled water
22		distribution supplying the new Air Handling Units,
23		thus eliminating the need to run new large bore

1 piping. This project was appropriated for \$6.6 2 million. 3 Roof Replacement Program What is the Company planning to do for roof 4 Q. 5 replacements? 6 Α. Facilities Engineering inspects each roof on a 7 periodic basis and recommends critical repairs or replacements as required. A roof generally has a 8 lifespan of 20 to 25 years, provided that repairs are 9 10 made in accordance with the five-year inspection 11 reports. We plan to address roof replacements at various facilities across our territories, including 12 13 The Learning Center, Victory Boulevard, 16th Street, 14 Atlantic Avenue, and Bruckner Boulevard as indicated in Exhibit ____ (SSP-6), white paper entitled 15 "Facilities Buildings and Yards - (Roof Replacement 16 Program)). Note that these roof projects are intended 17 18 to be completed prior to failure/water leakage into the building. 19 20 How much do you plan on spending on the roof Q. 21 replacement project?

A. For roof replacement and other related anticipatedwork from the ongoing roof inspection program, we

- 94 -

1 project spending approximately \$9.0 million in RY1, \$3.98 million in RY2, and \$5.97 million in RY3. 2 3 Please explain the projected differences for RY1, RY2 Q. and RY3. 4 5 Facilities Engineering, with the assistance of an Α. 6 outside consultant, performs periodic roof inspections to assess the condition and damage at the various 7 facilities. The Company looks to evaluate each roof 8 every five years. Based on the roof condition and 9 10 level of damage, the assessment provides each location with a numerical rating (i.e., from 1-10, with 10 11 12 being the worst). This information, along with the 13 year inspected, can be seen in the Roof White Paper 14 and in Exhibit ____ (SSP-6). Facilities Engineering 15 uses that information, along with the importance/criticality of the facility (e.g., TLC, 16 Headquarter Buildings) and stakeholder feedback 17 18 (leaks/complaints) to establish the five-year plan. 19 Facilities Service Center Renovation 20 and Storeroom Modernization Please explain your Facilities Service Center 21 Ο. 22 Renovation and Store Room Modernization Program.

Service Center Renovation projects are performed each 1 Α. 2 year to maintain and improve on overall conditions at 3 Con Edison buildings and yards. This program will renovate various office spaces located within the 4 Company's Headquarters Buildings (Rye HQ, and Davis 5 б Ave) and Service Centers (such as College Point and Eastview), many of which have not been renovated since 7 their original construction. Much of the 8 infrastructure at Con Edison buildings and yards is 9 10 outdated. The air conditioning is essentially unchanged since it was installed, with inefficient air 11 changes, air flow and controls that result in 12 13 unsatisfactory comfort levels in the buildings. As 14 part of the renovations, all the distribution ductwork 15 and controls will be replaced, including Variable Air Volume ("VAV") systems that change the air flow 16 depending on need. Similarly, lighting will be 17 18 completely replaced with an energy-efficient system that responds to a central controller and dims at the 19 20 perimeter to respond to available daylight. All renovated floors will have wireless access. 21 22 The Storeroom Modernization project aims to consolidate the various storerooms within service 23

- 96 -

1 centers, originally created by individual operating 2 groups, into one main storeroom in each service 3 center. The primary purpose of the project will be to 4 reduce material and tool redundancy, minimize physical storeroom footprints, streamline and standardize 5 б processes, and optimize staffing required to manage These renovations allow significant 7 the storerooms. opportunity to update processes by reducing or 8 eliminating paper-based transactions and employing 9 10 state-of-the-art technology for ordering and tracking 11 material. Note that Stores hired an expert in this 12 field to complete a study of the locations and 13 recommend the best way to consolidate and/or 14 streamline operations in College Point, E 16th Street, 15 Eastview, Rye, W 28th Street, Victory Blvd, 3rd Ave, and Van Nest. The study provides the foundation for 16 17 our long-term improvement plan. 18 How much do you plan on spending on the Service Center Ο. 19 Renovation and Storeroom Modernization project? 20 We project spending approximately \$8.01 million in Α. 21 RY1, \$8.01 million in RY2, and \$11 million in RY3. 22 Do you have a White Paper entitled "Facilities Service Ο. 23 Center Renovation and Storeroom Modernization?"

- 97 -

1 A. Yes. Please see Exhibit SSP-6.

Q. Please explain the need and associated benefits for
 such a program.

Most Con Edison buildings are over twenty-five years 4 Α. 5 old, with certain locations, such as Cleveland Street б and Rye Service Centers, over sixty-five years old. Interior offices, in certain cases, do not meet 7 current space-use or industry standards. The planned 8 renovations will bring the floors to the industry 9 10 standard for new office buildings, with the intent to 11 provide a work environment that is flexible, productive, easy to maintain, and will require no 12 13 substantial investment for many years. 14 Currently, storerooms in each service center are 15 comprised of nonadjacent rooms or spaces, often serving individual operating groups in Electric, Gas, 16 Steam and Customer Operations. Because of the 17 18 locations and configurations of these spaces, there is duplication of material and personnel. An architect 19 20 with expertise was engaged and has provided 21 recommendations on how to physically consolidate the 22 storerooms and optimize storage space utilization. 23 Adopting these recommendations will result in savings

1		and efficiencies but will require physical
2		construction and technology investment to accomplish.
3	Q.	Are there reasonable alternatives to the program?
4	A.	These spaces can be repainted and cleaned to make
5		cosmetic improvements to the office environment and
6		employee comfort, but few of the benefits and industry
7		standards described above can be reasonably achieved.
8		Facility Security Program Upgrades
9	Q.	What is the Company planning to do for the Security
10		Program Upgrades?
11	Α.	The Facilities Security Upgrade Program will include
12		upgrade/enhancements to several facilities.
13	Q.	Do you have a white Paper explaining the facility
14		security program upgrades projects?
15	A.	Yes. The White Paper "Facilities Security Upgrade
16		Program" has been submitted to the Commission's
17		Records Access Officer for Staff-Only review.
18	Q.	What are the projected rate year costs?
19	A.	The projected cost is \$3 million for RY1, \$3 million
20		for RY2, and \$3 million for RY3.
21		Safety and Environmental Programs and Projects
22	Q.	What does the fourth category of Facilities and Field
23		Services capital spending plan support?

1	Α.	The capital project plan for the Safety and
2		Environmental Program and Projects category supports:
3		o Energy Efficiency Program
4		o Compliance Projects (Safety, Environmental, and
5		Regulatory)
6		o Astoria SWSS Corrective Action Project
7		Energy Efficiency Program
8	Q.	What is the Company planning to do for the Energy
9		Efficiency Program?
10	A.	The Energy Efficiency Program is a compilation of
11		various Energy Efficiency Measures ("ECMs") identified
12		in the Level III Investment Grade Energy Audits
13		completed for: Irving Place Corporate Headquarters;
14		Flatbush Avenue, Rye and Davis Avenue Regional
15		Headquarters; and TLC buildings. A Level III Energy
16		Audit provides detailed project cost and savings
17		calculations with the high level of confidence
18		required for major capital investment decisions. Con
19		Edison conducted Energy Audits as part of its efforts
20		to comply with the New York City Local Law 87
21		requirement to conduct periodic audits.
22		These ECMs identify methods to reduce energy use at
23		each location. The majority of the ECMs identified

are associated with lighting, HVAC systems (to include sensors, building management system and software) and attributed to the energy inefficient building façades (e.g., building envelope components such as windows). The window replacement program, which addresses over 2,000 windows at Irving Place is underway and will carry over into the rate years.

This Rate Case request will primarily address the 8 9 lighting ECM items identified in the building Energy 10 Audits and Local Law 88 ("LL88"), which requires large 11 non-residential buildings to upgrade their lighting 12 systems to meet the NYC Energy Conservation Codes by 13 January 1, 2025. The Energy Efficiency Program will 14 primarily address the installation of new LED lights 15 and daylight harvesting controls at the Regional Headquarters and Service Centers and also address 16 completion of the Irving Place window installation 17 18 project. The details for these various projects may be found in the white paper entitled "FFS Energy 19 20 Efficiency Program", found in Exhibit ____ (SSP-6). 21 How much do you plan to spend on the FFS Energy Ο. 22 Efficiency Program?

- 101 -

1	Α.	The Company will spend approximately \$23.96 million
2		RY1, \$19.96 million in RY2 and \$5 million in RY3.
3		Compliance Projects and Programs
4	Q.	Please explain the compliance projects.
5	A.	Compliance projects are required to address
6		potentially unsafe conditions and environmental issues
7		to comply with the latest local, state, or federal
8		regulatory requirements and building codes.
9	Q.	What are the projected costs of all the compliance
10		projects that you have addressed?
11	A.	The estimated capital costs for this category of
12		projects are \$4.97 million in RY1, \$10 million in RY2,
13		and \$13 million in RY3. The RY2 and RY3 expenditures
14		are primarily for projects to comply with Local Law 11
15		("LL11"), which must be completed by the time
16		indicated in the filing report submitted by New York
17		City Department of Buildings ("NYCDOB").
18	Q.	Please summarize this project.
19	A.	Irving Place Local Law 11 - Cycle 9 Façade
20		Rehabilitation Work - The Local Law 11 ("LL11") Cycle
21		9 engineering façade inspection report for Irving
22		Place is scheduled to be completed and submitted to
23		the NYCDOB by the due date of February 2023. The

1		Cycle 8 inspection report depicted a large number of
2		Safe With a Repair and Maintenance Program ("SWARMP")
3		conditions and it is anticipated that the Cycle 9
4		inspection report will also depict a large number of
5		SWARMP conditions. The Cycle 8 inspection produced
6		approximately \$8.7 million of capital
7		repair/rehabilitation work, with \$5.6 million of
8		associated expense work, and was based on the LL11
9		inspection requirements at the time; two scaffold
10		inspection drops per façade and a binocular-type
11		inspection from the street level. The LL11 inspection
12		requirements have been revised and Cycle 9 requires a
13		scaffold inspection drop every 60 feet. It is
14		therefore anticipated that Cycle 9 will uncover a
15		larger or equivalent number of SWARMP conditions as
16		Cycle 8. The subsequent project will correct
17		structural and facade issues identified in the Cycle 9
18		inspection and will be executed in 2024/2025.
19	Q.	Are there other regulatory compliance projects that
20		need to be undertaken?
21	A.	Yes. LL11 is an example of a larger job in this
22		category. We anticipate there will be other emerging
23		projects that will result from future environmental,

- 103 -

1		local law, and safety regulations. The white paper
2		entitled "Facilities Buildings and Yards (Safety,
3		Environmental Regulatory)" included in Exhibit (SSP-
4		6), contains additional examples of capital compliance
5		projects. These projects are generally required for
6		compliance with the Occupational Safety and Health
7		Administration ("OSHA"), NYSDEC and other regulatory
8		requirements.
9	Q.	Do you have examples of some of the projects included
10		in this category?
11	A.	Yes. One such large project concerns the Facilities
12		Cooling Towers Conductivity Monitoring Sensors,
13		Automatic Blowdown - Irving Pl, West End Avenue, 16th
14		St, TLC, Davis Ave, Eastview, which will address
15		Legionella concerns. Smaller-cost projects include
16		upgrading the Davis Ave Stairwell D 1st Floor Landing,
17		and Cleveland Street - Parking Lot Study/Improvements.
18		These projects are included in Exhibit (SSP-6).
19		SWSS Correction Project
20	Q.	Please describe the purpose of the Southwest
21		Stormwater System ("SWSS")?
22	A.	The SWSS is located in the southwestern portion of the
23		Astoria Site along 18^{th} Avenue and collects storm water

- 104 -

1		from approximately 18 acres of the facility and
2		discharges to the East River via Outfall B. We
3		reconstructed the SWSS in 2015 and incorporated
4		several pollution reduction controls into the design
5		of the system, including oil/grit separators,
б		sediment/silt filters, and oil-separation devices.
7		These controls were intended to reduce the amount of
8		total suspended solids ("TSS"), oils, polychlorinated
9		biphenyls ("PCBs"), and other pollutants from
10		discharging into the East River.
11	Q.	How has the system operated since the new system went
12		into operation?
13	Α.	The Company has continued to identify PCBs in onsite
14		stormwater at concentrations that sporadically exceed
15		the 200 parts per trillion ("ppt") action level
16		established under a 2010 Order on Consent with the
17		NYSDEC. NYSDEC staff has advised Con Edison that
18		stormwater PCB sample results from Outfall B piping
19		must consistently be below 200 ppt to comply with New
20		York State Pollutant Discharge Elimination System
21		("SPDES") requirements and to avoid potential SPDES
22		violations and potential substantial penalties.

- Q. What is the Company proposing in this rate case to
 address this issue?
- 3 A. We are proposing the SWSS Correction Project, which is
 4 discussed further in the white paper entitled "Astoria
 5 Southwest Storm Water System Corrective Action Plan,"
 6 in Exhibit__(SSP-6).
- Q. What are the projected costs associated with the SWSS
 8 Correction Project in RY1 RY3?
- 9 A. We plan to spend approximately \$9.3 million in 202210 and \$14.61 million in RY1.
- 11 Q. Can you provide background on the project?
- 12 In 2016 and 2017, a Company consultant identified the Α. 13 likely contributors of PCBs and TSS into the SWSS, as 14 well as categories for system improvements. Amonq 15 other things, the consultant recommended we supplement the SWSS drainage collection system by adding catch 16 basins and slot drains to improve stormwater runoff 17 18 from the East Storage Yard, which presently overwhelms downstream catch basins. This would improve drainage, 19 20 reduce the flow of runoff from this area to the North 21 Storage Yard, alleviate bypassing and clogging of 22 catch basins with high sediment loads, help capture 23 and treat runoff from the Site more effectively,

- 106 -

1 reduce the frequency of inlet filter clogging across 2 the site, and reduce stormwater runoff from flowing 3 across the Site cover, all of which are expected to reduce PCB concentrations. The consultant also 4 recommended that the existing concrete/asphalt system 5 б of the Astoria East Yard be completely removed and replaced with a new concrete system that includes 7 proper drainage. In addition to improving Stormwater 8 Collection and Conveyance, replacing the Astoria East 9 10 Yard concrete slab and asphalt would address slips, trips, and fall safety hazards associated with the 11 12 The existing eight-inch heavy duty concrete area. 13 slab, which makes up most of the yard was installed 14 approximately fifty years ago. It has suffered damage 15 from aging, freeze-thaw cycles, and the leaching of lime and salt contamination. Both recommendations are 16 17 reflected in the project we are proposing. 18 The Company proposed this project in its last rate Ο. filing. Why was the project not completed within the 19 20 planned timeframe, i.e., 2022. 21 The earlier project's scope included constructing a Α. 22 new covered structure for receiving and washing down

23 dirt and debris from transformers before they were

- 107 -

1		temporarily stored outside. The Company postponed the
2		project as a whole while it evaluated the need for
3		this piece of it, which it ultimately cancelled,
4		reducing costs by approximately \$10 million.
5		Transportation Operations Projects
6	Q.	What does the last category of Facilities and Field
7		Services capital spending plan support?
8	A.	The capital project plan for Transportation Projects
9		category supports: Electric Vehicle Charging Station
10		Expansion Project Gasoline and Diesel Fuel Station
11		Upgrade; Third Avenue Yard Transportation Garage
12		Demolition, and the Third Avenue Yard Transportation
13		Garage Rebuild.
14	Q.	Please explain the activities of the Transportation
15		Operations group.
16	A.	Transportation Operations provides automotive
17		engineering and fleet support for the Company. The
18		group also manages Company fueling stations
19		(gasoline/diesel, compressed natural gas, and electric
20		vehicle chargers), creates specifications for new
21		vehicle equipment, purchases and administers parts and
22		service contracts for garage support, and manages the
23		capital budget for vehicle procurement.

- 108 -

1	Q.	Please describe the capital projects Transportation
2		Operations is planning to undertake.
3	A.	Transportation is planning to undertake three
4		projects: 1) expansion of the electric vehicle
5		charging stations at multiple sites 2) continuation of
6		fuel station upgrade (gasoline and diesel fuel
7		stations at College Point and Neptune Avenue workout
8		locations);3) demolition of the 3rd Avenue Yard
9		Transportation building; 4) rebuilding of the Brooklyn
10		garage at our 3 rd Avenue workout location.
11	Q.	What are the projected costs of these projects and
12		what are the anticipated in-service dates?
13	A.	The Electric Vehicle Charging Station Expansion
14		Project at various locations is estimated at \$7.5
15		million and is expected to be completed by year-end
16		2025. The fuel station upgrade project is estimated
17		to cost \$8.8 million and will be completed by year end
18		2025. The demolition of the 3^{rd} Avenue Yard
19		Transportation building is estimated at 11.8M and is
20		estimated to be completed by year end 2024. And
21		finally, the Brooklyn garage project is estimated at
22		\$12 million and is expected to be completed in 2025.

- 109 -

1		Electric Vehicle Charging Station Expansion Project.
2	Q.	Please explain the Electric Vehicle Charging Station
3		Expansion Project.
4	A.	This project funds the expansion, design, and
5		construction of new charging infrastructure required
6		to re-fuel plug-in vehicles. Vehicle charging
7		stations will be constructed in 15 locations. The
8		design of these stations will have two levels of
9		charging:
10		Level 2 - (4 to 6 hour charging time); and DC Fast
11		Charger (< 1 hour charging time).
12	Q.	What are the projected rate year costs?
13	A.	The projected cost is \$2.0 million in RY1, \$2.5
14		million in RY2, and \$3.0 million in RY3.
15	Q.	Do you have an exhibit that provides additional
16		details associated with the Electric Vehicle Charging
17		Station Expansion Project?
18	A.	Yes. The details are shown in Exhibit (SSP-6), on
19		the White Paper entitled "Electric Vehicle Charging
20		Station Expansion Project."
21	Q.	Please explain why is it necessary to install electric
22		vehicle charging stations at these locations.

As part of Con Edison's Clean Energy Commitment, the 1 Α. 2 Company is committed to lowering greenhouse gas 3 emissions by electrifying its fleet. The Company will replace all its light duty fleet vehicles with an 4 electrified option. The Electric Vehicle Charging 5 б Station Expansion Project will provide the Company with the required infrastructure to achieve these 7 goals by installing readily accessible facilities for 8 9 these electrified vehicles to plug in. Con Edison has 10 a regulatory commitment (DOE - EPAct) to use alternate 11 fuels, such as electric, in its fleet. The use of electric vehicles enhances our ability to meet EPAct 12 13 compliance. Failure to comply with this EPAct mandate 14 could result in penalties being imposed on the 15 Company. What other benefits will be realized by the 16 Q. installation of these electric vehicle charging 17 18 stations? The Company plans to replace all light duty petroleum-19 Α. 20 powered vehicles with plug-in electric technology by 21 2035, with 80% electrified by 2030. There is an 22 approximate 50% cost savings (fuel/maintenance) to 23 operate an electric passenger vehicle versus a

- 111 -

1		conventional petroleum fuel. In addition, plug-in
2		technology can assist in the development of clean
3		alternative fuel markets.
4		Gasoline and Diesel Fuel Station Upgrade
5	Q.	Can you please explain the gasoline and diesel fuel
6		station upgrade project?
7	A.	This project funds the replacement of obsolete and
8		deteriorating equipment at two of the Company's
9		fueling stations (College Point - Queens and Neptune
10		Avenue - Brooklyn). The major components of these
11		stations are over 30 years old. The scope of the
12		project includes replacing fueling islands, gas and
13		bio-diesel dispensing equipment, several single wall
14		tanks, associated hardware, and a card reader system.
15	Q.	Do you have an exhibit that provides additional
16		details associated with the gasoline and diesel fuel
17		station upgrade project?
18	A.	Yes. The details are shown in Exhibit (SSP-6), on
19		the White Paper entitled "Fuel Station Upgrade."
20	Q.	What are the forecasted expenditures for your Fuel
21		Station Upgrade project during RY1 through RY3?

- 112 -

The Company expects to spend approximately \$0.81 1 Α. 2 million in RY1, \$2.01 million in RY2, and \$5.97 3 million in RY3. 4 Why do you need to upgrade these stations? Q. 5 These fuel stations provide fuel for the daily Α. 6 operation of the Company's fleet of cars, trucks, and equipment. Due to obsolescence, replacement parts are 7 becoming difficult to obtain. There are also 8 environmental concerns because of the potential for 9 10 system leaks (higher due to the age of the equipment). In addition, if a major failure were to occur at a 11 station, it is possible the station would be out-of-12 13 service for a considerable amount of time until 14 repairs could be completed. This would severely 15 impact the ability to fuel Company vehicles at the site, resulting in the use of more costly retail 16 fueling sites. These upgrades will significantly 17 18 improve the operation and reliability of the fuel stations and reduce the risk of an environmental event 19 20 (leaks). We also expect to see a reduction in station 21 maintenance costs over time. In addition, these 22 stations are at high risk of flooding events, and this project will fund the storm hardening to reduce the 23

- 113 -

1		threat, such as elevating electrical components,
2		purchasing long lead spare parts, and backup power.
3	Q.	Are there any other benefits to performing these
4		upgrades?
5	A.	Yes. Because bio-diesel (B-20) is not available at
6		retail fueling stations, the upgrades to the Company
7		stations will continue to help reduce petroleum
8		consumption by using Bio-Diesel fuel in order to meet
9		the Department Of Energy (DOE) requirement for clean
10		alternate fuel compliance (Energy Policy Act - EPAct).
11		3rd Avenue Yard Transportation Garage Demolition
12	Q.	Please explain the demolition portion of the 3rd Ave
13		Yard Transportation Garage project.
14	A.	The 3rd Avenue Yard Flush/Transportation Garage
15		Building is a 42,400 square foot single-story
16		structure that uses a timber bow-string roof truss
17		support. It includes office space and service pits for
18		truck maintenance. The Splice Room is an 800 square
19		foot single-story brick structure that is adjacent to
20		and connected to the main garage. The facility is
21		designated for demolition due to structural stability
22		issues with the main timber bow-string truss system,
23		which is the primary support structure for the garage

- 114 -

1		roof. The project will install clean fill over the
2		entire demolished area and a new chain-link fence with
3		gates for security and personnel protection.
4	Q.	Is the funding request for the demolition included in
5		the Revenue Requirement calculation?
6	Α.	No. The funding request is not included in the
7		Revenue Requirement calculation. The Company began to
8		make plans for the demolition and the construction of
9		the new building. The Company completed the design
10		for the new build and included the costs in the
11		Revenue Requirement, while the demolition plans were
12		still being developed and therefore the costs were not
13		available. The current estimates in Capital
14		expenditure is \$8.85 million in 2023 and \$2.95 million
15		in 2024 and the anticipated O&M expenditure is \$1.75
16		million in 2023 and \$0.59 million in 2024. The
17		Company will provide revised numbers at preliminary
18		Update.
19	Q.	Have you prepared an exhibit to reflect the additional
20		capital request for the demolition portion of the
21		project?

- 115 -

1 Yes. The details are shown in Exhibit ___ (SSP-6), on Α. 2 the White Paper entitled "Third Avenue Transportation 3 Garage Demolition." Did Con Edison have an engineering assessment 4 Q. 5 performed for this building? 6 Α. Yes. Company central engineering personnel, with the 7 support of an outside service engineering firm, performed a structural analysis of the wood truss 8 9 system that supports the roof of the north and south 10 transportation garages and determined them to be 11 structurally compromised by splits, cracks and other deficiencies that have caused stress conditions that 12 13 require shoring to stabilize the structure. Con 14 Edison installed shoring systems to address stress 15 deficiencies, but the building has since been vacated due to safety concerns. 16 Is this shoring system still in place? 17 Ο. 18 Yes, the system is in place and the temporary Α. 19 stanchions will remain there until the building is 20 demolished; engineering performs periodic inspections 21 of the support system to ensure its stability/integrity. The last inspection showed that 22 23 some stanchions had loosened up and wood support

- 116 -

1 members had cracked requiring emergency repairs. This 2 measure is not recommended as a long-term alternative 3 and the building must be demolished to prevent the 4 possibility of a catastrophic collapse and potential 5 asbestos release.

Q. Normally demolition type projects are charged to net
retirement; but this project has large capital and O&M
dollar request associated with it. Please explain the
need for these dollars.

10 Α. Existing electrical, mechanical, fire protection, 11 security equipment, and gas infrastructure serving the adjacent office building, flush facility, storeroom, 12 13 electrical vehicle charging stations and CNG station 14 will need to be relocated/installed and made 15 operational before the buildings are demolished. These overhead and underground systems either run 16 through/under the transportation garage or are 17 18 attached to its building walls and serve as part of critical systems that support the yard operations. 19 20 The work described above will be completed prior to 21 the beginning of the demolition and allow for minimal 22 disruption to the site since the yard will be fully

- 117 -

1 functional and operational for the duration of 2 project. This work has been ruled capital and O&M. 3 3rd Avenue Yard Transportation Garage Rebuild 4 Please explain the Brooklyn garage rebuild project. Q. 5 The 3^{rd} Avenue garage is a vehicle repair facility. It Α. 6 has been closed since October 2019 due to structural issues with the roof and associated building 7 components. Because of this closure, all vehicles and 8 equipment assigned to the Third Avenue facility are 9 10 being maintained/repaired at the Neptune Avenue repair facility in Coney Island. There are currently 520 11 12 vehicles assigned to the Third Avenue facility and 212 13 vehicles assigned to the Neptune Avenue facility. 14 Thus, the closure of Third Avenue has resulted in a 15 245% increase in workload at Neptune Avenue. This is not sustainable because of space and logistical 16 difficulties in transporting, staging, and maneuvering 17 18 the additional vehicles. The logistical issues also present increased costs due to the use of towing 19 20 vendors and compound the potential for motor vehicle collisions because of the increased number of 21 22 vehicles. This project proposes to construct a new, 23 10,000 square-foot vehicle repair facility on the

- 118 -
1 Third Avenue property over a three-year period (2023-2 2025). The new construction could support work on six 3 to eight vehicles within its confines and is estimated 4 to cost \$10 million (there is already \$1 million allocated for engineering/consultants in 2022). The 5 б new construction would be modeled after the O&R Spring Valley repair facility, including additional overhead 7 clearance to permit "flying" of bucket truck boom 8 9 apparatus, which would otherwise need to be done 10 outdoors. The new construction would also include 11 drive-through work bays, which would allow vehicles to 12 be driven/pushed into the garage and allow them to 13 exit in the same direction on the other side, removing 14 the necessity to back out, which will reduce the 15 potential for collisions. Do you have an exhibit that provides additional 16 Q. details associated with the 3rd Avenue Yard 17 18 Transportation Garage Rebuild? The details are shown in Exhibit ___ (SSP-6), on 19 Α. Yes. 20 the White Paper entitled "Third Avenue New 21 Transportation Building."

1	Q.	What are the forecasted expenditures for the 3rd
2		Avenue Yard Transportation Garage Rebuild project
3		during RY1 through RY3?
4	Α.	The Company expects to spend approximately \$0.99
5		million in RY1, \$3.98 million in RY2, and \$6.97
6		million in RY3.
7		Prevailing Wage
8	Q.	Describe how Public Service Law §42-a (the "Prevailing
9		Wage Law") impacts Con Edison?
10	A.	In early April 2020, the New York Legislature passed,
11		and the Governor signed, an amendment to Public
12		Service Law §42-a, which requires that "building
13		service workers" who work at certain critical
14		infrastructure facilities of utilities such as Con
15		Edison, be paid at least the prevailing wage, as
16		determined by the New York State Department of Labor
17		or the New York City Comptroller. Although Company
18		employees are not directly impacted, the services
19		provided by building service workers under current
20		contracts are impacted. These workers include
21		cleaning, security and maintenance services workers.
22	Q.	Describe the Prevailing Wage O&M request.

1	Α.	With the passing of the Prevailing Wage Law, the
2		Company has experienced incremental expenditures.
3		Specifically, at critical infrastructure locations
4		identified by the Company, vendors have modified
5		service contracts to reflect the required prevailing
6		wage retroactive to October 1, 2020. In some
7		instances, the new wage requirements have
8		significantly increased the cost. For example, for
9		multiple contracts the year-end costs associated with
10		wages and benefits for building service workers in
11		2020 was \$2.9 million and, due to the Prevailing Wage
12		Law, the cost for wages and benefits in 2021 was $$5.2$
13		million, which included the increased costs and
14		retroactive payments as required under the law.
15	Q.	Do you have an exhibit explaining the Prevailing Wage
16		Request?
17	A.	Yes. The white paper entitled "Prevailing Wage," in
18		Exhibit(SSP-6).
19	Q.	What is the Company's prevailing wage O&M request?
20	A.	The forecasted increased O&M cost for the Prevailing
21		wage is \$4.85 million in RY1, \$5.0 million in RY2, and
22		\$5.15 million in RY3.
23	Q.	Are there any other potential impacts?

- 121 -

Expenditures associated with the Prevailing Wage 1 Α. Yes. 2 Law can increase substantially if the scope of the 3 requirements are determined to go beyond those locations the Company has currently identified or to 4 job classifications beyond quards and cleaners. 5 б To the extent possible, the Company has identified all properties that are Critical Facilities and the 7 contractors working at those facilities that are 8 subject to the law. However, the Prevailing Wage Law 9 10 states that it applies to critical facilities as 11 determined by the Division of Homeland Security and 12 Emergency Services in consultation with the New York 13 State Department of Public Service. Con Edison could 14 see a significant increase in the cost of complying 15 with the law if the Division of Homeland Security and Emergency Services expands either the number of Con 16 Edison's facilities or the type of employee. As such, 17 18 the Company proposes to continue the deferral of incremental costs to comply with the Prevailing Wage 19 20 Law.

21

22 VIII. Supply Chain

23 Q. Please describe the Supply Chain organization.

- 122 -

1	Α.	Supply Chain is primarily responsible for all
2		procurement and warehouse operations in support of
3		company-wide, day-to-day operating activities across
4		Con Edison and Orange and Rockland Utilities.
5		Procurement activities include market analysis,
6		sourcing, contract management and supplier
7		relationship and performance management.
8	Q.	Do you have an exhibit for the Third Party Risk
9		Management Program (TPRM) and was this exhibit
10		prepared under your direction and supervision?
11	A.	Yes, please see Exhibit SSP-7 titled "Shared Services
12		- Supply Chain - O&M."
13		MARK FOR IDENTIFICATION AS EXHIBITSSP-7
14		Third Party Risk Management
15	Q.	Please provide a summary of the Third Party Risk
16		Management Program.
17	A.	The Company is implementing this program to expand its
18		review of third-party vendors for additional risks.
19		The new program will allow the Company to have a more
20		robust risk review program while collecting and
21		centralizing data on third-party vendors and
22		establishing periodic reviews.
23	Q.	Is there a capital component to the TPRM?

1	Α.	Yes. The technology requirements for the TRPM Program
2		are contained in Exhibit "Common IT Projects" (IT-3)
3		which is supported by the Company's IT Panel. The
4		estimated capital costs for the TPRM project are \$0.25
5		million in RY2 and \$1.0 million in RY2.
6	Q.	Is there an O&M component to the TPRM?
7	A.	The Company has detailed the internal staffing
8		requirements, external consultant needs and ongoing
9		software maintenance requirements in the White Paper
10		(SSP7). The estimated O&M costs for the TPRM project
11		are \$1.35 million in RY1, \$1.55 million in RY2, and
12		\$1.55 million in RY3.

13

14 VIII. Emergency Preparedness

- 15 Q. Please describe the functions/responsibilities of16 Emergency Preparedness.
- 17 A. Emergency Preparedness is a shared service
- 18 organization within Utility Shared Services that
- 19 partners with stakeholders to provide effective risk
- 20 assessment, mitigation, preparedness, response,
- 21 recovery, and communications. High level
- 22 responsibilities include weather analysis, business

1		continuity, after action reviews, plans, exercises,
2		and training, etc.
3	Q.	Describe the two O&M Programs Changes in Emergency
4		Preparedness.
5	A.	The first program change is for the NYC Micronet and
б		the other is for Additional Support Personnel.
7	Q.	Have you prepared an exhibit entitled "Shared Services
8		- Emergency Preparedness - O&M Equipment?"
9	Α.	Yes.
10	Q.	Was this exhibit prepared under your direction and
11		supervision?
12	Α.	Yes, it was.
13		MARK FOR IDENTIFICATION AS EXHIBIT (SSP-8)
14		NYC Micronet
15	Q.	Provide some background on the NYC Micronet project.
16	Α.	The Con Edison New York City Micronet (NYCM) is a 17-
17		station climate network established across the five
18		boroughs of New York City in the fall of 2020. Con
19		Edison installed this network on its properties across
20		the City. The network monitors and collects weather
21		data across the City.
22	Q.	What type of information is being collected?

1	Α.	Con Edison has installed at each site a mix of high-
2		precision sensors, collectively reporting air
3		temperature, relative humidity, precipitation,
4		pressure, wind speed and direction, solar radiation,
5		snow depth, soil temperature and moisture, and water
6		temperature. The site also has cameras that provide
7		photos for additional measurement validation.
8	Q.	Do you have an exhibit explaining the NYC Micronet
9		Project?
10	A.	Yes. This project is discussed further in the white
11		paper entitled "NYC Micronet," in Exhibit(SSP 8).
12	Q.	What are the projected incremental O&M costs of the
13		NYC Micronet?
14	A.	For each rate year the Company forecasts \$300,000 for
15		contract services and \$100,000 in incremental labor
16		(one FTE) to enable more detailed data scrutiny as
17		well as data synthesizing.
18	Q.	Describe the purpose of the maintenance program.
19	A.	The Company implemented a maintenance program in 2021
20		when the equipment was installed. This program
21		includes analysis, preventive maintenance, rapid field
22		response, regular sensor calibration and upgrades,

- 126 -

1		automated and manual data quality control, power and
2		communications monitoring, and software security.
3	Q.	What are the benefits of this program?
4	Α.	As discussed above, Con Edison has already installed
5		the sensors, which provide real-time hyper-local
6		weather data available to all Company operating
7		groups. In particular, the Company's meteorologists
8		have plans to incorporate this data stream into the
9		Company impact model, dependent upon the data quality
10		going forward, which will aid with storm response and
11		Con Edison's efforts to understand and assess climate
12		change locally.
13	Q.	What type of maintenance is included in the program?
14	A.	For the maintenance schedule please refer to the "Work
15		Description" section the white paper entitled "NYC
16		Micronet."
17	Q.	Where there any maintenance costs in the test year?
18	A.	The maintenance program was included with the
19		installation costs of the sensors in 2021 and
20		therefore, not included in the test year or the
21		revenue requirement. The University of Albany provides
22		the maintenance services for the Company. Emergency
23		Preparedness Additional Support Personnel

- 127 -

1		Additional Support Personnel
2	Q.	Describe the program change for the Emergency
3		Preparedness Additional Support Personnel?
4	Α.	These positions will continually be evaluating the
5		impacts of climate change and weather volatility to
6		strategically shift preparation planning. They will
7		also support the development and execution of
8		exercises and drills as corporate risks evolve and
9		continue to be identified (e.g., cybersecurity,
10		electric, gas).
11	Q.	Do you have a White Paper that explains the functions
12		of the additional support personnel?
13	Α.	Yes. This project is discussed further in the white
14		paper entitled "Additional Support Personnel," in
15		Exhibit (SSP 8).
16	Q.	What are the projected costs of this program?
17	Α.	The O&M impact for the Additional Support Personnel is
18		\$0.2 million in each Rate Year.
19	Q.	Does this conclude your direct testimony?
20	Α.	Yes, it does.