BEFORE THE NEW YORK STATE PUBLIC SERVICE COMMISSION

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Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Electric Service	Case 15-E
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Gas Service	Case 15-G
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Rochester Gas and Electric Corporation for Electric Service	Case 15-E
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Rochester Gas and Electric Corporation for Gas Service	Case 15-G
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DIRECT TESTIMONY OF REFORMING THE ENERGY VISION PANEL

K. Jeffrey Ballard Laney W. Brown Linda C. Saalman Joseph J. Syta

May 20, 2015

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1		I. <u>INTRODUCTION</u>
2	Q.	Please state the names of the members on this Reforming the Energy Vision Panel
3		("Panel").
4	A.	Our names are K. Jeffrey Ballard, Laney W. Brown, Linda C. Saalman, and
5		Joseph J. Syta.
6	Q.	Mr. Ballard, please state your current position and business address.
7	A.	I am the Vice President of Operations Technologies and Business Transformation.
8		My business address is 89 East Avenue, Rochester, New York 14649.
9	Q.	Please summarize your educational background and work experience.
10	A.	My Curriculum Vitae ("CV") is set forth in Exhibit (REV-1).
11	Q.	Have you previously testified in other proceedings before the New York State
12		Public Service Commission ("PSC" or the "Commission") or any other state or
13		federal regulatory agency or court?
14	A.	I have testified in proceedings before the Maine Public Utilities Commission
15		("Maine PUC"), but I have not testified in proceedings before the Commission.
16	Q.	Ms. Brown, please state your current position and business address.
17	A.	I am the Director of Smart Grid Planning and Programs. My business address is
18		52 Farm View Drive, New Gloucester, Maine 04260.
19	Q.	Please summarize your educational background and work experience.
20	A.	My CV is set forth in Exhibit (REV-1).
21	Q.	Have you previously testified in other proceedings before the Commission or any
22		other state or federal regulatory agency or court?

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1	A.	I have testified in proceedings before the Maine PUC, but I have not testified in
2		proceedings before the Commission.
3	Q.	Ms. Saalman, please state your current position and business address.
4	A.	My title is Manager, Project Portfolio. My business address is 89 East Avenue,
5		Rochester, New York 14649.
6	Q.	Please summarize your educational background and work experience.
7	A.	My CV is set forth in Exhibit (REV-1).
8	Q.	Have you previously testified in other proceedings before the Commission or any
9		other state or federal regulatory agency or court?
10	A.	I have testified before the Commission in several cases, most recently in
11		Case 96-E-0898.
12	Q.	Mr. Syta, please state your current position and business address.
13	A.	I am the Vice President, Controller and Treasurer. My business address is 89 East
14		Avenue, Rochester, New York 14649.
15	Q.	Please summarize your educational background and work experience.
16	A.	My CV is set forth in Exhibit (REV-1).
17	Q.	Have you previously testified in other proceedings before the Commission or any
18		other state or federal regulatory agency or court?
19	A.	I have testified before the Commission in numerous cases dating back to 1989.
20		Most recently, I testified in support of the Companies' 2009 rate filings in Cases
21		09-E-0717 et al. as a member of both the Policy Panel and the Revenue
22		Requirements Panel.

Case 15-E-___; Case 15-G-___; Case 15-E-___; Case 15-G-___; **DIRECT TESTIMONY OF REFORMING THE ENERGY VISION PANEL** 1 Q. What is the purpose of the Panel's testimony? 2 A. Our testimony addresses the implications of Case 14-M-0101 (Reforming the 3 Energy Vision Proceeding) ("REV Policy Proceeding" or "REV") on New York 4 State Electric & Gas Corporation's ("NYSEG") and Rochester Gas and Electric 5 Corporation's ("RG&E" and together with NYSEG, the "Companies") activities 6 before and during the Rate Year (i.e., the 12 months ending March 31, 2017). We 7 also present the Companies' proposal to design and implement an Energy Smart 8 Community Project, a specific REV-related activity. We also note that the 9 Companies will, consistent with the Commission's directives in the February 26, 10 2015 Order Adopting Regulatory Policy Framework and Implementation Plan 11 issued in the REV Policy Proceeding ("Track 1 Order"), make demonstration 12 project filings on July 1, 2015. Finally, we address the cost implications of the 13 Companies' REV-related activities both before and during the Rate Year. 14 Q. Is this Panel sponsoring any exhibits? 15 A. Yes. This Panel is sponsoring the following exhibits: 16 1) Exhibit (REV-1) provides the CVs of the witnesses testifying on this Panel; 17 and 18 2) Exhibit (REV-2) describes the Energy Smart Community Project. II. 19 **REV IMPLEMENTATION PLAN AND ACTIVITIES** 20 Q. What is the purpose of this section of your testimony? 21 A. We will discuss the opportunities presented by REV and provide a description of 22 the Companies' efforts to respond to directives that have been issued by the

1		Commission in Track 1 and other REV-related investments that are being made
2		by the Companies.
3	Q.	What is the status of the REV Policy Proceeding as of the filing of these rate
4		cases?
5	A.	As noted above, the Commission issued its Track 1 Order on February 26, 2015.
6		This Order addressed the role and responsibilities of the Distributed System
7		Platform Provider ("DSP"), the participation of third parties in a more dynamic
8		market, and associated technical and transitional issues. The role of the DSP is
9		divided into three areas: integrated system planning; grid operations; and market
10		operations. The Track 1 Order prioritizes improvement of the distributed
11		generation ("DG") interconnection process, integration of Distributed Energy
12		Resources ("DER") into distribution planning, and actions necessary to promote
13		participation in new markets by all customers, including low- and moderate-
14		income customers. Several details necessary to further define the DSP and guide
15		the filing of the Distributed System Implementation Plans ("DSIPs") were
16		assigned to two working groups (Technology Platform and Market Design) under
17		the direction of the New York State Department of Public Service Staff ("Staff").
18		Staff will also release a Benefit Cost Analysis ("BCA") Whitepaper later in 2015.
19		In addition, the Track 1 Order confirmed the Commission's intent for
20		utilities to pursue demonstration projects. Such projects will engage customers,
21		prepare the utilities to serve as the DSP, test new business models, and inform the

	Commission and stakeholders concerning how best to engage customers to
	consider DERs and new products and services enabled by REV.
	A Track 2 Straw Proposal is expected to be issued for comment in mid-
	2015. A Track 2 Order addressing the overall regulatory framework and cost
	recovery, including rate design, is expected to be issued thereafter by the
	Commission.
Q.	What are the Companies' general perspectives with respect to REV?
A.	REV is ambitious and creates a new DSP role and associated responsibilities for
	NYSEG and RG&E. REV also entails working in novel ways with third parties
	(often as partners) to a greater degree than in the past to serve our customers. It
	will take time to develop and apply this focus to each new relationship and we
	expect to learn a great deal through early efforts. Thus, the transition to REV
	must necessarily be iterative, taking place over a period of years, to permit the
	thoughtful implementation of evolving technologies, the testing of customer
	engagement models, and the integration of lessons learned from early
	implementation stages and demonstration projects.
Q.	Is the Commission's deliberative approach to REV, as reflected in the Track 1
	Order and other issuances, consistent with the Companies' perspectives?
A.	Yes. The Companies believe that REV has the potential to deliver benefits to
	many of New York's electricity customers. Further, the Companies welcome the
	opportunity and challenge of establishing and serving as the DSP and believe that
	we will be successful in that role. The Companies endorse the continued design
	Q. A. A.

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1		and implementation of REV in a strategic manner, with adequate time to test new
2		technologies, market concepts, business processes, and customer engagement
3		models, and make adjustments based on the results. Our Energy Smart
4		Community Project is specifically designed with these objectives in mind.
5	Q.	Please summarize the Companies' approach for implementing REV.
6	A.	First, the Companies continue to make capital investments that will help support
7		REV implementation. The second step, consistent with the Commission's policy
8		direction, is to address potential barriers to success. In particular, the Companies
9		are working to make it easier to connect and integrate DG and other DERs from
10		both an operational perspective and a distribution planning perspective. The third
11		step is a well-conceived and executed series of targeted initiatives to test and
12		refine potential models and approaches that could be effectively employed on a
13		larger scale. Finally, any successful implementation of REV requires that the
14		Companies have the necessary resources to continue to provide customers safe
15		and reliable service as the Companies invest in new capabilities and systems to
16		transition to the new REV environment.
17	Q.	What impact has the Track 1 Order had on the Companies' immediate work
18		activities?
19	A.	The Track 1 Order has had two significant implications on the Companies'
20		immediate activities. First, it established a July 1, 2015 deadline for filing utility
21		demonstration projects. Second, it directed the utilities to begin the REV

1		implementation effort by reducing barriers to DER market participation through
2		specific actions in several areas, including:
3		1) Interconnection Process: The utilities were directed to file a report on
4		July 1, 2015 on improvements to the interconnection process and to address
5		capabilities that would allow small customers to apply for interconnection
6		using an online portal;
7		2) Integrated System Planning: The Track 1 Order directed each of the utilities
8		to identify one or more potential "non-wires alternatives" projects by
9		May 1, 2015. The Companies have made this filing; and
10		3) Digital Marketplace: The utilities must work with Staff and other parties on
11		the design of a statewide and uniform digital marketplace platform (i.e., a
12		"web portal") that will communicate information on REV-enabled products
13		and services to New York customers.
14		The Track 1 Order provided some clarity with respect to these immediate
15		priorities. These activities will likely require a further incremental level of
16		expense that the Companies will incur prior to the Rate Year and will also require
17		new investments that may be placed into service during and after the Rate Year.
18	Q.	Are the Companies participating in other activities that are related to REV?
19	A.	Yes. The three initial REV implementation actions noted above and the
20		development of demonstration projects for a July 1, 2015 filing will involve
21		incremental expenditures that are attributable to REV. Further, the Track 1 Order
22		and directives in other REV-related proceedings, such as Case 14-M-0094 (Clean

1	Energy Fund ("CEF") Proceeding), will continue to require a significant
2	commitment of resources from the Companies. For example, over the next year,
3	there will be a significant amount of incremental effort for the Companies to
4	participate in and contribute to the resolution and implementation of a number of
5	REV-related matters, including (but not limited to):
6	• Track 2 Straw Proposal review;
7	• Large-scale renewables resources;
8	• Market Design/Platform Technology group processes;
9	• Market and Tariff Development group;
10	• DER provider oversight rules;
11	• Microgrid framework;
12	• BCA framework;
13	• Energy efficiency activities, including energy efficiency implementation
14	plans, program budgets and metrics, Technical Resource Manual, new
15	BCA tools, new measurement and verification processes, coordination of
16	programs with the New York State Energy Research and Development
17	Authority ("NYSERDA"), and implementation of a self-direct program
18	for larger customers;
19	• Consolidated energy services company billing;
20	• Development and implementation of distribution-level demand response
21	programs;
22	• Implementation of the Sustainable Westchester Community Choice

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1		Aggregation ("CCA") program (NYSEG only);
2		• Development and implementation of non-wires alternatives;
3		• Utility codes of conduct review;
4		• CEF Proceeding comments and future transition work;
5		• Low- and moderate-income customer matters; and
6		• Community net metering.
7		III. OTHER INITIATIVES CONSISTENT WITH REV
8	Q.	Are the Companies undertaking and implementing other initiatives that are
9		consistent with New York's REV vision?
10	A.	Yes, the Companies have identified, planned, and launched several innovative and
11		strategic initiatives over the past two years, including some that pre-date the
12		initiation of the REV Policy Proceeding. Moreover, the Companies' actions to
13		create an advanced network platform, as discussed more fully below, are also
14		fully consistent with the REV vision.
15	Q.	What is the status of the Companies' innovative and strategic initiatives?
16	A.	These initiatives include research efforts that are in various stages (requests
17		submitted, in progress, or recently completed) and will be funded by the
18		Companies, NYSERDA, and/or the U.S. Department of Energy ("DOE"). They
19		also include several projects that are expected to produce near-term and mid-term
20		benefits for our customers and employees.
21	Q.	Please describe further these research efforts.

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1	A.	The research efforts	include

2		1) The development of a software tool that allows distribution engineers to
3		determine the maximum renewable DG penetration allowable on a particular
4		distribution circuit, as well as the impact of reinforcements on the maximum
5		allowable penetration. This will help distribution engineers develop screening
6		criteria to assess DG applications' potential to contribute to system issues;
7		2) Work between RG&E and the Rochester Institute of Technology ("RIT") to
8		study means of controlling multiple microgrid components; and
9		3) Work by NYSEG with a university partner (Binghamton University) to
10		examine the ability to integrate and control large-scale solar installations in a
11		project that may be funded by the DOE. The Companies are also sponsoring a
12		second effort with Binghamton University that examines the ability to
13		leverage data to improve system planning and operations. The analysis will
14		help inform DER performance modeling and a more detailed forecast
15		analysis.
16	Q.	Please explain how the Companies' efforts related to the creation of an advanced
17		network platform will contribute to moving REV forward.
18	A.	The Companies remain committed to increasing their ability to interact with
19		customers and the grid itself through the development of a platform that
20		emphasizes, among other things, the phased deployment of Advanced Metering
21		Infrastructure ("AMI") and increased Distribution Automation ("DA"). Both of
22		these initiatives are fully consistent with and support the Commission's REV

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1		vision. Although investments in the Companies' AMI program, DA, and network
2		communications have been identified as "foundational investments" in REV
3		discussions, the Companies view them as investments that they would have made
4		irrespective of REV. The investments are included in our Rate Year investment
5		plan and in our longer-term capital plan.
6	Q.	What experience do the Companies have to draw on regarding the deployment of
7		AMI?
8	А	Central Maine Power ("CMP"), an affiliate of the Companies, has deployed
9		approximately 600,000 meters through its AMI Project and has been measuring
10		the operational and customer-focused benefits associated with this effort since
11		2012. CMP provides customers online access to energy tools to help them track
12		their energy usage and identify opportunities to reduce their electricity bills, thus
13		directly engaging customers in a cost-saving activity. The Companies will draw
14		on CMP's experience both during and after the AMI deployment when moving
15		forward with an AMI program for New York.
16	Q.	Please describe the Companies' AMI program proposal.
17	A.	AMI is expected to provide operational benefits and advance REV objectives in
18		multiple ways. Participating customers will have the opportunity to manage their
19		energy usage to achieve specific cost savings and to take advantage of new value-
20		added services that leverage the availability of customer usage data, including
21		participation in DR, energy efficiency, and variable pricing programs.
22	Q.	What is Distribution Automation, or DA?

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1	A.	DA is an integrated application of technologies that enables the automated or
2		centralized control of power quality, reliability and flow conditions on feeders.
3		Elements include smart sensors, reclosers, regulators, capacitor banks, processors,
4		and supporting communications networks that allow the distribution utility to
5		control flows on feeders in response to system flows and events. For example,
6		DA will enable automated feeder switching capability whereby we can diagnose
7		problems remotely (without sending a crew) and then re-configure the network to
8		either prevent an outage, isolate a fault to the smallest possible impact area, or to
9		restore power, contributing to more efficient, safe, and expedient restoration of
10		service.
11	Q.	Do the Companies consider DA to be a foundational investment supportive of
12		REV?
13	A.	Yes. DA is a foundational investment because it allows us to monitor and control
14		the distribution network in ways that improve reliability, resiliency, service
15		quality, service flexibility, and operational efficiency. We do not, however,
16		consider DA to be a direct REV cost as DA would have been an element of our
17		capital expenditure plan irrespective of REV.
18 19		IV. <u>THE ENERGY SMART COMMUNITY PROJECT AND</u> <u>DEMONSTRATION PROJECTS</u>
20	Q.	What is the purpose of this section of testimony?
21	A.	There are two purposes – the first is to provide detailed information about the
22		Companies' proposed Energy Smart Community Project and the second is to

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1		provide a summary of the Companies' approach to proposing demonstration
2		projects as required under the Track 1 Order.
3		A. <u>Energy Smart Community Project</u>
4	Q.	Please describe the Companies' proposed Energy Smart Community Project
5		("ESC Project").
6	A.	The ESC Project will serve as a platform for initiatives and technologies that will
7		test REV concepts. Ultimately, this platform will inform a more effective and
8		efficient deployment of REV throughout New York. The ESC Project's
9		distinguishing characteristic is that it is being developed for deployment to a
10		single community, which will allow us to test new REV concepts for engaging
11		customers, the community, and the market on a smaller, controlled scale before
12		deploying proven work elements more broadly.
13		The ESC Project will address the three main functions of the Companies'
14		role as the DSP operator: 1) to implement new processes and tools for integrated
15		distribution system planning; 2) to support customer and third party engagement
16		in market operations, and 3) to operate the grid efficiently and reliably. A
17		detailed report describing the ESC Project is attached as Exhibit (REV-2).
18	Q.	Why are the Companies focused on a community-based approach?
19	A.	The ESC Project is envisioned as a platform to enable the implementation and
20		deployment of initiatives in a community (Ithaca Region) that shares a common
21		vision for sustainability and long-term planning for energy. The ESC Project
22		provides the opportunity to test the hypothesis that a community-based approach

1		to REV implementation is effective and efficient, and can be applied in other
2		service areas by building on the lessons learned from a small-scale deployment.
3		The initiatives within the ESC Project will help identify deployment features that
4		yield incremental benefits for implementation at scale.
5	Q.	Is the ESC Project a demonstration project?
6	A.	No, it is not. The ESC Project establishes a platform that can be employed to test
7		various REV concepts.
8	Q.	How did the Companies establish the scope of the ESC Project?
9	A.	We started with a conceptual idea that a single community would provide the best
10		environment in which to test our ability to perform as the DSP and to engage
11		customers and the market. This single community approach would also allow us
12		to test REV concepts and to evaluate the potential for synergistic impacts that
13		may not have been previously considered. We shared the community-based
14		concept with several stakeholders and received generally favorable responses.
15	Q.	Did the Companies study community-focused energy demonstration projects
16		while developing the scope?
17	A.	Yes. The Companies have studied other smart community programs throughout
18		the country in an effort to identify best practices and lessons learned. This
19		research yielded five important lessons that we have incorporated in the design of
20		the ESC Project, including:
21		1) Strong community leadership, including a university partner, is critically
22		important;

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1		2) Customer engagement is challenging and solutions must be easy to understand
2		and implement;
3		3) Stakeholder engagement and communication is enhanced by the establishment
4		and extensive use of an external advisory panel;
5		4) Technology is an enabler because it provides information and capabilities that
6		facilitate changes in the activities and behaviors of all market participants; and
7		5) A phased approach is appropriate.
8		Following the development of the community concept and the assessment of
9		lessons learned, the Companies focused on selecting a community and university
10		partnership to facilitate successful implementation of the ESC Project.
11	Q.	Who are your community and university partners?
12	A.	Our partners will be the City of Ithaca, the Town of Ithaca, Tompkins County
13		(collectively, the "Ithaca Region") and Cornell University ("Cornell").
14	Q.	Why did the Companies select the Ithaca Region as the community partner and
15		Cornell as the university partner?
16	A.	The Ithaca Region has established comprehensive energy and sustainability plans
17		that align with the principles at the foundation of REV. The ESC Project will
18		enable the Ithaca Region to make significant strides toward its existing
19		sustainability goals and will provide operating insights to the Companies as well.
20		The City of Ithaca has a manageable number of customers (approximately
21		30,000). The ESC Project will target a concentrated geographic area within this
22		broader Community that comprises approximately 12,000 customers and 12

1		NYSEG circuits. In addition, the regional media market is robust, which is
2		important as the Companies seek to educate and engage customers and market
3		partners. We expect that many of these attributes will be attractive not only to us,
4		but to our potential market partners as well.
5		Cornell was selected as the university partner as it is a major research
6		institution that has also made significant commitments to energy and
7		sustainability goals through research, collaborative activities with entities in the
8		Ithaca region, and through its Atkinson Center for a Sustainable Future. Cornell
9		has expressed a strong interest in pursuing opportunities to partner with us on the
10		ESC Project and more broadly on energy-related research. The ESC Project will
11		support the synergistic opportunities of the strong community/university/utility
12		partnership.
13	Q.	What are the immediate implications of these partnerships for the ESC Project?
14	A.	These partnerships will support engagement among the Ithaca Region, Cornell,
15		the Companies, and our customers. This engagement will be enhanced because
16		the Ithaca Region and Cornell share a commitment to energy education,
17		engagement, and innovative energy solutions.
18	Q.	Please describe the scope of the ESC Project in more detail.
19	A.	The ESC Project includes initiatives ("program elements") that are designed to:
20		1) build the Companies' capabilities as the DSP; 2) meet REV policy objectives;
21		and 3) meet the objectives of the Companies' community, university, and market
22		partners. Program elements can be grouped into three categories: 1) integrated

1		system planning, which includes program elements that will build and establish
2		processes and best practices for system planning; 2) market operations, including
3		program initiatives that enable customer and community engagement as well as
4		the development of competitive markets for energy products and services on the
5		distribution network; and 3) grid operations, which include initiatives and
6		investments to enhance how a more dynamic grid is operated by enhancing the
7		degree of automation on the system in addition to providing tools and information
8		to customers and partners.
9		These program elements, in combination with our phased deployment of
10		AMI, will provide the network capabilities and other functionalities that make it
11		possible to examine alternative approaches to engage customers and create
12		opportunities for market-facing partners to test consumer interest in a wide range
13		of end-use technologies and services. This experience will also provide third
14		parties the ability to refine their business models and processes based on actual
15		market conditions.
16	Q.	What are the Companies able to share at this point regarding other potential
17		partners?
18	A.	We have been working with several partners, including additional research
19		partners (which include Binghamton University and RIT) and the DOE. We have
20		also engaged in discussions with over a dozen market partners to determine their
21		interest in participating in various aspects of the ESC Project.

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1	Q.	How do the Companies plan to implement the ESC Project?
2	A.	The ESC Project is being implemented in four overlapping phases. The first
3		implementation phase, now underway, involves initial planning and schedule
4		development as well as securing regulatory support for the ESC Project. Initial
5		development of the ESC Project's governance structures is also taking place in
6		Phase 1, as are preliminary customer and Ithaca Region engagement efforts. The
7		second phase is planned to commence in early 2016 and will focus on more
8		detailed planning and early actions. The Companies plan to implement necessary
9		automation investments in Phase 2, and will begin more involved customer,
10		community, and market engagement activities. The third implementation phase is
11		planned to begin in 2017. In addition to advancing the objectives of program
12		elements initiated in earlier ESC Project phases, Phase 3 will focus on the
13		deployment of enabling technologies (e.g., AMI) and market development.
14		Phase 3 will also include work in partnership with market participants to
15		validate emerging business models. The fourth and culminating phase of the ESC
16		Project will overlap with the third phase. Phase 4 activities will draw insights
17		from the data and experience gathered throughout the earlier phases of the ESC
18		Project to identify new initiatives or programs that will continue REV learning,
19		while leveraging the test-bed environment.
20		In each phase of the ESC Project, we will identify lessons learned and
21		refine existing processes and best practices to use within the ESC Project and
22		throughout New York State. We will also continually address market issues,

1		including enabling management and control of DER and encouragement of more
2		advanced third party products and services throughout the ESC Project. As noted
3		above, knowledge and experience gained in the early phases of the ESC Project
4		will help inform timely deployment of program elements to other areas across the
5		NYSEG and RG&E service territories and potentially across New York.
6	Q.	Where are the Companies in the planning process?
7	A.	The Companies have developed program elements and cost estimates for the
8		DSP-related program elements of the ESC Project. In addition, we have
9		established strong working relationships with our community and university
10		partners. For the remainder of 2015, our primary work efforts will be on refining
11		the current plans and partnerships and supporting development of ESC Project-
12		supported demonstration projects to be filed on July 1, 2015. Finally, in
13		collaboration with our community and university partners, the Companies have
14		identified the development of community-focused Integrated Distribution System
15		Planning ("Integrated Plan"). Development of the Integrated Plan will provide an
16		opportunity to collaborate with motivated market and community partners, and
17		will leverage the existing energy and sustainability plans that have been
18		developed by the Ithaca Region and Cornell.
19	Q.	Have you estimated the costs for the ESC Project?
20	A.	Yes, we have developed cost estimates for each program element for which the
21		Companies currently plan to make investments. These program elements include:
22		1) Integrated System Planning; 2) Grid Automation and Communications;

	3) Volt/VAR Optimization; 4) Customer Research and Engagement; 5) Customer
	Communications Platform; 6) Customer Web Portal; and 7) Joint Partnership
	Development.
	The expenditure currently anticipated for these program elements is
	approximately \$15.5 million, including: \$6.0 million in 2016; \$5.5 million in
	2017; and \$4.0 million after 2017. These amounts do not include the initial phase
	of AMI deployment.
	The Companies will collaborate with market participants and support
	market-based program elements which should be funded by market participants to
	the extent possible. To the degree that the providers of products and services for
	these program elements do not materialize or require a utility investment, the
	Company will need to assess whether benefits warrant utility investment on
	behalf of customers. In such an instance, we would plan to consult with the
	Commission to secure approval to incur costs and recover them through an
	appropriate mechanism.
Q.	How do the Companies propose to recover the costs associated with the ESC
	Project?
A.	Following the general guidance provided in the Track 1 Order, the Companies'
	proposed recovery mechanism will minimize customer bill impacts. The
	Companies propose to use \$5.0 million of previously reserved economic
	Companies propose to use \$5.0 million of previously reserved economic development funds in the following manner: 1) \$2.7 million to cover operating
	Q. A.

1		remaining costs are expected to be charged to capital. This cost recovery proposal
2		will have a <u>de minimis</u> effect on delivery rates during the Rate Year.
3	Q.	Have the Companies performed an initial assessment of the benefits that are
4		expected from the ESC Project?
5	A.	Yes. As described above, the Companies have selected program elements that
6		will: 1) advance the REV policy goals; 2) inform the deployment of systems and
7		technologies required to fulfill the REV vision at scale; and 3) enable more
8		informed and successful customer and community engagement. At this stage,
9		however, the composition of all program elements that will be completed as part
10		of the ESC Project Package is not yet finalized. We expect to provide additional
11		detail in forthcoming regulatory filings.
12		B. <u>Demonstration Projects</u>
12 13	Q.	B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration
12 13 14	Q.	 B. <u>Demonstration Projects</u> What did the Track 1 Order determine with respect to utility demonstration projects?
12 13 14 15	Q. A.	B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by
12 13 14 15 16	Q. A.	B.Demonstration ProjectsWhat did the Track 1 Order determine with respect to utility demonstrationprojects?The Track 1 Order directed each utility to file demonstration projects byJuly 1, 2015, if they had not already been filed as part of a rate case. The Track 1
12 13 14 15 16 17	Q. A.	 B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by July 1, 2015, if they had not already been filed as part of a rate case. The Track 1 Order further confirmed that the Commission intended to apply the approval
12 13 14 15 16 17 18	Q. A.	 B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by July 1, 2015, if they had not already been filed as part of a rate case. The Track 1 Order further confirmed that the Commission intended to apply the approval criteria that it identified in its Memorandum and Resolution on Demonstration
12 13 14 15 16 17 18 19	Q. A.	 B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by July 1, 2015, if they had not already been filed as part of a rate case. The Track 1 Order further confirmed that the Commission intended to apply the approval criteria that it identified in its Memorandum and Resolution on Demonstration Projects issued on December 12, 2014 in the REV Policy Proceeding and adopted
12 13 14 15 16 17 18 19 20	Q. A.	 B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by July 1, 2015, if they had not already been filed as part of a rate case. The Track 1 Order further confirmed that the Commission intended to apply the approval criteria that it identified in its Memorandum and Resolution on Demonstration Projects issued on December 12, 2014 in the REV Policy Proceeding and adopted by the Commission in the Track 1 Order. The Track 1 Order and the other other
12 13 14 15 16 17 18 19 20 21	Q.	 B. Demonstration Projects What did the Track 1 Order determine with respect to utility demonstration projects? The Track 1 Order directed each utility to file demonstration projects by July 1, 2015, if they had not already been filed as part of a rate case. The Track 1 Order further confirmed that the Commission intended to apply the approval criteria that it identified in its Memorandum and Resolution on Demonstration Projects issued on December 12, 2014 in the REV Policy Proceeding and adopted by the Commission in the Track 1 Order. The Track 1 Order also provided for

	recovery the annual incremental demonstration project costs that are incurred
	prior to the Rate Year. The Track 1 Order effectively established an initial capital
	cost recovery cap of approximately \$28 million for total NYSEG and RG&E
	demonstration project costs.
Q.	What are the Companies' plans with respect to proposed demonstration projects?
A.	We are actively working with Staff, NYSERDA, market participants, and other
	key stakeholders to develop a variety of demonstration projects for
	implementation beginning in 2015. The focus of such projects will be on testing
	market participation and alternative business models for the provision of DER
	services. We will file the Companies' proposed demonstration projects by
	July 1, 2015. As described above, some of our proposed demonstration projects
	may leverage the preliminary work with our community and university partners in
	the ESC Project and may be based in the Ithaca area.
	V. <u>REV RATE YEAR IMPLICATIONS</u>
Q.	Are the implications of REV on the Rate Year level of expenses and rate base
	fully resolved at this time?
A.	No. The REV Policy Proceeding is an ongoing process with many policy issues
	still to be resolved over the next several months and years. At this point, the
	Companies are participating fully in the REV Policy Proceeding as well as in a
	number of REV-related proceedings. We are also proceeding with investments
	that are clearly mandated by the Track 1 Order as well as investments that support
	REV which were already planned by the Companies. We will work hard to
	Q. A.

1		accommodate changes that may result from REV policy development expected
2		within the next few months. The Companies also anticipate that the Commission
3		and Staff will provide further policy guidance and/or specific implementation
4		directives during the rate case suspension period, which will likely impact the
5		Companies' expenditures prior to and during the Rate Year.
6		For example, the Companies will be filing their DSIP on January 15,
7		2016, based on guidance currently scheduled to be provided by Staff in early
8		August. The DSIP is a multi-year filing that will provide, among other
9		components, the Companies' proposed implementation plan to build, operate, and
10		maintain the DSP and its associated functions. The DSIP filing will include a
11		plan to incorporate DER into the Companies' integrated distribution system
12		planning function. The DSIP filing will invariably impact the projected level of
13		expenditures and capital investments that occur during and after the Rate Year,
14		and will likely have an impact on expenses that the Companies incur prior to the
15		Rate Year.
16	Q.	What are the implications of other REV-related uncertainties for the rate case?
17	A.	The Companies will need to revisit REV impacts in response to Commission

A. The Companies with need to revisit KEV impacts in response to Commission
 policy decisions and Staff guidance issued during the suspension period and,
 absent specific Commission direction regarding alternate cost recovery
 mechanisms for new REV-related expenditures, it may become necessary to
 update Rate Year expense and rate base projections in response to particularly
 significant developments. The DSIP filing is likely to be the most significant of

1		these updates and may require separate consideration by the Commission given its
2		scheduled timing. Because of the many ongoing developments in the REV Policy
3		Proceeding and related proceedings, it is appropriate for the Commission to
4		authorize a separate recovery mechanism for a variety of uncertain/unknown
5		REV-related costs, including but not limited to DSIP expenditures and
6		demonstration project costs.
7	Q.	Are the Companies making any specific REV-related cost recovery requests in
8		this proceeding?
9	A.	Yes. We are seeking Commission approval to proceed with the ESC Project and
10		approval of the specific funding and cost recovery approaches proposed in our
11		testimony for associated expenditures and capital investments. As discussed
12		earlier, these cost recovery approaches have been structured to minimize near-
13		term impacts on delivery rates. We are also seeking authority to recover those
14		REV-related incremental expenses, primarily consulting and legal fees that have
15		occurred and continue to occur prior to the beginning of the Rate Year. Such
16		expenses are currently being deferred by the Companies under the terms of their
17		current Rate Plans. Finally, as noted above, it is also possible that the Companies
18		may make other REV-related expenditures prior to and during the Rate Year as
19		the result of new Commission orders or new guidance from Staff. It is
20		appropriate for the Commission to establish a mechanism or mechanisms to
21		recover these expenditures that would not have been incurred absent REV or
22		various REV-related proceedings.

1		Staff has suggested in its REV Panel testimony in Case 14-E-0493 (2014
2		Orange and Rockland Utilities, Inc. rate case) that most REV-related cost
3		recovery will be a matter to be resolved on a generic basis in Track 2. The Track
4		2 Order is anticipated to be issued well after the filing of these rate cases. To the
5		extent that REV-related cost recovery is not fully resolved in the Track 2 Order,
6		the Companies would request recovery of any incremental costs necessary to
7		build and maintain the DSP as well as costs to implement other REV-related
8		items when we file the DSP.
9	Q.	Why are you placing an emphasis on "incremental" costs in your prior response?
10	A.	Many of our current and ongoing investments in areas supportive of REV
11		concepts are not, by definition, incremental costs associated with REV and the
12		REV-related proceedings. The Companies have been and will continue to make
13		substantial investments to enhance their distribution and communications
14		networks, including advanced metering, modernization, and grid automation.
15		Such investments are REV-supportive because they improve our ability to
16		monitor and control the distribution network and are being made as part of the
17		Companies' proactive efforts to meet our obligations while reflecting customer,
18		technology, and regulatory trends as they evolve. In planning these types of
19		investments, we are responding to the same industry-wide trends that led the
20		Commission to initiate the REV proceeding, including customer demands for
21		greater reliability and resiliency and an expected increase in the interest in, and
22		penetration of, customer-sited generation. These investments are certainly

1		supportive of REV and are in many respects foundational to REV
2		implementation.
3		While the Companies do not consider these type of investments to be
4		incremental and solely attributable to REV, it is quite possible that REV's
5		implementation schedule may increase the priority of these investments, requiring
6		an acceleration in their timing, which could create new incremental expenditures
7		prior to and during the Rate Year that we could not anticipate at this time. In
8		addition, new technology investments may be required as the result of future Staff
9		guidance regarding the DSIP and DSIP implementation. These and many other
10		priorities, including the need to continue to replace our aging infrastructure, drive
11		our capital planning and budgeting process.
12	Q.	Is the overall approach to cost recovery requested by the Panel consistent with the
13		Commission's views as expressed in the Track 1 Order?
14	A.	Yes. On page 120 of the Track 1 Order, the Commission noted that
15		implementation of REV will be accomplished through both REV-related and rate
16		case filings, adding that "[t]he comprehensive, complex, and transformative
17		nature of REV will require years of iterative planning and increasingly granular
18		design determination."
19	Q.	Does this conclude your testimony at this time?
20	A.	Yes.