CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

SHARED SERVICES PANEL – GAS

TABLE OF CONTENTS

I. INTRODUCTION

Q. Would the members of the Shared Services Panel ("Panel") please state your names and business addresses?

A. Our names are Saddie L. Smith, Tracy Cureton, Terrence J. Walsh, Michelle Alexander, and Michele Campanella. Our business addresses are 4 Irving Place, New York, NY 10003 (for Smith, Walsh, Alexander, and Campanella), and 31-01 20th Avenue, Astoria, New York 11105 (for Cureton).

Q. By whom are the panel members employed?

A. We are all employed by Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company").

Q. Please explain your educational backgrounds, work experience, and current general responsibilities.

A. **(Smith)** I am currently the Vice President of Facilities for the Company. I have been employed by Con Edison since 1982, holding positions of increasing responsibility in a variety of support and operating positions including: Senior Attorney, Law Department; Director of Equal Employment Opportunity Affairs; Director of Facilities Management; Vice President, Electric Operations – Staten Island; and Secretary and Associate General Counsel.

Effective April 2008, I was elected to my current position, Vice President Facilities. As Vice President of Facilities, I am responsible for operating and maintaining over 40 facilities (office buildings and field operations locations/service centers) within the service territories of Con Edison and Orange and Rockland Utilities, Inc. ("O&R")including: planning and project management; engineering services; environment, health and safety; and office services. I earned a Juris Doctorate from Columbia University in 1978 and a Bachelor's Degree in Classics from Bowdoin College in 1975.

(Cureton) I have been employed by Con Edison since 1991. I was hired by Con Edison as a Management Intern. After completing the intern program, I held a variety of management positions of increasing responsibility in Electric Operations, including Operating Supervisor Splicing, Operating Supervisor Emergency Operations, Feeder Control Representative Brooklyn/Queens, Manager of Brooklyn/Queens Field Operations, Section Manager Brooklyn/Queens Underground West, Department Manager Distribution Engineering Secondary System Analysis. In December 2008, I was promoted to the position of General Manager Brooklyn/Queens Overhead and Services. In November 2011, I was assigned the position of

General Manager, Transportation Operations. I am responsible for all the garages throughout Con Edison and O&R as well as Automotive Engineering and Fleet Administration. I received a Bachelor of Science degree in Marine Engineering from SUNY Maritime College in 1991. In 1998, I received a Master of Science degree in Energy Management from the New York Institute of Technology.

(**Walsh)** I have been employed by Con Edison since 1980. I have served as Director of Information Technology Planning in the Company's Information Resources Department for the past 12 years. Prior to my current position, I was Manager of Network Systems, Technical Specialist, and MVS System Programmer. My responsibilities include establishing hardware and software standards for the computing, networking and communications environments. In addition, my area is responsible for defining and implementing cyber security policy for the Company. Prior to that, I managed the Network Systems group. I received a Bachelor of Science in Economics from Albany University in 1980.

(Alexander) I am employed as the Medical Director of Occupational Health. I have been employed by Con Edison since April 2011. I am responsible for

overseeing all clinical operations and programs addressing employee health, wellness and productivity. I am also responsible for policies pertaining to Occupational Health processes and sick absenteeism. I received a Bachelor of Science degree from Florida State University and a Medical Degree from the University of Florida, College of Medicine. Prior to Con Edison I worked as the Vice President and Chief Medical Officer at Angel Body Products and Corporate Medical Director and Chief Medical Review Officer at Sterling InfoSystems. I also worked at the Metropolitan Transportation Authority for many years as the Assistant Vice President of Occupational Health Services. I am a member of the American College of Occupational and Environmental Medicine and serve on the Executive board of New York State Occupational and Environmental Medicine. I am also a member of the National Medical Association.

(Campanella) I am the Director of Security Services. I graduated from Clarkson University, Potsdam, New York with a Bachelor of Science degree in Accounting in 1978 and from New York Law School, New York, New York, with a Juris Doctor degree in 1989. I am an active member of the Security Committees for both the American Gas Association and the Edison Electric Institute. I am

also a member of the Domestic Security Alliance Council. Prior to Con Edison, I was a Special Agent of the Federal Bureau of Investigation ("FBI") from 1980 to 2008. Among other duties, I served as the Assistant Special Agent in Charge ("ASAC") in the Washington Field Office, a position that included oversight of the Security Branch. As the ASAC, I was responsible for the protection of the Attorney General of the United States and the Director of the FBI, the physical security of the properties within the Washington Field Office territory, and the investigative services related to personnel security, including polygraphs, background investigations, and clearances. Since September 2008, I have been the Director of Security Services for Con Edison. As the Director of Security Services, I formulate and direct security policies, practices and procedures for the Company. I direct the investigative and security related activities of twenty-eight investigators and staff; act as a liaison with Federal, State and local law enforcement agencies; advise senior executives on security-related matters; direct physical security surveys of Company facilities; and make and implement security recommendations throughout the Company. In addition, I develop specifications and monitor the performance of contract

guard services and implement training requirements for Company security personnel.

Q. Have any of you previously submitted testimony in a proceeding before the New York State Public Service Commission ("PSC" or the "Commission")?

A. Panel members Smith, Walsh, and Campanella testified in Case 09-E-0428, Case 09-G-0795, and Case 09-S-0794.

II. PURPOSE OF TESTIMONY

Q. Before beginning to explain the various projects and programs, please explain the purpose of the testimony and the relationship of Shared Services efforts to the Company as a whole.

A. Shared Services perform a number of different functions that support Company operations. They include logistical support activities; business software development; maintaining and improving computing, communications, and the supply chain infrastructure throughout the Company; hiring and training employees; and maintaining all of the Company's properties. All of the projects and programs discussed in our testimony are common to the Company's electric, gas and/or steam businesses, and, in some cases, to O&R. The Company Accounting Panel provides for the allocated share of these costs to Con Edison's electric, gas and/or steam service.

Q. Please summarize the Panel's testimony.

A. We describe numerous Shared Services efforts needed to support common programs throughout the Company. Throughout this testimony, we also discuss measures that Shared Services is taking to mitigate costs now, in the 12-month period ending December 31, 2014 ("Rate Year" or "RY1"), and beyond. With respect to operation and Maintenance ("O&M") expenses, in addition to providing projections for the Rate Year, the Company has included forecasted financial information for two annual periods beyond the Rate Year, i.e., the twelve month periods ending December 31 , 2015 and December 31, 2016 (which we will refer to as RY2 and RY3, respectively, for ease of reference). As to capital expenditures, the Company has included forecasts for 2013 to 2017.

First, we explain the Company's capital request for general equipment. As demonstrated in our testimony, general equipment is necessary for the Company's day-to-day operations. The Company is forecasting capital expenditures related to general equipment of: $60.2 million in 2013; $70.0 million in 2014; $66.1 million in 2015; $66.0 million in 2016; and $68.5 million in 2017.

Second, we discuss the current volatility of vehicle fuel prices and project costs for this expense for the Company's fleet in the Rate Year, as overseen by the Company's Central Field Services Department. Additionally, we describe capital projects sponsored by Central Field Services.

Third, we discuss the major information technology ("IT") related capital investments and two IT O&M expense programs.

Fourth, we describe the technological upgrades needed in the Occupational Health Department to address the changes in the medical health care field. We describe the Company's analysis of possible solutions for a fully integrated electronic system and explain the initial costs and potential cost savings associated with a new system. We also discuss three Human Resources capital programs needed to maintain and improve training and development throughout the Company. Regarding Human Resources O&M, we discuss our request for additional Gold Associates and Customer Operations instructors along with strike contingency costs.

Fifth, we address the need to strengthen the Company's existing security programs by providing for automated electric card access at an additional 13 strategic

facilities, the replacement of obsolete Digital Video Recorders ("DVRs") that record the camera activity, the systematic replacement of old/outdated closed circuit television ("CCTV") cameras, and the hiring of two additional technical systems specialists and one technical expert.

Finally, we explain the need to modernize, upgrade, and improve various equipment, systems and infrastructures associated with the various buildings coming under Facilities' responsibilities. Over the next three years, Facilities is planning to undertake nearly 150 capital projects. We will also discuss various Facilities O&M programs for the Rate Year.

Q. How has the Company's response to the cultural barriers identified in the most recent Management Audit affected the way the Shared Services organization operates?

A. Shared Services' contributions to the Company's efforts to implement cultural imperatives are demonstrated in many different ways, including the following examples:

Enhance Customer and Other External Relationships – the additional Customer Operations Instructors we are proposing will allow the Company to properly prepare the growing need for Customer Service Representatives who can handle customer phone inquiries;

Engender Openness, Fairness and Trust – the additional funding proposed for employee training will help prepare the Company's workforce for an ever-changing business landscape; and

Cost Management Consciousness – throughout our testimony, we discuss our efforts to mitigate costs and operate more efficiently.

Q. Do the projects and programs submitted by the Panel include any costs for escalation?

A. Yes. We applied general escalation rates and wage increase factors that we received from the Company Accounting Panel. Please refer to the Accounting Panel testimony for information on how these rates and factors were developed.

III. GENERAL EQUIPMENT

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

A. General Equipment represents specific categories of capital equipment that are classified under the Uniform System of Accounts as General Plant. This category is basically all the equipment that is necessary for the day-to-day functioning of the Company. 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-610-2.

Q. Do you have exhibits entitled "Capital-Shared Services-General Equipment" detailing Corporate Instruction CI-610-2 and each category of General Equipment?

A. Yes.

Q. Were they prepared under your direction and supervision?

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-1)

Q. What are the categories of General Equipment?

A. General Equipment consists of nine main categories of capital plant or "tools." Each is commonly referred to as an XM, which is a unique budget reference coding for the Company's General Equipment. The following is a list of the Company's XMs.

Office Furniture	(XM-1)
Transportation Equipment	(XM-2)
Stores Equipment	(XM-3)
Shop Equipment	(XM-4)
Laboratory Equipment	(XM-5)
Tools & Work Equipment	(XM-6)
Miscellaneous Equipment	(XM-7)
Communication Equipment	(XM-8)
Computer Equipment	(XM-10)

Q. Please generally describe the nature of and need for General Equipment.

A. General Equipment represents the tools and work equipment needed to keep the Company functioning. It ranges from desks in the office, bucket trucks for overhead operations, store room shelving, electrical test equipment, jack hammers and safety hoists to microwave communication equipment and even the computer used to write this testimony. These "work" tools are necessary and critical for employees to perform their job functions. Normal replacement for use and wear of this equipment or changing operations requirements create a constant replacement demand to provide the tools for Company employees to complete their tasks in a safe and efficient manner.

Q. Can you provide any specific examples that demonstrate the role of General Equipment in the Company's day-to-day operations?

A. Yes. The following example illustrates the vital role General Equipment plays and how it is interwoven into the Company's daily operations from the standpoints of reliability, efficiency and safety, and is apparent when visiting a typical work site. An underground splicing crew requires, in addition to splicing equipment such as a propane torch, a van (XM-2) to

deploy the crew to the site. A mandatory rescue device (XM-6) is setup for employee safety before entering the structure. A requisite examination of the site with the use of a gas detector (XM-5) tests the atmospheric conditions before proceeding with work. The actual work of splicing the cable requires the mechanic to use various cutter and crimper equipment (XM-6) to install the new section of cable. The work is recorded into the work management system through a personal computer (XM-10) and then the crew will be routed to the next location through the use of a radio (XM-8) mounted in their van (XM-2).

Q. Do you have exhibits that explain each category of General Equipment in more detail?

A. Yes. This information is included as part of Exhibit __ (SSP-1).

Q. Please discuss the manner in which General Equipment requirements are developed.

A. To begin, the Company has identified organizations that act as Control Agencies to meet corporate standards for quality and compatibility for this equipment and also provide for economies of scale in the purchase of this capital equipment. The Control Agencies are:

- Central Field Services ("CFS") Automotive Engineering/Fleet Administration

- Vehicles (XM-2).

- Equipment - Central Field Services
  - Stores Equipment (XM-3);
  - Laboratory Equipment (XM-5); and
  - Tools & Work (XM6).
- Equipment - Information Resources
  - Communication Equipment (XM-8); and
  - Computer Equipment (XM-10).
- Equipment - Facilities Management
  - Office Furniture (XM-1): and
  - Safety & Miscellaneous (XM-7).
- Equipment - Maintenance and Construction - Van Nest Shops
  - Shop Equipment (XM-4).

Q. Please explain how the General Equipment budgeting process works.

A. On an annual basis, each Control Agency develops projected costs for each XM category for which they are responsible. The projected spending levels are based on the Company's historical needs for such equipment and the budget review process in which each organization forecasts their capital equipment needs for five years. A price list is provided to user organizations to assist them in developing their General Equipment requirements.

The user organizations notify their respective Control Agencies of their expected needs by XM category over the next five year period. The appropriate Control Agencies review the submissions and compile all the requests. A final budget is approved for a one-year period each November for each XM category. Other operating needs may cause variations in the general equipment expenditures as well.

Q. Once the list is finalized, what do the Control Agencies do?

A. Each Control Agency issues purchase requisitions for its responsible category of General Equipment throughout the year. The Control Agency function is to standardize the equipment purchased to maintain quality, reliability and the safety of the employees using the equipment. This function also involves the aggregation of all General Equipment purchases to allow for the most competitive pricing. For example, CFS provides for a listing of transportation equipment that can be purchased such as cars, trucks, and mini-vans.

Q. Does the Control Agency also have a monitoring function for the XM budget under its responsibility?

A. Yes. The Control Agency monitors commitments and expenditures to avoid exceeding the authorization

levels established in the approved XM Budget for each user organization.

Q. How much does the Company plan on spending for General Equipment in 2012 and 2013?

A. In 2012, we spent approximately $59 million for General Equipment. In 2013 we project spending $60.2 million for General Equipment.

Q. What impact did Superstorm Sandy have on the Company's General Equipment?

A. While Superstorm Sandy caused damage to several categories of General Equipment, the most significant damage occurred to Company vehicles. Approximately 100 vehicles and pieces of equipment were damaged as a result of the storm. The Company is in the process of filing claims with its insurance carriers and will also seek other sources for reimbursement of these costs.

Q. Within each category of equipment, are there any changes between the 2012 projected spending and the 2013 forecast?

A. Yes. In 2013, we project an increase in Transportation Equipment (XM-2) for the replacement of cranes and heavy hauling vehicles for CFS. This vehicle equipment will be coming to the end of its service life, resulting in a spike in budgeted expenditures in 2013. While the Company strives to levelize replacement of

transportation vehicles that have reached the end of their useful economic life, highly specialized equipment, such as cranes, are one-time purchases that are incremental to transportation vehicle purchases in the five-year capital plan. These specialized machines can cost between $500,000 and $1.5 million. Replacement of this equipment is also based on an evaluation of the specific nature of upcoming construction projects.

Q. Are there any other significant increases in equipment in 2013?

A. Yes. We also project an increase in Computer Equipment (XM-10) for three major initiatives. First, we will be performing a technology refresh on server storage arrays that have reached end of supported life. These arrays are used to host the Company's electronic information including databases, emails and files. Second, we will be replacing our server backup technology with a new solution that can provide encryption for all electronic data as it is backed up. This will improve our protection of sensitive Company, customer and employee information. Third, we will be increasing network capacity to our server farms needed to provide reliable availability and performance to business systems and information.

Q. What is the Company requesting for General Equipment over the next four years, starting in 2014?

A. In 2014, we project to expend $70.0 million, followed by $66.1 million in 2015, $66.0 million in 2016 and $68.5 million in 2017.

Q. Why is the projected spending in these years higher than 2013?

A. The projected spending is higher in several XM categories as explained below.

- There is approximately a $3.3 million increase attributed to Communication Equipment (XM-8) and Computer Equipment (XM-10) in 2014.

  For XM-10, there is a $2.5 million increase for the purchase and installation of a new server farm, which includes the server, storage and network components. The reasons a new server is needed are described later in our testimony. This project will include:

  - Servers requiring hardware technology refresh;
  - Those not currently in an enterprise server farm today; and
  - Servers from 4 Irving Place data centers which will be decommissioned.

  For Communication Equipment (XM-8), there is a $0.8 million increase. This reflects in 2014 the Company's plans to deploy Voice over IP technology to substations

to enable point to point voice communications to the control centers. In addition, the Company will complete the implementation of Session Initialization Protocol technology to connect the Company's private phone network to the public telephone network using a computer network similar to the Internet.

- There is approximately a $5.5 million increase attributed to Stores Equipment (XM-3), Laboratory Equipment (XM-5), and Tools and Work Equipment (XM-6) from 2014 to 2017. Beginning 2014, we need to start replacing equipment that has exceeded its normal life expectancy and is resulting in higher maintenance costs for the Company. As discussed later in our testimony, these spending levels are needed for equipment replacement that has been deferred over the last few years.
- There is approximately a $1.1 million increase attributed to Transportation Equipment (XM-2) in 2014. This is attributable to spending reductions, over multiple years, on vehicle equipment purchases. Increased spending levels are needed for equipment replacement that has been deferred over the last few years.

Q. Have you prepared an exhibit entitled "General Equipment Trends" detailing historic and projected expenditures for XM General Equipment?

A. Yes.

Q. Was this exhibit prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-2)

Q. Can you now please explain for each category, the type of equipment purchased, the amounts expended in recent years and any mitigation steps taken to control the expenditures?

A. Yes, we will.

Q. Please describe the categories of equipment known as Stores Equipment (XM-3), Laboratory Equipment (XM-5), and Tools and Work Equipment (XM-6).

A. Central Field Services Capital Equipment Group is the Control Agency for XM-3, XM-5, and XM-6.

The XM-3 Budget category is designated for the replacement of warehouse and material handling equipment, including storage bins, pallet racks, pipe racks, shelving, and strapping/wrapping equipment. This equipment is used in the central warehouse/ distribution facility and regional storerooms to operate and maintain materials and supplies for

electric, gas and steam distribution equipment. The Company maintains a central warehouse to provide materials needed in the routine maintenance and construction of the Company's system, including the electric infrastructure. It also operates approximately 15 smaller satellite warehouses at various major workout locations. Some of the key warehouses are located at Van Nest (Bronx), College Point Boulevard (Queens), Third Avenue Yard (Brooklyn), and Neptune Avenue (Brooklyn). All these warehouse facilities are linked via work-processes and computer systems to facilitate the effective use of inventory and critical spare components. Materials are moved to and from the main warehouse as well as to field locations, such as specific street jobs or other electric locations where the material is needed such as a substation. The equipment in the XM-3 budget is necessary to maintain proper storage conditions and prepare items for secure shipment to their ultimate use.

Q. Please continue.

A. The XM-5 Budget category is designated for the replacement of laboratory testing equipment, which includes volt meters, atmospheric testers, recorders, and pressure gauges. These devices are used by field

forces to test and evaluate gas, electric and steam systems components.

The XM-6 Budget category is designated for the replacement of tools and equipment, including portable pumps, chain saws, and hydraulic jacks, pneumatic hammers, parts washers, and tire repair equipment. These devices are used by field forces to assist in the installation, repair and maintenance of gas, electric and steam systems components, as well as, for the repair of fleet vehicles. Additional information describing the various tools and instruments is included in Exhibit __ (SSP-1).

Q. What is the procedure or process associated with the replacement requirements for XM-3, XM-5 and XM-6 category?

A. Items covered under the XM-3, XM-5 and XM-6 categories are typically replaced when they are deemed beyond economical repair or in certain instances if a procedure or specification is changed. Procedure and/or specification changes are initiated by the operating department due to operating or work practice changes and can be related to new tasks, or improvements in safety, quality or productivity.

Q. Can you provide some examples of these changes?

A. Yes. Two examples are the replacement of retrieval devices and atmospheric gas detectors. The retrieval devices included in the XM-6 budget are used as rescue and material handling apparatus for our field crews that work in electrical enclosed spaces. The units are positioned over manholes and vaults and are used as lifting devices. The existing devices were improved based upon feedback from the field. Corporate EH&S and engineering improved the device by making specification changes to the unit. The new devices offer improved ergonomics and durability over the present units. The atmospheric gas detectors included in the XM-5 budget are used by field mechanics in many organizations throughout the Company to monitor the atmospheric conditions that they work in, typically underground vaults and manholes. In the past, when the electro-chemical sensors in the older detectors failed, they did not provide an indicator to the operator that it had stopped working. Corporate EH&S addressed this concern and newer technology was identified to replace the existing instruments. The new devices not only have sensors that provide an indicator when it fails, they also have the ability to test for additional types of gases, such as hydrogen sulfide.

Q. Please explain the ramifications if the Company is unable to acquire and have available the replacement tools and equipment in these categories.

A. The current inventory of tools and equipment would need to be maintained beyond their useful life. This would result in increased maintenance and repair costs on older tools and in potential delays to the operating organizations. In addition, if the Company is unable to take advantage of new tool and equipment technologies, such as noise reduction and ergonomics, this could potentially have an adverse affect on employee safety.

Q. Do the projected spending levels included in this case reflect any efforts by the Company to minimize expenditures for these tools and equipment?

A. Yes. Tools and equipment are evaluated before being replaced; only those that are deemed un-repairable or uneconomic to repair are replaced, except when the equipment is purchased due to operating or work practice changes requiring a new type of device. In addition, the majority of contracts utilized to purchase new tools and equipment are competitively bid and, where possible, orders are consolidated to take advantage of volume discounts.

Q. Can you also provide the actual historic spending levels for these categories?

A. Yes, this information is included as part of Exhibit __ (SSP-2).

Q. What is the projected spending for 2013 for these categories (XM-3, XM-5 and XM-6)?

A. We project to spend $104,500 in XM-3, $4.3 million in XM-5, and $2.8 million in XM-6 in 2013.

Q. What is the projected spending in the years 2014 to 2017?

A. In each of the years 2014 through 2017, we project our spending to increase to $417,000 in XM-3, $5,634,000 in XM-5 and $6,703,000 in XM-6.

Q. Why is the projected spending level increasing for each of these categories from 2013 levels?

A. Beginning in 2014, we will need to start replacing equipment that has exceeded its normal life expectancy and is resulting in higher maintenance costs for the Company. This includes items, such as, but not limited to wrapping and banding machines for XM-3, new model of gas detectors to replace our current fleet of Drager Miniwarns which are no longer produced for XM-5, and pumps, jackhammers, drills, generators, and various cutting tools for XM-6. These levels are needed for

equipment replacement that has been deferred over the past few years.

Q. Please discuss the next category of XM equipment.

A. The next category is items covered in General Equipment XM-2, which is for Vehicles and Equipment. The XM-2 category provides for the purchase of mobile equipment, such as trucks, cars, cranes, construction equipment and forklifts used throughout our operations. As noted above, the Control Agent for this equipment is CFS Automotive Engineering/Fleet Administration group. Under this category of expenditures, the Company owns approximately 4,000 over-the-road self-propelled vehicles, including passenger vehicles, bucket trucks and tractor-trailers. Factoring in other pieces of mobile equipment, like backhoes, aerial devices, forklifts and trailers used to move equipment and materials, the Company owns close to 6,100 items of transportation equipment. This figure includes highway, non-highway powered equipment, trailers and mounted equipment for tracking purposes. Exhibit __ (SSP-2) sets forth historical and projected XM-2 expenditures related to the replacement of existing equipment.

Q. Please describe the manner in which General Equipment XM-2 “Transportation Equipment” is budgeted.

A. The Company has a pre-determined methodology for selecting vehicles and mobile equipment(based on age, maintenance, and reliability). This methodology is based on the equivalent, uniform, annual cost ("EUAC") method. The methodology combines factors related to capital cost, residual value and cost of maintenance over the life of a representative asset to determine an appropriate point at which it makes financial sense to replace such asset. The Company's Transportation department maintains a database of these assets and their associated operating costs. It reviews the information annually, in addition to output from the EUAC model, as a starting point for its vehicle replacement decisions. The Company also employs its judgment and experience, as well as case-by-case evaluations of certain assets, in making its replacement decisions.

Q. Can you please explain in more detail the methodology employed for that review?

A. The Company uses historical, actual and expected maintenance data, as well as cost-of-money considerations, to determine the point at which it is most economical to replace an asset rather than endure increasing maintenance costs and reduced reliability that would adversely impact our ability to respond to

the maintenance of the T&D system. The EUAC model reviews the change in maintenance costs as the asset ages and, more specifically, it looks at the rate-of-change for maintenance costs. This optimizes the Company's overall cost to own and maintain these assets. The EUAC model identifies the optimum time to replace a deteriorating asset.

Q. How is that analysis used to budget from year to year?

A. The Company maintains a table of various asset-types and their ideal/economic replacement age. This is a starting point and is further refined by looking at the specific assets chosen as candidates for replacement. Based on that review, the Company may either retain an asset that has performed better than its peer group or accelerate the replacement of an asset that is performing poorly. For instance, the current expected life-cycle analysis for vacuum-trucks indicates it is advantageous to replace these types of assets roughly every eight years. That analysis, as well as those performed for other classes of assets, is based on nearly 30 years of accumulated maintenance data from the Company's Vehicle Management System.

The Company considers age, maintenance, history, usage, and technology advances in considering replacements. Therefore, a vacuum truck in Manhattan used seven days

a week for three shifts could be replaced before an older vehicle in Westchester that has two shifts of usage in a typical week because of higher usage/mileage. The final selection is made jointly between CFS and the operating areas.

Q. Is there any other analysis that is performed to determine which vehicles should be replaced?

A. Yes. The factors identified above are incorporated into a prioritization model for XM-2 spending. In the prioritization model, the vehicles that are identified as "beyond life-cycle" are rated using Transportation criteria (which includes vehicle life cycle age, reliability, and cost impacts) and are then prioritized based on this criteria:

- The highest priority are heavy-duty vehicles that are well-past due for replacement and/or equipment that would likely be condemned by the local repair facility if a major component were to fail. Loss of this equipment would result in significant incremental maintenance costs and lost productive field time.
- The next priority includes medium and light-duty trucks that are somewhat past-due for replacement and would impact cost and productivity, but to a lesser extent.

- o And finally, passenger vehicles that are past their normal replacement cycle represent the lowest priority.

Q. Can you provide the actual historic spending levels for vehicles and mobile equipment?

A. Yes, this information is included as part of Exhibit __ (SSP-2).

Q. What would be the ramifications of not meeting the purchase requirements in the XM-2 category?

A. The cost to operate mobile equipment beyond its economic life quickly compounds if not replaced at an optimal point in its life-cycle. Over time we have found that the cost to maintain this equipment can rise substantially in a short period of time if the replacement of equipment is deferred or delayed (based on the EUAC model). Reduced spending on replacement equipment would result in higher polluting, older and less reliable mobile equipment being kept in service. Vehicle availability may decrease and in some cases equipment would age beyond our ability to purchase replacement parts. The consequence of this would be the introduction of an adverse effect on operating personnel's ability to respond to emergencies and construction of needed electric, gas and steam projects. The Company cannot operate vehicles, such as

red wagons, flush trucks, or cranes that are not road worthy or capable of performing their functions. If adequate numbers of vehicles are not available to respond to system equipment failures, it would likely adversely affect the time to restore service to customers and thereby decrease the Company's ability to meet Commission-established service targets under the current Reliability Performance Mechanisms. Inadequate vehicle availability would also inhibit the Company's response to major storms. Further, inadequate vehicle availability could jeopardize the Company's ability to maintain a network in service when feeder contingencies occur during summer heat waves. Some equipment, were it to fail, could also put the employee operating the equipment at risk. While some vehicles can feasibly be maintained longer than the life-cycle would suggest with "average" performance, some critical equipment can begin to suffer structural failures due to age. The catastrophic mechanical failure of bucket-trucks, cable-pulling equipment, heavy trucks and cranes, for example, could result in injuries to equipment operators and the public.

Q. Do the proposed spending levels include any cost reduction efforts?

A. Yes, the Company's Transportation department periodically evaluates the life-cycle model described earlier. In some cases, Transportation employees have been able to work with manufacturers and engineers to improve maintenance designs and remove common causes of failures. For instance, in 2011, Transportation's engineers improved upon the design of its truck mounted cable pulling apparatus. The improved design incorporated stronger and more reliable components, as well as reduced the initial procurement cost by $10,000 per vehicle. We expect to see reduced maintenance costs by eliminating known failure points. In addition, by competitively bidding large contracts to multiple vendors and negotiating volume discounts with the major Original Equipment Manufacturers, the department leverages its buying power, reducing the up-front cost of the equipment. The department also employs highly-skilled mechanics, armed with appropriate technology to effectively diagnose and repair equipment. We believe that these factors reduce initial cost, cost-to-maintain and MTBF (mean-time between failures), all of which translate into being able to prolong the life of our assets and/or maximize the effect of our capital replacement programs. Furthermore, in 2012, fleet reductions amounted to 181

vehicles (that will not be replaced) which is consistent with the Liberty Audit Item #51 recommendation.

Q. What effect does prolonging the expected life of these assets have on capital spending?

A. Prolonging the life of these capital assets has allowed the Company to maintain or reduce projected spending levels in this category. Transportation continually looks for ways to extend the life or defer the replacement of vehicles and equipment (where practical). However, doing so (in some cases) may have an adverse effect on associated vehicle maintenance costs over the long-run. For example, due to the complexity, the number of components and the environment that a vacuum-truck operates in, extending the life of this type of truck will likely result in an increase in operating and maintenance costs over and above its normal life.

Q. Are there any factors that increase the initial purchase cost of Transportation assets?

A. Yes, the EPA requires diesel-emission engine control equipment for new vehicles. In previous years, these diesel emissions components added approximately $13,500 to the purchase price of every diesel vehicle. For 2013, new on-highway diesel engine regulations call for

the addition of On-Board-Diagnostics systems adding (approximately) an additional $1,000 per vehicle. The Company annually purchases about 150 diesel vehicles that are affected by these regulations, which have added a total cost of approximately $2 million annually. In addition, greenhouse gas and fuel-efficiency standards are scheduled to take effect in 2014 and 2017 and, as a result, the additional cost of meeting these regulatory standards is not known at this time.

Q. What is the projected spending from 2013 to 2017 for Transportation Equipment XM-2?

A. We project to spend $35.4 million in 2013, $36.4 million in 2014, $37.9 million in 2015, $37.9 million in 2016, and $37.9 million in 2017.

Q. Please continue.

A. The next category is for items covered in General Equipment XM-1 “Office Furniture” and XM-7 “Miscellaneous Equipment.” The XM-1 budget category represents the portion of the Capital Budget devoted to the purchase of general office furniture, business machines, modular office partitions, floor carpeting and window air conditioners. The XM-7 budget category represents the Company’s miscellaneous equipment, such as cafeteria and kitchen equipment, safety and training

equipment, fire protection, audio visual and photographic equipment which includes security cameras and recorders, as well as sign and advertising displays.

Q. Please explain the ramifications if the Company is unable to acquire the needed equipment in these two categories.

A. Our work forces would be hindered from meeting their objectives in an efficient and safe manner. For example, certain employees, due to their medical conditions, require ergonomic ("ERGO") furniture to be able to perform their duties. Also included in the XM-7 equipment category is the safety lifting devices which allow employees who are overcome in confined space to be lifted out of such spaces by fellow employees from above. Self Contained Breathing Apparatus ("SCBA") and Respirators with Escape Bottles for entry by employees in work areas where the atmosphere is suspect in supporting human life (e.g., underground structures and confined spaces) are part of the XM-7 budget. Other XM-7 equipment includes ice machines at work out locations to provide ice to keep crews with cool drinking water in the summer and portable respirator mask fit testing devices to test for leaks when conditions require employees to wear

respirators. Other critical needs include the replacement of broken or inoperable security cameras and recorders at workout locations and sub-stations.

Q. What items have historically been purchased in XM-1?

A. Furniture typically comprised of 40% modular furniture, 24% chairs, 12% file cabinets, 12% for ERGO chairs, 6% for tables, 3% for window air conditioners and 3% miscellaneous furniture. We project this mix to generally remain constant for both 2012 and 2013.

Q. How much have you previously expended and how much do you plan to spend from 2013 to 2017 for furniture?

A. Over the period 2008 to 2011, we have spent, on average, $1.1 million for the replacement of furniture. We expect this spending level to decrease from 2013 to 2017 to approximately $850,000 per year, as a result of restacking and open office space initiatives at workout locations which have decreased the need for furniture. In addition, the Company re-uses furniture following office renovations to replace worn out furniture as a cost mitigation effort.

Q. Please describe other cost reduction efforts by the Company in the XM-1 category of costs?

A. Tools and office equipment are evaluated before being replaced and only those that are deemed un-repairable are replaced. As a general practice, Facilities

recycles desks, chairs and office partitions whenever possible. In addition, the majority of contracts utilized to purchase new tools and equipment are competitively bid and where possible orders are consolidated to take advantage of volume discounts.

Q. What is the mix of equipment purchased under XM-7?

A. In 2011 we purchased $0.9 million of miscellaneous equipment, comprised of 55% Audio and video, 20% Security cameras/card access controls, 15% training equipment and 10% Safety equipment. We expect this mix to change in 2012 and 2013 with the purchase of additional security cameras and access control equipment.

Q. How much have you previously expended and plan to spend from 2013 to 2017 for the XM-7 category?

A. Over the period 2008 to 2011, we have spent, on average, $1.8 million for the replacement of miscellaneous equipment. We expect this spending level to decrease from 2013 to 2017 to approximately $900,000 per year. This decrease is mostly attributable to advances in technology which require less audio/visual equipment purchases under this category.

Q. Please describe the category of equipment known as XM-4.

A. This is the Shop Equipment category. The equipment includes floor grinders, lathes, milling machines, welding equipment, drill presses, jib cranes and hoists, and specialized equipment to repair network transformers and switch gear equipment.

Q. Please describe how the budget is designed for XM-4 equipment and what the basis is for the equipment requirement and use.

A. The XM-4 Budget is designated for the replacement of Shop Equipment at the Van Nest Shops Operations Facility, the Transformer Shop in Astoria, and Electric Operations Metering Facility located at Van Dam Street in Long Island City. The equipment requirement is based upon the work load, which includes emergency fabrication of specialized parts. The mentioned facilities support the electric and gas distribution operations, sub-station operations, and steam generating stations. Failing to perform this support work could have an adverse impact on delivery time of repairs and fabricating new parts.

Q. What are some of the planned equipment replacement for Van Nest's Shop Operations in 2013 to 2017.

A. Some of our major equipment purchases under this category will include a CNC Pipe bender, a MAZAK VariAxis Machine, Faro Arm, and Replacement Flowjet.

Q. Describe the types of equipment purchased in XM-4?

A. In 2011 we purchased $164,000 of equipment comprised of 54% Milling Machines, 32% Flow Jet/ Welding and Cutters, 11% saws and 3% Sanders. We expect this mix to continue in the years 2012, 2013, and 2014.

Q. How much do you plan to spend from 2013 to 2017 in this category?

A. We expect to spend approximately $334,000 annually from 2013 to 2017.

Q. Please describe the categories of equipment known as Communication Equipment (XM-8) and Computer Equipment (XM-10).

A. The equipment in XM-8 and XM-10 provide the means for Company employees to communicate and access business systems, including the Customer Information System, Outage Management systems, electric, gas and steam monitoring and control systems as well as financial, Human Resource and legal systems. Information Resources' Operations Support Group is the Control Agency for XM-8 and XM-10. The equipment in XM-8 "Communication Equipment" is capital communications equipment, including fiber optic cables, electronic and optical communications protocol components, transmitters, receivers, amplifiers, reflectors, towers, radio telephones, vehicle mounted radios,

walkie-talkies, telephone switches and microwave equipment. The equipment in XM-10 "Computer Equipment" is computer equipment used throughout the Company and includes laptops, desktops, mobile data terminals, servers, storage, UPS devices, mainframes, printers, plotters and LAN/WAN network equipment, called routers and switches.

Q. What is the procedure or process associated with the replacement requirements for the XM-8 and XM-10 categories?

A. Items covered under the computer equipment (XM-10) categories are normally replaced on industry standard practice of five years or as business requirements dictate new technology specifications. Over the past two years, however, through the use of virtualization technology, we have been able to extend the replacement of desktops and laptops to seven to eight years. Communication Equipment (XM-8) has an extended life and is replaced at eight to ten year increments. This equipment is mostly carrier grade communications equipment to support voice and other communication requirements.

Q. Please provide a summary of the approximate number of PCs, Servers, and Networks within Con Edison?

A. As of December 31, 2012:

- Number of Desktops: 8,876
- Number of Laptops: 6,285
- Number of Servers: 1,582
- Number of Networks: 1 Logical Corporate Information IP network and 1 Operations network are used for electric, gas and steam control and SCADA applications.

In addition to the network mentioned above, there are control networks that are separated by firewalls. Firewalls are devices that provide security between networks. The control networks are located in our electric, gas and steam control centers. These number approximately 15 and use a combination of Company-owned and public carrier communications circuits to operate. The circuits are used for computer applications, voice services and critical feeder protection and SCADA applications.

Q. How many computer devices are purchased on a yearly basis?

A. Recently (i.e., in 2011 and 2012), the total number of laptops and desktops has stabilized and purchases are mostly limited to address obsolescence and repairs. The number of computer devices purchased is listed in the chart below. In 2013, we will be replacing a large number of obsolete desktop computers and Mobile Data

Terminals ("MDTs"). However, we do not anticipate any additional growth in this area in the Rate Year. One area of growth is expected to occur in the newer tablet market where field crews can use less expensive and more functional devices than the traditional MDTs. The rising number of field devices is based on the need for mobile dispatch applications to access corporate data from remote locations. Our mobile operating workforce requires immediate access to maps and procedures to perform their jobs wherever their work takes them. Our purchases are identified as:

Category	2010	2011	2012	Projected 2013
Desktops	3,678	1,876	1,813	2,000
Tablets	0	0	0	1,000
Laptops	1,963	1,208	1,200	1,000
MDTs	373	0	0	300
Total	6,014	3,084	3,013	4,300

Q. Please explain the ramifications for the Company if it is unable to meet its projected needs in the XM-8 and XM-10 categories?

A. In XM-8, failure to perform upgrades and expansion to the Company's communication systems would result in an increased failure rate and limit performance and capacity of communication services affecting systems,

voice communications and feeder protection circuits. Reliable communications systems and distribution automation systems are required to support field restoration activities and the automation of the distribution system to maintain electric, gas and steam services. Con Edison operates a wireless communication system for distribution data services. The system provides above-street radio coverage and is used to minimize outage duration and provide more rapid restoration during system disturbances, like storms and feeder trip-outs due to peak loading and faults. Con Edison operates a single master site wireless communication system for voice service. The system provides on-street radio coverage for Con Edison's operations personnel throughout its 660-square mile service territory. It incorporates a man-down safety feature that alerts control center personnel to substation operators in distress during switching operations on the transmission and distribution substation equipment and is essential to Con Edison's public utility services in both routine and emergency situations. This equipment is essential to provide both system reliability and employee safety.

If the needed equipment in the XM-10 category were not available, the Company's ability to provide reliable

access to all Company computing systems would be adversely impacted. This equipment is necessary and essential to the operations, maintenance and expansion of the electric, gas, and steam transmission and distribution systems, and is also an integral part of other infrastructure and business systems used by Customer Operations, Finance and Transportation.

Q. Did you provide any exhibits for the XM-8 and XM-10 General Equipment request?

A. Yes, these are included in Exhibit SSP-1.

Q. Do the levels included in these General Equipment categories reflect any cost reduction efforts by the Company?

A. Yes.

Q. Please explain.

A. Computer hardware is purchased in bulk and competitively bid to take advantage of volume discount. Additional policies, technologies and centralized control of the procurement and deployment of computers have resulted in the elimination of recent growth trends. Improved remote access technologies and improved asset management processes have eliminated the need for many employees to have multiple PCs. This has eliminated PC growth trends we experienced in previous years. Purchases are made only to replace obsolete

computers and in some cases these devices will be tablets. In addition, Information Resources has initiated programs to optimize its mainframe costs. One such program leverages IBM hardware and software products against non-IBM vendors suggesting suitable IBM replacement products. Through the usage of monitoring tools, we have discovered duplicate functionality between software products as well as products not being utilized. For products of which there are no suitable IBM replacements, Information Resources has been utilizing contract negotiation best practices from an industry consulting expert, Gartner Group, for price and duration of contracts. In addition, through performance tuning, Information Resources has been attempting to improve the run time efficiencies of several of the largest production batch jobs. Con Edison has instituted the use of virtual server and Storage Area Network ("SAN") technology, which allows more efficient use of computer hardware and reduces costs.

Virtualization of servers allows multiple logical servers to reside on a single physical server and reduce unused computer cycles. We are continuing the server virtualization program and during the past year surpassed the 50% virtualization rate for all servers.

This has reduced the need for over 1000 physical servers plus the costs of building two new server farms to host them. This also improves disaster recovery and reduces the power and cooling necessary for physical servers. Cost savings are realized by avoiding the need to acquire as many physical servers and house those servers in server farms with the appropriate cooling and power capacity. Each virtual server saves approximately $7,000 in avoided capital costs.

Q. How are computers used at Con Edison?

A. Computers are essential to conducting business at Con Edison and have specifically become critical to business applications. There are over 500 business applications accessed via the Company computers and the number grows each year. E-mail and calendaring functions are essential communication and time management tools for employees. Computers provide access to the information and control of the energy management systems used in control centers and customer billing information is accessed directly from the computers.

Q. How much do you plan to spend in 2013 and 2014 for these XM categories?

A. In 2013, we expect to spend $3.0 million and $12.5 million on XM-8 and XM-10, respectively. In 2014, we

expect to spend $3.8 million and $15.0 million on XM-8 and XM-10, respectively.

Q. Please describe how Con Edison intends to utilize carrier wireless networks to support its smart grid projects.

A. Con Edison has worked with Verizon Wireless to develop a private carrier solution that will allow the Company to securely communicate with smart grid assets such as remote switches and remote metering points using Verizon Wireless' network. This is accomplished by using network addressing that allows the Company to communicate with the remote devices without using the internet. The field devices are connected to Verizon Wireless' network but are not exposed to the internet. Con Edison has established a connection into Verizon Wireless' network that allows it to communicate directly with these devices. This solution provides a cost effective means of supporting remote smart grid applications in a secure manner. The alternative would have been for Con Edison to invest capital in building out its own private communications system to connect to these remote devices.

IV. CENTRAL FIELD SERVICES

Q. Please explain the services CFS provides.

A. CFS is a support organization made up of three major groups: (1)Stores Operations, which operates and manages a central warehouse/distribution facility and regional storerooms that provide materials and supplies for electric, gas and steam distribution equipment; (2) Transportation Operations, which provides maintenance and repairs to the corporate fleet and manages the fleet vehicle replacement program; and (3) Astoria Operations, which provides crane and rigging services, tanker support, technical services and material delivery service Company-wide. CFS also provides logistics and support services during contingencies and other emergencies and manages and operates a hazardous waste storage facility in Astoria.

Vehicle Fuel

Q. Please explain the recent history associated with the Company’s vehicle fuel expenses.

A. Company vehicle fuel includes both gasoline and biodiesel fuel. In 2010, the Company expended $10.9 million for 3.53 million gallons of vehicle fuel used to run the Company’s fleet vehicles. In 2011, the Company expended $13.7 million for 3.5 million gallons of fuel for the fleet. In 2010 and 2011 both gasoline and biodiesel fuel experienced significant variations in pricing. During 2011 alone, gasoline ranged from a

low of $3.231/gallon to a high of $4.035/gallon. Similarly, biodiesel fuel ranged from a low of $3.460/gallon to a high of $4.185/gallon.

Q. Does Con Edison see any pattern to these costs?

A. While there has been significant volatility in recent years, the overall trend has been increasing prices over the last couple of decades. With the exception of 2009 where prices were lower, the Company has seen price-per-gallon increases annually from 2003 through the present.

Q. Can you please explain some of the drivers of vehicle fuel prices seen by the Company?

A. Some of the drivers causing increased prices include world events, market forces and, to a lesser extent, mandated reformulation of fuels for certain markets. Previous U.S. EPA enacted requirements have mandated the use of ultra-low sulfur diesel fuel ("ULSD") that has increased the cost of the fuel. Additionally, the Department of Energy ("DOE") regulates the fleets of "fuel providers" and we are obliged to use an increasing portion of alternate or renewable fuels annually. The Company considered several options and has chosen biodiesel as part of its plan to meet DOE regulations. This fuel comes at an additional premium.

Q. What is the current status of vehicle fuel prices?

A. Presently, the existing economic situation has seen an increase in oil and petroleum distillate prices which continues to drive prices higher. All current indications (discussed in more detail below) are that prices will continue to rise through 2013 and the Rate Year.

Q. What is the Company's current estimate for fuel costs in the Rate Year?

A. The Company's current estimate is $6.1 million for gasoline and $6.5 million for biodiesel.

Q. What is your current estimate of Rate Year vehicle fuel costs based on?

A. The Rate Year forecasts are based on the DOE, Energy Information Administration's – Short-Term Energy Outlook ("DOE EIA-STEO") fuel prices report ("STEO report") and the actual fuel prices paid by Con Edison. The STEO report provides an independent reference for future fuel prices. The Company forecasting methodology uses DOE historical and forecasted price/gallon and the actual historical year price/gallon paid by the Company for both commodities. Our formula considers the net effect of our bulk purchase agreements; local taxes and fees; and in the case of biodiesel, the bio additive. The methodology,

expressed as formulas, is shown below for gas and diesel.

Gasoline(The Petroleum Administration for Defense District – East Coast, PADD-1, is used for gasoline projections):

[(Con Edison Historic Year (2011 Average $/gallon) / (DOE Historic Year (2011) PADD-1 $/gallon)] * (DOE Future PADD-1) = Con Edison Future $/gallon. The product of this calculation would be multiplied times the gallons of fuel used in the Rate Year.

Using this formula for the Rate Year, we would have the following calculation -- ($3.728/$3.576) * ($3.535) = $3.685; then $3.685 * 1,650,000 gallons = $6,080,250 expected gasoline expenditures for RY1

Diesel (B20 Biodiesel):

[(Con Edison Historic Year (2011) Average $/gallon) / (DOE Historic Year (2011) National Average $/gallon)] * (DOE Future National Average) = CECONY Future $/gallon. The product is again multiplied times the gallons.

So, for diesel, we would have ($3.998/$3.917) * ($3.854) = $3.934; and then $3.934 * 1,650,000

gallons = $6,491,100 expected B20 biodiesel expenditures for RY1.

Q. Please explain the basis for this formula.

A. This formula illustrates the relationship between Con Edison's cost for fuel and the federal government's actual and projected price for fuel. By comparing the Company and federal government data, the Company can develop (subject to certain adjustments) fuel forecasts.

Q. Does the Company use the information directly from the STEO report to develop its price forecasts?

A. No. The STEO report does not project prices on a local basis. While the DOE/EIA STEO reports actual pricing on a local basis, its forecasts are regional in nature at best. DOE data points can be used as a basis for future projections, but they must be adjusted to reflect local pricing, the terms of the Company's bulk fuel contracts and the use of biodiesel. These adjustments are based upon the Company's historical fuel costs.

Q. How does Con Edison mitigate fuel costs?

A. We mitigate costs by operating private fueling stations and through our bulk purchase agreements. Retail gasoline prices have historically ranged between $0.15 - $0.20 more per gallon than at the Company's fueling

stations (due to the Company's bulk fuel contract). Regarding diesel fuel, the Company has a regulatory requirement to use alternate fuels, such as bio-diesel in its medium/heavy duty fleet. (Energy Policy Act of 1992 ("EPAct")). The use of Bio-Diesel (B-20) contributes to our ability to meet and maintain EPAct alternative compliance. Also, Bio-Diesel is not readily available at outside fueling stations in the metropolitan area.

Q. Are there any ways the Company mitigates its fuel consumption?

A. Yes. Behavioral management plays an important role in conserving fuel. Employees who operate Company-owned vehicles are reminded periodically about ways to improve their fuel economy. Many of our class 5 and class 6 trucks incorporate technology that automatically shuts off the vehicle's engine after the engine idles past a certain timeframe. We have also incorporated technology into our cargo vans and step-vans that provide AC and DC power (without the need to have the engine running) to power equipment and worksite tools. The technology includes the use of AC shoreline power and on-board generators. And finally, we have initiated a pilot program to incorporate solar panels with lithium polymer batteries to provide

auxiliary power for the operation of tools and equipment. It should be noted, however, that even if a product is found that is designed to reduce fuel consumption and meets our vehicle specification requirements, it typically takes time to implement new technologies throughout the entire fleet.

Q. Are there other initiatives that might have a greater, quantifiable impact?

A. Yes. We have added approximately 145 Compressed Natural-Gas ("CNG") vehicles and approximately 200 hybrid vehicles and have plans to continue purchasing these types of vehicles going forward. Since hybrid vehicles typically exhibit better fuel economy (on average approximately 19 mpg city and 7 mpg highway improvement), we believe that these technologies serve to reduce the amount of fuel used by mobile equipment as we construct and maintain our electric, gas and steam systems. Although we have purchased hybrid vehicles to be used by employees, there are no commercially available and cost-justified hybrid offerings for the biggest consumers of fuel (trucks and other heavy equipment). We continue to work with R&D to develop battery technologies to facilitate our crews working with electrically powered equipment on

job-sites. But this is also a few years away from a production technology.

Q. Is the Company proposing to update these fuel costs at a later date?

A. Yes. Due to the rapid and volatile changes in this market, the Company proposes that it update these fuel costs during this proceeding at the latest date permissible. Waiting until a later date will provide the most accurate forecast of this volatile commodity and allow incorporation of more accurate 2013/2014 forecasts when they become available. In fact, the Commission's Order in Case 08-E-0539 (p. 76, footnote 109) used the March 10, 2009 DOE forecast to develop the revenue requirement for the rate year.

Q. Have you prepared an exhibit detailing historic and projected expenditures for "Vehicle Fuel Costs" for the Company?

A. Yes, we have.

Q. Was this exhibit prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT (SSP-3)

Central Field Services - Capital projects

Q. Please identify the capital projects CFS is planning to undertake.

A. Transportation is planning two fuel station upgrade projects. One of the projects is to upgrade the gasoline and diesel fuel stations and the other is to upgrade the Company's CNG fueling stations.

Q. What are the projected costs of these projects and what are the anticipated in-service dates?

A. The fuel station upgrade project is estimated to cost $10.4 million and the CNG station upgrade is estimated at $8.8 million. We expect the CNG station upgrade project to be in service by December 2014. The gasoline and diesel fuel station upgrade project is expected to be completed by year end 2015.

Q. Have you prepared an exhibit entitled "Capital - Shared Services - Central Field Services" detailing these projects?

A. Yes.

Q. Was this exhibit prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT (SSP-4)

Q. Can you please explain the gasoline and diesel fuel station upgrade project?

A. This project funds the replacement of obsolete and deteriorating equipment at the Company's twelve fueling stations. The equipment at three of the stations is

over 30 years old and the equipment at the remaining nine stations ranges from 20-25 years old. The scope of the project includes the replacement of the fueling islands, gas and diesel dispensing equipment, several single wall tanks and associated hardware. In addition, the Gas Boy card reader systems will be replaced with new state-of-the-art technology.

Q. Why do you need to upgrade these stations?

A. These fuel stations provide fuel for the daily operation of the Company's fleet of cars, trucks and equipment. Due to the obsolescence of the equipment at these locations, replacement parts are becoming difficult to obtain. There are also environmental concerns because of the potential for system leaks (higher due to the age of the equipment). In addition, if a major failure were to occur at a station, it is possible the station would be out-of-service for a considerable amount of time until repairs could be made. This would severely impact the ability to fuel Company vehicles at the site, resulting in the use of more costly retail fueling sites. These upgrades will significantly improve the operation and reliability of the fuel stations, reduce the risk of an environmental event (leaks) and we also expect to see a reduction in station maintenance costs over time.

Q. Are there any other benefits to performing these upgrades?

A. Yes. Because bio-diesel (B-20) is not available at retail fueling stations, the upgrades to these stations will continue to help reduce petroleum consumption by using Bio-Diesel fuel in order to meet the DOE requirement for clean alternate fuel compliance.

Q. Do you have an exhibit that provides additional details associated with the gasoline and diesel fuel station upgrade project?

A. Yes. The details are shown in Exhibit ___ (SSP-4), on the page entitled "Fuel Station Upgrade."

Q. Please explain the CNG Station Upgrade Project?

A. This project funds the design and construction required to increase the operating pressure and replace obsolete and deteriorating equipment at the Company's eight CNG fueling stations. In order to accomplish this, the CNG fueling stations will receive new dispensers, storage vessels, piping, associated valving, control panels, electronic control units and card reader systems. In addition, the slow-fill apparatus will be upgraded to 3600psi.

Q. Is the Company required to use alternate fuel vehicles ("AFVs")?

A. Yes. The DOE, in accordance with the EPAct, requires the Company to purchase AFVs, such as CNG-powered vehicles, as replacements for a portion of its light-duty fleet (typically 60 vehicles/year).

Q. Why do you need to upgrade the Company's CNG stations?

A. These stations provide compressed natural gas for the daily operation of the Company's CNG powered vehicles. All of the stations have been in-service over 20 years and are becoming costly to maintain. Replacement parts are becoming obsolete and difficult to obtain and if a major failure were to occur at a station, it is possible the station would be out of service for a considerable amount of time until repairs could be made. This would severely impact our ability to re-fuel Company vehicles at the site, as well as provide fueling capability for outside customers (Verizon, UPS, US Postal Services, NYC & NYS Agencies, NYC Taxi Fleet, and other small private entities) that also use these sites for fueling.

In addition, in order to align with current standards for the operation and fueling of Natural Gas Vehicles ("NGV"), station operating pressures at our CNG Fueling Stations must be increased from 3000psi to 3600psi output. Current vehicle technology requires higher pressure to effectively achieve the manufacturer's

mileage ratings. This project will provide Company and outside customers with additional vehicle range and increased throughput at our stations. The higher pressure and current technology will allow for continued expansion of NGVs within the Con Edison fleet. There are presently 145 NGVs in the Company's fleet, and we have plans to purchase approximately 300 additional NGVs (as vehicle replacements) over the next several years (total NGV fleet size of 445).

Q. Are there any other benefits to performing these upgrades?

A. Yes. The replacement of aging equipment and upgrading the stations to new technology will allow the Company to continue to purchase and operate AFVs that produce lower emissions and fewer toxic contaminants than gasoline and diesel powered vehicles. Expanding the Company's clean AFV fleet will reduce negative impacts on the environment, air quality, global warming and public health. These upgrades will also enhance fueling capability for outside customers.

Q. Are there any fuel offset benefits associated with using CNG as a motor fuel?

A. Yes. Assuming the projected price per gallon of diesel fuel ($3.934/gallon), gasoline ($3.685/gallon), the Company's internal CNG rate ($0.55/GGE) and the

approximate average annual vehicle fuel consumption rate (diesel-powered trucks - 1,080 gallons, gasoline-powered cars - 375 gallons), we estimate petroleum fuel savings for Con Edison's current fleet of 145 NGVs to be 79,000 gallons and $255,000. With the Company's plans to replace 60 petroleum powered vehicles per year with NGVs, the incremental annual estimated savings amount to an additional 47,000 gallons and $155,000.

Q. Does the Company's CNG Station Upgrade Project comply with the Commission's NGV Policy Statement in Case 92-G-0451?

A. The Commission's Policy Statement in Case 92-G-0451 applies to discretionary utility investments in NGV infrastructure made for the purpose of encouraging the development of a NGV market. In this case, the planned upgrades to existing Company infrastructure are not for the purpose of encouraging the development of a NGV market. Rather, as explained above, the Company is planning to upgrade obsolete and deteriorating equipment that is required in order to continue complying with federal statutory requirements related to AFVs. The EPAct requires the Company to utilize AFVs for 90% of light duty vehicle replacements purchased annually, to reduce the annual consumption of petroleum. Based on the Company's number of light duty

vehicles and EPAct requirements, the petroleum fuel reduction requirement through 2020 is approximately 606,400 gallons. Our strategy to achieve this reduction includes the continued purchase of CNG vehicles and the use of Bio-Diesel (B-20).

Q. Has the Company explored other, potentially lower-cost options?

A. Yes. The Company has reached out to the City of New York ("City") and the Metropolitan Transit Authority ("MTA"), which operates a total of seven CNG fueling stations, to determine whether the Company could utilize their CNG fueling facilities at a lower cost. The Company has been advised that City-owned CNG fueling facilities are restricted for City vehicle use and the MTA stations are not compatible (fuel nozzle) with our vehicles. The Company has also explored using privately-owned and public CNG fueling facilities. There are currently only two privately-owned stations and six public stations in our service territory. At this time the privately-owned facilities have not granted us access to their stations. The public stations are not always reliable and available for fueling (for example the Clean Energy LaGuardia Airport station has been inoperable for a considerable amount of time). In addition, the public facilities are

located at sites that are not in close proximity to our service centers (which can impact crew productivity). And finally, utilizing public stations would add a premium of $2.16/Gasoline Gallon Equivalent ("GGE"). At the current fleet population of 145 NGVs, the Company would incur an increase of approximately $171,000 per year of additional fuel costs (at the projected fleet population of 445 NGVs the increased fuel cost will be approximately $681,000 per year).

Q. Do you have an exhibit that provides additional details associated with the CNG station upgrade project?

A. Yes. The details are shown in Exhibit ___ (SSP-4), on the page entitled "CNG Station Upgrade." We note that as a result of our continuing evaluation of this project, we currently anticipate that we can meet our environmental compliance requirements and satisfy the fueling requirements for the projected number of Company vehicles and our current third party customers by upgrading one less station.

Central Field Services - Cost Mitigation

Q. What does CFS do to minimize costs?

A. As described earlier, CFS is a large organization comprising many areas, including vehicle garages, storerooms, trucking, cranes and rigging, and waste processing. Over the past several years, CFS has

provided operational support without significant staffing increases. We continue to achieve cost savings in the following areas:

- Stores - CFS will continue evaluating the efficiency of storerooms and will continue to expand the consolidation of Storerooms to include the Cleveland Street Service Center.
- Transportation – Transportation Operations continues to purchase clean AFVs that serve to reduce gasoline and diesel fuel consumption. We also work with vehicle manufactures by piloting fuel saving prototype vehicles for possible future fleet use. Transportation continues to look at new vehicle technologies that offer more efficient vehicle operation such as the use of battery power instead of diesel generators for work-site power, and the use of solar panels to supplement the charging of these batteries. In addition, we reduced the size of the fleet by 181 vehicles in 2012 and are committed to looking at alternative ways to reduce the fleet further (vehicle pooling, etc.). And finally, we continue to use our relationships with suppliers and manufacturers to obtain skills training for our staff of mechanics. Improved skills have allowed Transportation to address a

larger and more diverse fleet with no staffing increases.

- Astoria Operations – The Cranes and Rigging section of CFS provides support for various operating groups throughout the year. During peak workloads additional vendor resources are hired to facilitate the work and meet schedule deadlines. Hiring vendors required the Company to pay for a crane and crane operator. In 2011 the Company negotiated an agreement with a crane vendor that resulted in the Company saving over $75,000 during 2012.

V. INFORMATION RESOURCES

Q. What is Information Resources and what is its organizational structure?

A. Information Resources provides all the computer support for the Company. The group is divided into five sections. They are the Application Services, Information Technology Planning, Technology Services, Quality Assurance/Contract Administration, and Operation Support.

Q. Please describe the functional responsibilities of the five sections.

A. Application Services provides and maintains computer-based applications for Con Edison. This group facilitates change of business practices and processes

through the use of enabling technologies, and information and application software. Examples of this include the new Oracle Financial and Supply Chain System, new Electric Work Management System, and the System Trouble Analysis and Response ("STAR") outage management system.

Information Technical Planning establishes hardware and software standards for the computing and communications infrastructure; introduces new technology into the architecture and is responsible for cyber security policy. Information Technology Planning also provides planning and operations support for the Corporate Communication Transmission Network ("CCTN"), a private communications network, as well as multiple Company owned radio and telephone systems.

Technology Services provides the organizational support and operations for the Company's information technology in the areas of data and visual communication, equipment, and infrastructure. This includes design implementation, maintenance and technical support. This group also maintains the corporate data centers and supports disaster recovery.

Quality Assurance/Contract Administration assures quality for Information Resources processes in areas of Environmental Health & Safety, operational security and

audit management. They provide administrative services for corporate computing and telecom contracts, and manage the telecommunications clearing budget. The group also satisfies various requests for communications hardware including pagers, cellular phones and blackberries.

Operations Support plans and coordinates areas relating to finance, budget, and personnel. They also administer contracts for computer hardware and services.

Q. Please explain the capital programs and O&M program changes sponsored by Information Resources.

A. The Company is projecting the following amounts under its five-year capital IT budget: $22.4 million in 2013, $20.1 million in 2014, $11.0 million in 2015, $11.9 million in 2016, and $11.5 million in 2017. The greater spend in 2013 and 2014 is mainly attributed to the new Server Farm Infrastructure project which will be completed in 2014. For O&M, the Company projects $72,000 for RY1, which is an increase over historic year expenditures of $72,000. The Company is also projecting expenditures of $285,000 in RY2 and $291,000 in RY3. Finally, the Company has an additional $3.4 million Rate Year O&M program change related to the

Company's implementation of the Project One Financial system.

Q. Is the Company planning to implement any additional projects whose costs are not contemplated by the current five-year capital IT forecast?

A. Yes. As we discuss later in our testimony, due to the impact of Superstorm Sandy, we are planning to implement a a storm hardening project that will help mitigate the impact of a future storm on the Company's telecommunications system. The annual estimated expenditures for this project are $1.3 million in 2014, $2.7 million in 2015, and $2.6 million in 2016

Q. Do you have exhibits detailing these programs?

A. Yes, exhibits were prepared for 28 capital projects and the two O&M expense programs that have been submitted.

Q. Were they prepared under your direction and supervision?

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBITS __ (SSP-5, SSP-6)

Q. Please discuss the importance of the Cyber Security – Info Resources project.

A. Cyber security has been identified as one of the top corporate risks and must be incorporated in every aspect of the energy delivery business. While many steps have already been taken to design and implement a

security perimeter to defend Company resources, new risks are identified each day and new techniques are needed to stay secure and improve that defense. Attack vectors change and responses to them must be swift and definitive. Failure to maintain a proactive stance will create an unacceptable risk for the corporation. The risks include operating failures of control systems, damage to transmission and distribution assets, damage to the Company's reputation, the loss of sensitive data and even rising to the safety of employees and the public. Cyber security risks today are evolving into Advanced Persistent Threats which are unlikely to be detected using dated technology. The project will include the installation of new Intrusion Prevention Systems and security tools

Q. What is the projected cost and completion date for this project?

A. The total projected cost funded in the Five-Year Capital Budget for this project is $3.7 million and the completion date is December 2017. The annual breakout is $990,750 in 2013, $628,500 in 2014, $512,000 in 2015, $620,000 in 2016 and $900,000 in 2017.

Q. Does the Company anticipate additional capital expenditures to address cyber security threats?

A. As we mentioned, new cyber security risks are identified each day and new techniques, which are unlikely to be detected using dated technology, are needed to stay secure and improve our defense. In September 2012, the Department of Public Service Staff directed the state's energy utility companies to develop a strategic planning process for cyber security related to critical infrastructure protection and develop or improve a comprehensive plan to guide a cyber security program. The plan would address strategic cyber security plan elements states in Staff's letter and would include specific and time-lined goals for addressing areas for improvement. The Company is examining its current cyber security program for compliance with Staff's directive. In this process, or in response to newly identified cyber security risks, the Company may identify additional information security technologies or other security features that may be required to mitigate emerging cyber security risks. Company witness Muccilo addresses the reconciliation of capital expenses related to such cyber security initiatives.

Q. Please explain the capital project called Server Farm Infrastructure project included in your request?

A. Con Edison is planning to construct a new server farm on a Company facility and funded in our Five-Year Budget for $17.6 million. The Server Farm is a modular design and will be installed on a concrete pad near the parking lot on an area that is currently unused. The plan calls for construction to begin in 2013 and be completed in 2014. The annual breakout is $11,850,000 in 2013 and $5,750,000 in 2014. This project is similar in design to our most recent Server Farm completed in 2012, and will replace two large inefficient 1970 vintage data centers. The new Server Farm is scheduled to become operational in the 4th Quarter of 2014.

Q. Why is this project important to Con Edison and its customers?

A. Computer systems and business applications require servers and storage capacity. Business systems and applications enable critical business functions for the Company and include financial systems, customer systems and control systems. Servers also provide access to Company data in the form of email, files and maps. The ability to access these systems and resources is critical to the Company. The amount of electronic data has grown ten-fold over the past five years. This project will be designed with redundancy and diversity

and provide a secure and reliable environment for these resources for the next ten years. The new Server Farm will also present opportunities to deploy systems faster and access resources faster and more reliably than today. The Company's restacking plan for 4 Irving Place is underway in order to comply with Local Law 26. As each floor is renovated per the restacking plan, affected IT infrastructure is displaced and must be relocated elsewhere in order to maintain operations. Such infrastructure includes existing data centers on the 4th and 17th floors. We have established a plan to eliminate these data centers and relocate the essential equipment to the proposed new Server Farm. The existing data center on the 4th floor houses the Company's mainframe environment which runs critical business systems including the customer system and billing. The retirement of the data centers at 4 Irving Place is a multi-year project and is expected to be completed in 2016. Additionally, there are over 500 distributed servers running in the two data centers at 4 Irving Place. The restacking plan includes the renovation of these two locations and conversion to traditional office space.

The new Server Farm plan also provides for the Company's expanding server and storage needs by

establishing a scalable architecture that would meet the demand for future growth in server and storage needed for the Company's business applications.

Q. Is there associated O&M related to this project?

A. Yes, the new Server Farm as well as our most recent server farm are both stand-alone buildings that will incur costs that are specific to those server farms. These costs include:

- HVAC operation, inspection, maintenance, repairs and upgrades;
- Emergency generator operation, inspection, maintenance, fuel, repairs and upgrades;
- Fire Protection System operation, inspection, maintenance, repairs and upgrades; and
- Security System operation, inspection, maintenance, repairs and upgrades.

Q. What are the additional O&M costs associated with the Server Farm project?

A. The additional maintenance of the two Server Farms is required since the two farms were built as independent structures and subject to costs that can be segregated and not associated to any other existing building. The additional maintenance is $72,000 in RY1, $285,000 in RY2, and $291,000 in RY3.

Q. Please explain the capital project called CCTN Expansion – Fiber Projects included in your request?

A. Con Edison owns and operates CCTN, a private communications network. This network is the vehicle that enables secure communications circuits for SCADANet, voice, video, protection and the computing and storage environment. CCTN enables computing resource consolidation, disaster recovery, as well as the reduction of public carrier cost savings. There are over 100 Company locations which host the equipment used by CCTN. CCTN will continue to provide the Company with a high-speed, reliable and cost effective alternative and compliment to public carriers. Communications requirements for data, voice, protection, SCADA and video circuits will result in the installation and deployment of modern communication technologies to many Company facilities. CCTN provides the network for SCADA, protection and data services to critical substations necessitating capital projects to improve diversity and capacity to those locations. CCTN has far surpassed the use of public carriers for communications and provides a corporate backbone for all communication services for the foreseeable future. Many major CCTN nodes possess diverse Points of Entry and redundant components including power sources to

eliminate any single point of failure and provide redundancy and diversity. Substations are interconnected to the core CCTN network with fiber runs to support high speed services. Wireless technology is considered for redundancy and diversity when installing new fiber is not feasible or justified. In RY1, RY2 and RY3 the following locations will be addressed:

- Add a new fiber run between 4 Irving Place and the Murray Hill Substation;
- Add a new fiber run between the Murray Hill Substation and West End Avenue; and
- Add a new fiber span between East River Substation and the new Gold Street Communications Hut.

Q. What is the projected cost and completion date for this project?

A. The projected cost funded in the Five-Year Capital Budget for this project is $5.4 million and the completion date is December 2017. The annual breakout is $1.4 million in 2013, $1.6 million in 2014, $1.3 million in 2015, $392,500 in 2016 and $750,000 in 2017.

Q. Please explain the capital project called SCADANet included in your request.

A. The electric industry is undergoing a radical change in the use of technology. Field components now come equipped with microprocessors and the capability to

collect power quality and load data. On the other hand, the Federal Energy Regulatory Commission ("FERC") and the North American Electric Reliability Corporation ("NERC") are enforcing new cyber and physical security regulations that affect the ability to achieve the benefits from this new technology. Con Edison is currently designing and implementing multiple new SCADA and Smart Grid applications. In addition, during 2012, the Commission expressed concern for protecting customer information, including meter reads. SCADANet is designed to provide secure communications and address these concerns. Infrastructure has been built to support the following initiatives:

- Sectionalized Switching for electric distribution;
- Secondary Model validation;
- Transformer Monitoring; and
- Distributed Generation.

Q. Will this network include the ability to utilize carrier communications?

A. Yes, the network is designed to allow for any number of "last mile" connections including carrier wired or wireless, private wireless or private fiber. In fact, we have recently established a private wireless network with Verizon wireless that allows any electric, gas or steam SCADA application to securely connect to the

control centers and eliminate any concerns about the Internet.

Q. What is the projected cost and completion date for this SCADANet project?

A. The projected cost funded in the Five-Year Capital Budget for this project is $7.0 million and the estimated completion date is December 2017. The annual breakout is $1.8 million in 2013, $1.5 million in 2014, $1.2 million in 2015, $1.7 million in 2016, and $750,000 in 2017.

Q. Please explain the capital project called Desktop Infrastructure included in your request?

A. This project provides for the latest productivity and collaborative desktop tools for employees to perform business functions in a secure fashion, as well as the following features:

- Enables secure desktop environment to share information with external partners as well as provide collaborative sites for internal files sharing and team activities.
- Allows third-party software and business applications to be available without being resident on every device and efficiently manage license use.
- Improves operational processes by enabling a single version of software to be maintained and streamed to users as needed.

- Reduces requirements to patch 14,000 PCs and disrupt the computer users in doing so.
- Enables employees to work anywhere and use a broader array of devices.
- Provides the capability to display and search user content to avoid recreating work and preventing versioning inefficiencies.

Q. What is the projected cost and completion date for the Desktop Infrastructure project?

A. The projected cost funded in the Five-Year Capital Budget for this project is $5.3 million and the estimated completion date is December 2017. The annual breakout is $782,000 in 2013, $1.6 million in 2014, $1.4 million in 2015, $782,000 in 2016, and $782,000 in 2017.

Q. Given the impacts of Superstorm Sandy, are there any new initiatives underway that would help prevent or mitigate the impact of a future storm on the Company's telecommunications systems?

A. Yes, we have one storm hardening project comprised of three separate initiatives. The first initiative is to harden radio sites by improving backup generator power and reinforcing antennas and radio frequency cables at radio sites. The second is to extend the Corporate Communication Transmission Network ("CCTN") fiber optic

network to critical transmission substations in lower Manhattan. The third is to mitigate the impact of flooding on communications infrastructure.

Q. Please describe the impact of Sandy on your radio sites.

A. During Sandy high winds detached antennas and cable at two of our 35 radio facilities. In addition, several of our radio sites experienced prolonged power outages that interrupted radio service in pockets of Westchester County. The unavailability of these radio facilities had an adverse effect on the overhead distribution restoration efforts in the areas served by the affected radio sites. Typically, radio sites have 8 to 16 hours of battery backup time compared to the several days it took to restore utility power.

Q. Please describe your initiatives to prevent or mitigate these circumstances during a future storm.

A. The following initiatives are planned:

• Antenna Hardening: Inspect, evaluate, redesign, reinforce and replace antenna and line systems at all radio sites and dispatch centers so equipped to determine where physical reinforcements are necessary to strengthen supports, fastening and anchoring systems used to secure various antennas, including pole, panel and dish antennas and radio frequency cabling and

waveguides. There are more than 50 locations to be assessed.

• Generator Backup Power: Evaluate the capacity and feasibility of installing backup generators at critical radio sites. Provide a backup generator at the Buchanan substation radio hut, increase generator gas tank capacity at Graymoor radio site and install a gas-fired generator at North Castle 1 radio site.

Q. Please summarize the estimated costs for the radio system initiatives.

A. The two radio systems initiatives are projected to cost approximately $550,000 over three years: $200,000 for the antenna reinforcement and $350,000 for the generator upgrades.

Q. Why is it necessary to extend CCTN in lower Manhattan?

A. During Sandy, the local exchange public carriers sustained (i) severe damage to their telecommunications facilities, which included central offices and copper outside plant directly affected by the flood waters, and (ii) power outages that resulted in prolonged service outages to their customers. Outages adversely affected voice and data services and feeder protection circuits at the bulk power transmission substations in lower Manhattan. The proposed fiber optic extension in lower Manhattan will link Leonard Street, World Trade Center

and Seaport substations into the CCTN network to provide carrier diversity for critical circuits. CCTN will provide these substations with a high-speed, redundant and diverse complement to public carriers.

Q. Please describe what this work entails.

A. The work entails installing CCTN telecommunications facilities at each substation and the following underground fiber spans:

- Add new equipment at and new fiber span between 4 Irving Place and Leonard Street Substation.
- Add new equipment at and new fiber span between Leonard Street Substation and World Trade Center substation.
- Add new equipment at and new fiber span between World Trade Center Substation and Seaport substation.
- Add new equipment at and new fiber span between Seaport Substation and Cherry Street Substation.

The new telecommunications equipment will be housed in pre-fabricated huts and existing communications rooms and will possess diverse Points of Entry ("POE") and redundant components, including power sources to eliminate any single point of failure and provide redundancy and diversity.

Q. What is the estimated cost and projected completion date for this program?

A. The estimated cost for this program is approximately $5 million, apportioned as follows:

- $1.2 million - equipment at and fiber span to Leonard St
- $2.0 million - equipment at and fiber span to Seaport
- $1.8 million - equipment at and two fiber spans to close the communications loop at World Trade Center.

The projected completion date for this portion of the project is December 2016.

Q. What was the impact of flooding on the communications infrastructure and how do you plan to provide additional protection for equipment against flooding?

A. Telecommunications equipment is housed in communications rooms and pre-fabricated huts located at generator stations, substations and other operations and office facilities. During Sandy, CCTN circuits remained operational at all locations except for two locations that severely impacted by flood waters. They are the telecom room at East 13th St substation and the communications hut at Goethals substation.

Q. What actions has the Company taken to address these circumstances?

A. Water damaged equipment, located at low positions on the equipment rack, was replaced at Goethals and East 13th St. The new equipment at Goethals was reinstalled higher on the equipment rack. A solution at East 13th St. is being developed to account for space limitations. IR is currently evaluating the flooding risk at facilities located in flood prone areas and will develop solutions that range from enhanced sealing techniques to prevent water ingress to hut replacements where necessary. Although IR has an ongoing program to replace older communications huts, all future huts will be installed on a concrete pad at least four feet above ground.

Q. What additional actions will the Company take to address these circumstances?

A. The communications huts at Freshkills substation and 1 Davis Avenue will be replaced with elevated huts in 2015 and 2016, respectively.

Q. What is the projected cost and completion date for this program?

A. The estimated cost for this program is approximately $1.0 million for both huts with a projected completion date of December 2016.

Q. Please summarize the planned expenditures for the Storm Hardening project.

A. The annual estimated expenditures for the project is approximately $1.3 million in 2014, $2.7 million in 2015, and $2.6 million in 2016.

Q. Provide a summary of the remaining 22 projects from the five-year capital budget.

A. The remaining 22 projects are discussed in Exhibit ___ SSP-5 and fall into several categories including technology refreshes on IT infrastructure components for example storage arrays, and network routers and switches, and business application sustainability.

Q. Are there any additional O&M programs that you wish to introduce?

A. Yes, our second O&M program change is for expanding programmer support of Project One and the Electric Work Management project.

Q. Please describe this program change.

A. The implementation of Project One will require additional staff to support the new system. O&M funding has been approved in 2012 and 2013 for this support which will be used to bring on 31 new FTEs. The retirement of legacy applications will free up 13 FTEs of the 44 that are needed. The additional 31 FTEs will be brought on in stages beginning with 15 in 2012. The remaining 16 FTEs will be brought on in 2013. In

addition the Electric Work Management project will require two additional FTEs in year 2015.

Q. What type of support work will the additional staff be performing?

A. The additional support work can be divided into the following four distinct modules: Finance, Supply Chain, Business Intelligence, and Financial Planning & Analysis. Specifically, these modules will contain support for:

- Finance Module
  - General ledger
  - Cash Management
  - Receivables
  - Advanced Collections
  - Project Accounting/Costing
  - Governance, Risk and Reporting
- Supply Chain Module
  - Payables
  - Purchasing
  - Sourcing
  - Procurement Contracts
  - Warehouse Management
  - Inventory Management
  - Imaging
  - iSupplier

- iProcurement
- iExpense

- Business Intelligence
  - Financial Intelligence & Analytics
  - Procurement and Spend Intelligence & Analytics
  - Projects and Cost Management intelligence & Analytics
  - Oracle OBIEE support

- Financial Planning & Analysis
  - Planning & Budgeting
  - Forecasting
  - Financial Consolidations

Q. Can you elaborate on the support work that the additional staff will be working on?

A. The increased staffing related to Project One implementation is required in order to support new applications that are incremental to the Company's existing systems (i.e., new application do not replace any existing systems). These include Business Intelligence, Project Accounting, HFM Financial Consolidation and GR Break/fix support surrounding the Project Accounting, Accounts Payable, Purchasing and Inventory Management modules. These modules are highlighted due to their complexities and the fact they

have had the majority of the defects during the multiple cycles of testing.

Additionally we would expect to see a higher level of support arise in Labor Distribution, PowerPlant, legacy Work Management systems integration, again due to complexity.

Integration with the new Work Management System will require an initial higher level of support.

Project One will go through its first year end closing in January. This event could generate additional issues/requirements. Additional activities include:

- Monitor and implement improvements for job scheduling
- 24 by 7 support for EBS Application; Development, Technical Architecture, Biztalk, and BI
- Annual disaster recovery drill for Oracle EBS financial and supply change modules, BI and EIE;
- Enhancements
  - For legacy system and vendor supplied system (PeopleSoft – new upgrade, PowerPlant – repair allowance, LOGICA – future phases) enhancements
  - System performance monitoring and possible improvements especially in the area of Project Accounting with respects to project creation

- Required upgrade for Informatica tool. Tool is used for extracting data from Oracle EBS to load information into data warehouse; and
- Upgrade versions of third-party vendor products that are used in Project One. These have been held in their current versions in order to mitigate testing variances:
  - Symantec's – Virus Scan for incoming documents from vendors
  - Kofax - Image scanning
  - OMTool – Out-bound faxing
  - Zebra - Bar Code Printing
  - UC4 - Job Scheduling.

Q. What are the O&M costs associated with the programmer support program change?

A. The cost for programmer support was $0 in the historic year and the Company is projecting costs of $3.6 million for RY1, $3.7 million for RY2 and $3.8 million for RY3.

Q. Please describe the next project.

A. We are including a new project in the Common budget identified as Consolidated Mapping and Visualization Platform.

Q. What is the projected cost and completion date for the Consolidated Mapping and Visualization Platform project?

A. The total projected cost for this project is $40.0 million and the completion date is December 2017. The annual breakout is $10 million in 2015, $15 million in 2016 and $15 million in 2017.

Q. Please explain this capital project.

A. Con Edison maintains 38 software applications that are used for map creation, map viewing, and GIS-like functionality to support the Electric, Gas and Steam business processes. This process will consolidate the entire mapping platform. It will include spatial alignment of all Con Edison data using a common lan-based and real world coordinates. It will integrate engineering design, work across commodities, communication with external stake holders, maps and records maintenance and spatial analysis.

Q. Are there any additional projects that you wish to introduce at this time?

A. Yes. We would like to discuss improvements to the Steam Customer Care and Billing System.

Q. What customer information system is used for steam billing?

A. In April 2008, a new Steam customer information system, Customer Care & Billing ("CC&B") was implemented. CC&B replaced a legacy customer information system that was no longer able to support the needs of our complex rates and programs. CC&B provided a basic platform to develop complex rate structures and programs to align steam customers with our electric and gas population. The new system also provided the platform for improved efficiency, customer experience, and Sarbanes-Oxley compliance.

Q. Please describe the Company's plan to maintain and expand the functionality of the CC&B.

A. The Company plans a number of improvements and upgrades to CC&B. The upgrades are necessary to have access to vendor support. A 2013 upgrade is needed because our current version of CC&B is unsupported by the vendor. The vendor forecasts that an additional upgrade will be needed in 2017. The upgrades will allow the continuation of accurate and timely billing through continued vendor support. While the Company's CC&B is unsupported, we are not eligible to download or receive system updates, maintenance releases, software patches, telephone assistance, or obtain any other technical support services. The Company needs to complete these upgrades so that it will be able to meet its customer

care and billing responsibilities to its customers, which generate over $600 million in annual revenues. The Company is planning seven improvements for completion during 2013-2017 to expand the functionality of CC&B. These improvements will enhance the customer experience and to upgrade the process controls while aligning the steam credit processes with those used in connection with electric and gas service. Having parallel process for credit actions will assist the Company in collecting aged arrears.

Q. Please describe the improvements.

A. The seven improvements to CC&B include:

1. Payment Agreement Process Automation & Bill Messaging
2. Posting Process Automation – Multiple Dwelling Posting Process Prior to Service Interruption
3. Uncollectible Bills ("UB") and Collection Agency Process Automation
4. Level Payment Plan Reconciliation Automation
5. Meter Paging Functionality
6. Change of Customer and New Turn On/New Business Improvement
7. Deposit Request and Calculation Automation

Q. What is the status of this project?

A. The project's implementation schedule is to be completed by year-end 2017. The projected completion of the CC&B upgrade is second quarter 2013, followed by the Meter Paging and Deposit Request Calculation. The Turn On, Multiple Dwelling Posting Process, and the LPP improvements are all scheduled to be completed by year-end 2014. The Change of Customer, Payment Agreement, and UB process improvements are scheduled to be completed by year-end 2015. However, the order of work may be adjusted to meet changing priorities or needs. In 2017, CC&B is anticipated to require an upgrade to a supported version.

Q. What is the capital cost of this program?

A. Projected capital costs associated with the Steam CC&B work is $1.2 million for 2013, $281,000 for 2014, $276,000 for 2015, and $1.9 million for 2017.

Q What is the projected O&M cost of this program?

A. The 2013 funding includes an upgrade for CC&B to a supported platform. CC&B requires annual O&M expenses for maintenance. The upgraded version incurs additional O&M expenses due to increased Database Maintenance costs. The increase is $29,000 over our recurring annual cost of $98,000.

Q. What is the GridOps Upgrade Project?

A. The Company uses the GridOps Load Forecasting system to develop the short term electric and steam load forecasts to support electric and steam operations as well as how much energy to purchase in the wholesale markets. The GridOps Upgrade Project includes the implementation of an upgrade to the GridOps Load Forecasting system and its supporting database.

Q. Why is this upgrade needed?

A. The GridOps system and database, as well as the automated system interfaces, currently run on SQL Server 2000. This technology platform will no longer be supported by Microsoft in early 2013, and must be upgraded to a later version.

Q. Are there other benefits from this upgrade?

A. In addition to addressing technology obsolescence, the upgrade will provide improved data validation to ensure the integrity of the short term forecasts as well as improve the forecasts' accuracy. Furthermore, the upgrade will allow the Company to pursue the development of the short term natural gas forecast using the same system, thereby consolidating the short term forecasts of all three commodities under one consistent platform. The current GridOps application would not support the complexity of the natural gas commodity in terms of a short term forecast.

VI. HUMAN RESOURCES

Q. What is the role of the Human Resources organization?

A. Human Resources' ("HR") overall strategy focuses on developing programs around the following four imperatives: attraction, development, retention and the "Way We Work Environment." In support of the attraction imperative, HR continues to refine its corporate hiring program through strategic sourcing, and partnership with schools. The Company's focus on the development imperative is achieved through varied training programs. These programs support leadership, skills and technical development. Career path training for our large trainee population has remained steady and HR has developed technical training programs for new supervisors in several organizations. The Company uses both traditional training at The Learning Center ("TLC") and online training sessions. During 2011, HR began work on contract negotiations and contingency preparations with Local 1-2, our largest union workforce. This contract expired on June 30, 2012. The contract with Local 3, our Staten Island union workforce, expires on June 30, 2013.

HR addresses the retention imperative by managing the Company's compensation and benefits programs to be competitive with the marketplace. The Company has

developed six guiding principles for how we manage our work and ourselves. They embody our corporate values and are essential to achieving the level of excellence we want in our corporate culture. HR has integrated these principles in the Way We Work Environment. These six principles are Plan the Work, Work the Plan; Seek and Accept Responsibility; Communicate Openly; Work in Teams; Improve Continuously and Celebrate Success.

Q. Does Con Edison currently have a recruiting, testing, hiring, and training program for new employees?

A. Yes. HR works closely with the Company's operating departments to determine the staffing levels and skills required to meet operational needs. Based on these needs, HR is responsible for recruiting, testing, hiring, and training new and existing employees. This effort involves several groups within HR, including Occupational Health, Recruitment, Testing Services, Human Resource Services, and TLC.

Increased GOLD Program Hiring

Q. Please explain what the GOLD (Growth Opportunities through Leadership Development) program is and the Company's hiring plans for the program.

A. The GOLD program is an 18-month program that employs recent college graduates and provides them with basic leadership development and technical skills training to

fill anticipated openings and facilitate succession planning throughout the Company. For the Gold program we have been hiring approximately 45 recent college graduates in June of each year. The 18-month program averaged 85 participants during the Historic Year. However, since we plan to hire 60 GOLD Associates in June 2014 (instead of the typical 45) our average staffing level will increase to 100 or 15 additional participants. The total cost for the program in RY1 will be $5.4 million. The increased GOLD hiring will enable us to respond to specific and core critical talent needs to better address strategic recruitment challenges.

Q. Have you provided additional details for the increased GOLD hiring?

A. Additional detail can be found in the Exhibit entitled "O&M-Shared Services-Human Resources" on the pages entitled "2013 Growth Opportunities for Leadership Development (GOLD) Program."

Q. Was this prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-7)

Q. Please describe the current training program for new employees.

A. There are two categories of new employees – union (weekly) or management. For the most part, new weekly employees are hired at the entry level – either as Customer Service Representatives ("CSR"), Customer Field Representatives ("CFR"), or General Utility Workers ("GUW"). Assuming the applicant qualifies on all the selection processes, the individual would be hired. The employee would then be required to take from five to ten days of initial training at TLC, depending on the job function for which she/he was hired. These classes include basic knowledge of the function the new employee is about to perform as well as environmental and safety-related topics. While all areas require initial training, CSRs have more extensive initial training that lasts for approximately nine weeks.

Q. Please describe TLC.

A. TLC, Con Edison's central training and education facility, is responsible for handling the majority of the Company's training needs. Located in Long Island City, Queens, TLC was built in 1993 as a state-of-the-art training center. In 2012, we trained employees in over 600 courses. In order to complete these courses we conducted over 5,500 classes that were attended by

over 25,000 employees. In many cases, employees attended more than one course.

Additionally, the Learning Center supports the on-line training effort which has grown in use over the last several years. In 2012, over 15% of training conducted was done through the on-line training methodology.

Q. Does the new employee receive any additional training after completing training classes at TLC?

A. After his or her initial training at TLC, the employee then goes out into the field to begin performing their job function. The Company continues to train its employees through such methods as on-the-job training, safety talks, online training, "Technically Speaking" and "Strategic Issues" Seminars, and by taking additional classes at TLC.

Q. Does the rate request reflect incremental expenditures for training?

A. Yes, it does.

Customer Operations Instructors

Q. Please explain the Company's need to add two additional Customer Operations Instructors.

A. The Company needs to add two additional Customer Operations Instructors to the Learning Center Staff due to the increase in training classes for CSRs. We currently have five Instructors who teach two of these

16 week classes annually. In the course of a year this would allow us to conduct ten total training classes. Customer Operations has a growing need to bring in additional CSRs to handle customer phone inquiries. This need has developed as the incumbent CSR population has dwindled due to attrition and transfers. Our plan is to add approximately 160 CSR's annually. With this increased need, we have to conduct between 14 and 16 classes annually. The increased classes require the need for two additional full time instructors. The total cost for Customer Operations instructors in RY1 will be $1.2 million.

Q. Have you prepared an exhibit that provides further information on the Customer Operations Instructors?

A. Additional information is shown in Exhibit __ (SSP-7) on the pages entitled "Career Path Training - Customer Operations."

Occupational Health Current Operating State

Q. How does the Occupational Health Department function in its current state?

A. The Occupational Health Department currently functions in large part through paper records and the existing electronic system, i.e., the Occupational Health Administrative System ("OHAS"). OHAS has limited functionality, and has not been significantly updated

since its design and implementation 15 years ago. Other Con Edison systems have been updated, such as HR Payroll, leading the OHAS system to be modified manually to provide essential data on qualified sick absences to payroll. In order to produce reports, the Occupational Health Department must match data across discrete systems and manually manipulate the data for each query. This is not a sustainable process to meet the challenges of addressing and reporting on regulatory requirements, quality checks and lost time.

Q. What are some of the major issues that Con Edison faces with the current OHAS?

A. The current OHAS is not integrated with our paper based medical records. Occupational Health clinicians are unable to have a complete and accurate picture of employee illness and disabilities as it relates to the employee's ability to safely do their job and work disposition. The lack of integration between the paper based medical record system and the electronic medical information system increases the potential for human error, decreases the efficacy with which Occupational Health can manage employee health conditions and absence and hamper reporting capabilities. Occupational Health must also move toward an electronic platform to have interoperability with the federal

electronic medical records mandate. This mandate will require all physician practices, hospitals, and laboratories that receive Medicare or Medicaid reimbursement to implement an electronic medical record system by 2014. Although Con Edison is not directly subject to the mandate, Occupational Health will need to have an electronic medical system in order to have the ability to receive and send medical information on behalf of our employees in the standards set by the industry and federal government or the clinic will be hampered in reviewing medical information for employees. In addition, the current systems that record information related to employee absence prevent the Occupational Health clinic from identifying and managing absence patterns and occupational evaluations related illness and injuries of our employees. The paper based system reduces the opportunity to evaluate and investigate root causes of lost time or trends and patterns which may impact absenteeism or fitness.

Q. What is the goal of the Occupational Health Integrated Data Management Platform ("IDMP")

A. The goal of the IDMP is to integrate and enhance Con Edison's medical information systems so that Occupational Health can improve the department's efficiency and compliance with mandated evaluations for

federal, state and local laws and policies. These include surveillance of occupational and environmental exposures, Department of Transportation ("DOT") examinations, substance abuse testing and Company examinations for safety sensitive job functions. These are critical functions which impact the safety of employees and the public. In addition, Occupational Health will need to undergo change in work flow processes to be in accordance with the new federal mandate for electronic medical records, mandated transition in industry diagnostic coding, implementation of the new short-term disability plan for managers and the new procedures changes for the administration of the sick absence policy for weekly employees.

Analysis of Solutions for an Integrated Electronic System

Q. How did the Occupational Health Department assess the data management needs of the Department?

A. A discovery/gap analysis was performed by an outside vendor, Vanguard Direct, in 2011 which identified the pros and cons of three alternative plans of action: purchase of a software solution that can be customized for Con Edison's use, redesign of the existing in-house system by internal staff, or a combination in which some functionality is achieved through a purchased

solution and other modules are created by enhancing existing applications. The main considerations taken into account included technological feasibility of implementation, costs (upfront and recurrent) and fit with user defined functional specifications. The analysis as to which alternative is most appropriate will be conducted in Q1 of 2013.

Q. Explain the components of an IDMP.

A. The creation of an Occupational Health Integrated Data Management Platform will improve the quality and efficiency of managing clinic functions related to regulatory examinations, return to work evaluations, and wellness programs resulting in the ability to meet the demands of future sick absence plans/policies and decrease the amount of paper used by the department. The IDMP will coordinate medical data that is currently found in paper charts and information from our disability vendor to create a comprehensive record of employee illness and injuries that may impact their ability to perform their job duties. In addition, the platform will integrate data and reporting across existing legacy systems currently used to hold medical information and report on lost time, although that was not their original purpose when designed. These systems are: eTime, eTime Medical, OHAS, Case

Management System, Random Drug Testing and Employee Personal Information Center.

Q. Why is the IDMP important to the Occupational Health Department at Con Edison?

A. Added focus on integrated data management and reporting structures is needed as it will allow for more advanced analyses that will provide information for strategic planning, as well as provide the ability to identify trends and potential health concerns through the centralization of data. Also the IDMP will introduce electronic medical records to the Occupational Health Department. This will improve regulatory monitoring and will align with the Occupational Health Clinic to have a standard platform and interoperability with outside physicians, hospitals and laboratories with which the department regularly interacts. Implementing this project will put Con Edison in line with best practices, as determined by the Certification Commission for Health Information Technology ("CCHIT"), for the security and accessibility of health records. Moreover, the implementation of electronic health records will allow the Company greater oversight over its OSHA and DOT regulated exams and DOT drug testing. An electronic system will reduce potential human error, increase the efficacy with which Occupational Health

can manage employee health conditions, reduce administrative burdens and improve the quality of service, as well as contribute to an overall "greening" and carbon footprint reduction for the department.

Q. Have you provided additional details associated with this Capital Program?

A. Additional detail can be found in the Exhibit entitled "Capital-Shared Services-Human Resources" on the pages entitled "OH Integrated Data Management Platform/Health Management System."

Q. Was this prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-8)

Cost and Potential Savings Associated with a New System

Q. What will be the anticipated cost of implementing an IDMP?

A. As shown in Exhibit SSP-8, the implementation costs for this project are estimated to be approximately $2.0 million. These costs will include Occupational Health and Information Resources labor, purchase and implementation of software, hardware (tablet computers and server),a technical consultant, and training and development.

Q. What are the anticipated cost savings of this project?

A. There are both financial and non-financial benefits of the IDMP project. The cost savings will be realized through the reduction in paper and the increased efficiencies of the department. The department uses an excessive quantity of paper documenting clinic visits. It is estimated that about 24,000 clinic visits to Occupational Health occur yearly. A substantial proportion of these visits involved regulatory testing. Each of these exams is completed by paper. It is estimated that in a given year, Occupational Health is using approximately 3.5 tons of paper, at a cost of $10,000/year. The creation of an IDMP also has several non-tangible benefits. Electronic systems will allow for better utilization of Con Edison medical staff and resources, creating efficiencies and the ability to more quickly review employee records and address concerns. Additionally, a reduction in administrative burden and improvement in quality of service will have a direct effect on reducing the time employees spend in the clinic for appointments and will decrease the duration of absences by managing more closely employees' return to work plans. Occupational Health clinicians will be able to more thoroughly focus on employee well-being, fitness for duty and regulatory compliance.

Strike Contingency

Q. Please generally describe the Company's strike contingency efforts.

A. The Company and its two local unions, IBEW Local 3 and UWUA Local 1-2 employees, have collective bargaining agreements that expire on June 30, 2013 and on June 30, 2016, respectively. In the event of a labor stoppage, the Company has developed a planned approach to provide for the continued safe operation of its facilities and its services.

Q. Are there costs associated with these preparations?

A. Yes. The Local 1-2 and Local 3 Contingency Programs are ongoing initiatives that occur once every four years. As a result, for rate case filings, the cost for these initiatives is priced out at one-fourth of the estimated cost. The estimated cost of the next round of union contract negotiations is $1.8 million for Local 1-2 and $100,000 for Local 3, or a total of $1.9 million. This is based on our most recent experience with the contingency planning that occurred in 2012 for Local 1&2 and in 2009 for Local 3. One - fourth, or $475,000 will be included in the rate filing. Incremental costs for contingency planning are estimated at $1.5 million. The Accounting Panel will

address the proper allocation of these costs among electric, gas and steam.

Q. Have you prepared an exhibit that provides further information on strike contingency expenses?

A. Yes. Additional information is shown in Exhibit __ (SSP-7) on the pages entitled "Strike Contingency."

Human Resources Capital Program

Q. Please describe the planned capital program in Human Resources for the rate period.

A. As described above, Human Resources must upgrade and enhance various aspects of training so that future training needs are met. To accomplish this, we have three on-going capital program initiatives, the development of eLearning courses to offset additional training costs, a project to upgrade our HR Payroll application and Learning Center Infrastructure upgrades.

Q. Please continue.

A. As to the first program, the use of eLearning helps to avoid additional training costs. This program is on-going and we plan on spending $700,000 in each of the next five years. Secondly, we have a capital project that addresses the need to complete the upgrade of the HR Payroll system. Based on the upgrades Oracle has made to this application it is recommended we make

these changes to our application in order to maintain reliability of the system. This project will be completed in 2013 at a cost of $1.2 million. The Commission adopted a Joint Proposal in the Company's last rate case that reflects spending on each of these capital programs. Finally, in order to provide effective training to our employees, it is necessary to maintain an up to date educational facility. Technology is rapidly changing how way people work. In addition, as equipment and process improvements take place in operating areas, our training facilities and course curriculum must also change to insure that the training experience reflects the field environment. The requested funding of $300,000 annually from 2014 to 2017 will allow the Learning Center to upgrade Facilities to modernize classroom space by increasing space utilization with modern designs.

Q. Have you provided additional details for each of these capital programs and the associated costs?

A. Yes. Additional detail can be found in Exhibit (SSP-7) on the pages entitled "TLC eLearning Initiatives, HR Payroll Upgrade and Learning Center Infrastructure Improvements."

VII. SECURITY PROGRAMS

Q. What are the security-related projects that the Company is proposing?

A. The Company is proposing the following projects: (1) expansion of automated electric card access; (2) replacement of obsolete DVRs; and (3) replacement of obsolete CCTV cameras.

Q. What are the projected capital costs for each of the security projects proposed by the Company?

A. The projected capital cost for the automated electric card access is a total of $2.3 million. Because of the magnitude of the projects, and the process of scoping and bidding the projects, these capital costs will not begin until calendar year 2014. These costs are broken down into $778,000 in 2014; $821,000 in 2015; $403,000 in 2016; and 279,000 in 2017. The projected capital cost for the replacement of obsolete DVRs is a total of $1.1 million in 2014 and the projected capital cost for the systematic replacement of old/outdated CCTV cameras is $303,000 per calendar year.

Q. What are the projected O&M costs associated with the security requests?

A. The projected increase for security-related O&M costs are $161,000 in RY1, $194,000 in RY2 and $199,000 in RY3. These costs are associated with the hiring of two new employees in RY1.

Q. Do you have exhibits entitled "Capital-Shared Services-Security and O&M-Shared Services-Security" detailing these programs?

A. Yes, exhibits were prepared for the three capital projects and one O&M expense program that have been submitted.

Q. Were they prepared under your direction and supervision?

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBITS __ (SSP-9, SSP-10)

Q. Please explain the need for the three capital projects described above.

A. Con Edison recognizes its importance as a critical component to the infrastructure of New York City and the surrounding areas. To adequately safeguard its facilities, Con Edison continues to incorporate comprehensive security processes to protect the Company, its employees and its assets. The platform we have implemented to date consists of CCTV, intrusion detection, card access and DVR equipment. We continue to add facilities where we have these systems, into our Security Operations Center ("SOC") where we monitor them, on a 24 hour, seven day per week basis. This provides a central point for coordinating response protocols for security events and alarms.

Q. Please discuss the access control capital project.
A. Access control software integrates the most advanced security technologies with innovative networking capabilities to bring full-featured security solutions serving any size Con Edison facility. Con Edison's current electronic card access system is employed at 87 corporate sites. Corporate Security has identified 13 high-trafficked Company sites that currently lack or have insufficient electronic access controlled security. This project would provide for the installation of card readers, with supporting CCTVs and DVRs at these locations. This project as proposed would take five years to implement, with a completion date of 2017 and a total cost of $2.3 million.
Q. Which Company locations have been identified?
A. The thirteen locations are as follows: Bruckner Boulevard; Cleveland Street; College Point; Neptune Avenue; East 110th Street; Eastview; Victory Boulevard; East 16th Street; 4 Irving Place parking lot; Farrington Street; West 28th Street; 30 Worth Street; and the Learning Center.
Q. Do you have an exhibit that provides additional information regarding the access control project?

A. Yes. Additional information is shown in Exhibit __ (SSP-9) on the pages entitled "Corporate Security Access Control, CCTV, and equipment."

Q. Please continue.

A. The next capital project I will discuss is the replacement of obsolete DVRs. All security cameras throughout Con Edison record on DVRs. This is crucial for forensic investigations such as suspicious activity, and attempted or actual breaches of security. Con Edison's Information Resource ("IR") Department is moving to Windows 7 as the system Con Edison currently uses, XP, will have reached the end of its useful life by April 2014. All servers, computers, security DVRs and any technical device that is to be connected to the network mainframe server must have the Windows 7 operating system installed and in use. In order for the continued recording of the over 1,400 cameras in place, there is a need to replace 100 DVRs by April 2014. This is projected to result in capital expenditures of $1.1 million on this project in 2014.

Q. Do you have an exhibit that provides additional information regarding the DVR capital project?

A. Yes. Additional information is shown in Exhibit __ (SSP-9) on the pages entitled "Corporate Security DVR Replacement – Company Wide."

Q. Please continue.

A. The final capital project we will describe is the systematic replacement of old and obsolete CCTV cameras. Prior to the centralization of technical security at Con Edison, many of the organizations had CCTV cameras installed right after September 2001, and some have had their cameras as far back as in the 1990s. Many of these cameras are outdated as they are not supported by their manufacturer, their parts are no longer available, and they are deemed "beyond economic repair." With the introduction of the SOC in 2007, Corporate Security is now able to provide monthly updates regarding the operating status of cameras that are connected to the SOC. Currently there are over 1,000 cameras which are connected to the SOC. Security also has the responsibility for standardizing and providing subject matter expertise on the most cost-effective CCTV cameras to install. As cameras continue to fail, requiring more servicing, lose their capability of capturing quality video and even experience total video loss, the Company becomes increasingly vulnerable regarding the security of assets, theft, vandalism and acts of sabotage. Corporate Security is looking to embark on a two-phase equipment replacement plan whereby 100 of the oldest

cameras (75 pan, tilt and zoom, and 25 fixed) would be replaced each year. As discussed below, this project will require hiring two additional employees, as Con Edison's Security Department will perform the labor on this continuing project, providing the most cost-effective solution to meet our needs.

Q. Do you have an exhibit that provides additional information regarding the CCTV camera replacement project?

A. Yes. Additional information is shown in Exhibit __ (SSP-9) on the pages entitled "Corporate Security - Rollout Program for Obsolete Cameras - Company Wide."

Employee Support

Q. Does the Company require any additional employees for the Security Department?

A. Yes. The Company requires two additional employees, two System Specialists. The estimated cost of these two employees will be $161,000 in RY1 (based on the two System Specialists in March 2014); $194,000 in RY2; and $199,000 in RY3.

Q. Please explain why these employees are necessary.

A. Corporate Security's mission has evolved and grown since September 11, 2001. Almost all of this growth has focused on technical aspects of security, which includes evaluating, analyzing, recommending and

installing effective electronic security systems to better protect our critical infrastructure.

Q. Please continue.

A. The Company has an operational need for two highly specialized Systems Specialists proficient in internal and external electronic security protection systems not just for connecting new systems to the SOC, but for a myriad of security-related technical projects.

Q. Can you please expand on that?

A. The Systems Specialists would serve as Security's project managers on the card access projects, and would provide the labor for the camera replacement project.

Q. Are there any other functions these additional System Specialists would address?

A. Yes. These two additional personnel would enable Corporate Security to expand the scope of work we currently do to include: some corrective and preventative maintenance on security equipment; test technical security systems; determine optimal equipment logistics and inventory; and bench repair of defective technical security system to the component level. These additional tasks would prove to be cost-effective methods to extend the life of the equipment and maintain the reliability of the system. It would also

reduce the costs and time associated with vendor repairs.

Q. Do you have an exhibit that provides additional information regarding the hiring of the two Systems Specialists?

A. Yes. Exhibit SSP-10 has been provided.

VIII. FACILITIES

Q. Please explain the services Facilities provides.

A. Facilities plans, directs, and controls the maintenance of all building systems and the day-to-day building and yard operations at the Company-owned and leased office buildings and service centers. We perform periodic assessments and inspections of all buildings and prepare corrective action plans. We provide engineering support so that critical building systems are operated and maintained appropriately. We also are responsible for seeing that all required fire and life safety equipment is operational and emergency procedures are communicated to organizations.

Q. Have you prepared exhibits entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC., FACILITIES CAPITAL BUDGET PLAN and Capital-Shared Services-Facilities," detailing these programs and your projected capital expenditures?

A. Yes, we have.

Q. Were these exhibits prepared under the Panel's direction and supervision?

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-11, SSP-12)

Q. What are the forecasted capital spending levels for Facilities' programs?

A. The Company plans to spend approximately $62.9 million in 2013, $65.6 million in 2014, and $46.5 million in each of years 2015, 2016 and 2017. In 2011, Facilities spent $55.2 million on such capital projects and in 2012, Facilities plans to spend approximately $55 million.

Q. Please discuss the projected Facilities capital spending level and why it is necessary to modernize, upgrade, and improve the Company's facilities?

A. Most of the Company's facilities are over 20 years old. Certain locations, such as 4 Irving Place, Cleveland Street, Rye Service Center and various auxiliary buildings at the 3rd Ave Yard site, were constructed over 60 years ago. Projects set forth in the exhibit are all needed either to correct potentially unsafe conditions, to address environmental issues, to comply with local, state or federal regulatory requirements/building codes, to maintain the structural integrity of the Facilities buildings, and/or to

improve a building's overall condition. Also, various equipment and systems required to operate these facilities have reached the end of their useful lives and are no longer economical or practical to operate. For example, heating, ventilating and air-conditioning ("HVAC") equipment, in many locations such as Irving Place, the Cleveland Street Service Center and Bruckner Boulevard, are close to 20 years old and need to be gradually replaced with more efficient systems that utilize more environmentally friendly refrigerants. Similarly, electrical systems, bathrooms and locker rooms, exterior facades, sidewalks, drainage systems and paved areas at certain locations are aging and, in some places, are in a state of disrepair. Exterior windows and doors need to be upgraded to meet present day energy standards. Finally, in light of security concerns, security fencing and access improvements are required at certain locations.

Q. Please explain measures that Facilities is taking to minimize costs associated with these projects.

A. Facilities identifies its projects via programmatic assessments, such as the Facilities Roof Inspection, Steel/Concrete/Façade Inspection, Emergency Diesel Generator and Electrical System, Bathroom/Locker Room and HVAC Evaluation Programs and the Engineering

Service Request ("ESR") process, which evaluates a particular problem and then provides a conceptual scope of work/budgetary order of magnitude cost estimate. Facilities uses this information to then prioritize projects according to the following categories: "compliance," "critical infrastructure projects," "programmatic site improvements," or "user requests". By studying, evaluating and assessing the condition of its equipment and systems, and developing work scopes and cost estimates, categorizing and prioritizing its projects accordingly, Facilities develops the best understanding of where to most efficiently allocate its funding and personnel resources. This method has identified "compliance" and "critical infrastructure" projects as targets for funding in the earlier years of its program with projects categorized as "programmatic site improvements" and "user requests" being deferred until later years.

Q. Have you prepared other exhibits detailing the O&M programs for the Facilities buildings and yards located in the five New York City Boroughs and Westchester County (described in this testimony as "The Regions")

A. Yes, we have.

Q. There are two exhibits prepared under the Panel's direction and supervision?

A. Yes, there are.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-13, SSP-14)

FACILITIES O&M

Q. Please discuss O&M spending for Facilities.

A. As for O&M, the Company's Regions (e.g., the Flatbush Ave and Davis Ave Headquarter Buildings facilities, and the various service centers such as those located at Cleveland Street, Neptune Ave, 28th street and 16th street) plan to spend approximately $1.9 million in RY1 and $2.0 million in each of RY2 and RY3 on specific programs compared to historical year spending of $216,000. The O&M increase over the historical year is attributable primarily to the following programs: Plant Held for Future Use Maintenance Program, Facilities Structural Inspection and Repair Program, Floor Maintenance Program, and Painting and Wall Treatment Maintenance Program.

Q. Please further explain these O&M programs.

A. Concerning the Plant Held for Future Use Maintenance Program, the costs for these services are $224,600 in RY1, $229,300 in RY2, and $234,100 in RY3. This cost will cover the associated fees pertaining to Company labor for supervision, refuse removal, permits, snow removal, fire/security system maintenance, miscellaneous repairs, exterminating, landscaping, and

utilities relating to Plant facilities Held for Future Use.

The Facilities Structural Inspection and Repair Program restores the envelopes of Company buildings for improved energy efficiency and façade safety and includes waterproofing, structural restoration, window lintel/sill replacement, brickwork replacement, roof repairs, and brickwork mortar joint re-pointing. Façade restoration is a major expense, especially at many of our older brick structures in Astoria, Brooklyn, Manhattan, Staten Island and in the Bronx. Waterproofing will prevent water infiltration and thus safeguard the structural integrity of the buildings thereby extending the life of the buildings in general. The costs for these repairs are $734,700 in RY1, $750,100 in RY2, and $765,900 in RY3.

Concerning the Floor Maintenance Program, this program will replace worn carpeting throughout the Facilities Regional locations annually. This also includes moving furniture so carpeting can be installed. This is a programmatic approach to address aging carpet throughout various locations plus the cost to move furniture while the work is in progress. Annual carpet inspection will prioritize carpet replacement. Normal wear and stretching of floor carpeting creates tripping

hazards. Carpeting is replaced when it has worn beyond any economic or reasonable cleaning method resulting with torn, rolled, and extremely dirty carpets. The costs for these replacements are $446,100 in RY1, $455,400 in RY2, and $465,000 in RY3.

Concerning the Painting and Wall Treatment Maintenance Program, this program is a programmatic approach similar to the carpet program where all locations are inspected annually and required painting is scheduled on a priority basis. This program also includes repainting worn striping to more efficiently utilize parking space and making better use of our properties. Inadequate maintenance/repair of aging infrastructure is problematic and further delays in repair will result in greater escalation of costs. The costs for these repairs are $524,800 in RY1, $535,800 in RY2, and $547,100 in RY3.

Facilities Capital Compliance Projects

Q. Please explain the first category of capital projects, compliance projects.

A. Compliance projects are required to address potentially unsafe conditions and environmental issues as well as to comply with the latest local, state or federal regulatory requirements and building codes.

Q. Is there one project that accounts for much of the spending in the compliance category?

A. Yes. In terms of expenditures and time, the largest and most complicated regulatory requirement project involves compliance with NYC Department of Buildings ("DOB") LL26. LL26 requires full sprinklering, which is a water based fire suppression system, of office buildings 100 feet or more in height no later than July 1, 2019. Under this law, water based sprinkler systems are required in all office areas and other areas such as electrical closets, mechanical/fan rooms, computer/LAN/UPS rooms, and tower stages of buildings.

Q. Has the Company discussed LL26 in prior rate proceedings?

A. Yes, the Commission has adopted Joint Proposals in the Company's last electric, steam and gas rate cases that reflect spending on compliance plans with LL26.

Q. To which Company facilities does LL26 apply?

A. LL26 applies to the Company's headquarters at 4 Irving Place as it is greater than 100 feet tall.

Q. What is the basis for this new requirement?

A. LL26 is based on recommendations made by the World Trade Center Building Code Task Force in February 2003 and signed into law by Mayor Bloomberg on June 24, 2004. LL26 implements this requirement through

amendments to the NYC Building Code and Fire Prevention Code.

Q. What steps are necessary for the Company to timely satisfy the LL26 requirement?

A. The Company has determined that the most efficient means for meeting the LL26 requirement is to continue to install the required sprinkler systems for a certain number of floors each year between now and 2019. We would note that Facilities has developed and periodically updates its comprehensive "restacking" program to determine the order, schedule, timing and method in which the building will be renovated. When the Company renovates a floor, the Company pursuant to its "restacking" program temporarily relocates, as needed, the affected employees to another part of 4 Irving Place or outside of the building. On July 1, 2011, as required by LL26, the Company submitted to the DOB its seven year affidavit stating the progress of the program at Irving Place. This report indicated that the "Percent of Building Sprinklered" was 43.23%. Since then several additional floors at 4 Irving Place have undergone full renovations and have been sprinklered and that the Company is currently approximately half way through the program. However, in order to meet LL26's 2019 deadline, the Company

needs to continue on its current schedule; also the Company may need additional space for temporary relocation of employees during the renovation.

Q. Please explain.

A. As noted above, when the Company renovates a floor, it temporarily relocates, as needed, the affected employees to another part of 4 Irving Place or outside of the building. This is because it is logistically difficult or practically impossible to maintain employees in their current work area during the renovation process. This is due to the physical arrangements of ceilings and other building infrastructure and the presence of environmentally sensitive materials (such as lead and asbestos) that need to be addressed during the renovation process.

Q. Please detail the issues associated with performing renovations while floors are occupied.

A. It would be neither safe nor practical or efficient to perform the required renovation and sprinkler installation during off-shifts, when personnel have vacated the space, and allow the affected personnel to return to work during their normal work hours (thereby requiring a set-up and take-down of the work area on a daily basis). Most importantly, the safe removal of any environmentally sensitive materials, while the area

is occupied, is logistically extremely difficult. Having personnel completely vacate the space until the renovation (and any required abatement) is finished enables the Company to completely abate the environmentally sensitive materials in a safe and efficient manner.

Q. Can sprinklering be accomplished absent full floor renovations?

A. No. To install sprinklers, one must remove all the asbestos and other materials from the ceiling, which serves as the structural support base for the sprinkler pipe. Thus, this project basically requires the complete renovation on the respective floors as there is no practical manner to install sprinklers without doing extensive ceiling renovation work. In addition, other compliance methods such as installing exposed pipe on un-renovated floors were evaluated but these options were not chosen; exposed pipe installed below a hung ceiling is unsightly in a commercial building, while installing such pipe above a ceiling would be disruptive to personnel and require that ceilings/lighting be taken down and then reinstalled, requiring abatement of environmental materials such as asbestos in the spaces above hung ceilings. In addition, furniture would need to be stored and

personnel relocated during this abatement process and new carpeting would need to be installed as it would become contaminated.

Q. If the Company follows its current renovation schedule, will it be in compliance with the LL26 requirement by 2019?

A. Yes. At the current rate of floor renovations (i.e., two to three floors per year) which has been determined by the "Restacking Plan" schedule and dictated, in part by available temporary space, the Company would be in compliance with LL26 by the 2019 deadline. Accordingly, the Company has developed a plan to install required sprinkler systems in conjunction with the conversion of floors at 4 Irving Place, to restack the building (realign adjacencies) to improve synergies, and renovate to provide more flexibility. In order to meet the needs of this program, some of the affected personnel may need to be relocated out of 4 Irving Place because there is insufficient swing space currently available in the building (i.e., there is currently less than one full floor of available swing space). At the present time, office renovation and associated sprinklering projects have been mostly completed on eighteen floors (i.e., the basement, 2nd,3rd, 5th, 6th, 9th, 10th, 11th, 15th, 17th, 20th' 21st,

22nd, 23rd, 24th, 25th, 26th, and 27th floors and eight tower stages.) Ten un-renovated floors currently remain but projects associated with the 7th, 8th, and 13th floors are scheduled to be completed in 2013.

Q. What impact does this program have on the temporary relocation of employees?

A. In order to meet the needs of this program, some of the affected personnel will be relocated out of 4 Irving Place for three to five years because there is insufficient space to move the personnel in the building.

Q. What are the costs associated with LL26 compliance?

A. There are both O&M and capital costs associated with this project. For O&M costs, Company-wide, the expenses associated with the temporary relocation of personnel are projected to be approximately $2.6 million annually until the program is completed and to maintain the infrastructure of the temporary space. This estimated O&M cost includes maintaining the space, i.e., furniture, computer and associated local area network relocation; placing items into storage; and moving personnel and files off-site to temporary swing space. The Company currently leases approximately 15,000 square feet at 111 Broadway, Manhattan. The rent prices consist of a base lease and infrastructure

rents which include fiber leases, cooling surcharges and building management charges.

Q. Has the Company done anything to minimize the costs associated with these renovations?

A. Yes. The Company has renovated the 6th and 7th floors at its Flatbush Avenue location, making 28,000 square feet (from the 6th floor) of space available in mid 2011.

Q. Please explain the capital costs associated with LL26.

A. We project Company-wide common capital costs of approximately $ 25.0 million in each of 2013, 2014 and 2015 and $12.5 million in each of 2016 and 2017. These project values are based on actual past expenditures and project appropriation estimates.

Q. What benefits are associated with completing the LL26 program according to the "Restacking Plan" schedule and prior to the 2019 compliance date?

A. Many buildings in the City must comply with LL26. As compliance time gets closer to the deadline, we believe that temporary space in other buildings will become more expensive and less available. In addition, contractors performing these types of renovations will become more in demand, which impacts their availability, as well as their costs.

Q. Are there any additional significant projects at 4 Irving Place necessary to meet LL26 requirements?

A. Yes. There is one other large project related to LL26 concerning the relocation of the Company's Bill Printing Operation from the fourth floor at Irving Place to Mail Operations located on the first floor at a cost of approximately $2.0 million. The combined space will then be sprinklered as required by LL26 and the area's HVAC system will be modified as required to accommodate the additional cooling loads.

Local Laws 10-11

Q. Are there any other major compliance projects associated with local laws?

A. Yes. There are projects needed for the Company to remain in compliance with Local Laws 10-11, the applicable provisions of which are described below. The Commission has adopted Joint Proposals in the Company's last electric, gas and steam rate cases that reflect spending on Local Law 10-11 projects. Even though the Company is not projecting any increased O&M expenditures for this program in the Rate Year from the historical year, we will discuss this project because of its safety and compliance significance.

Q. Please describe Local Law 11.

A. Local Law 11 ("LL11") was instituted in the early 1980's as LL10. The law, which was amended and renamed LL11 in 1998, requires the periodic inspection of the

exterior facades of buildings in NYC greater than six stories in height. Upon completion of the inspection, a report must be filed by a Licensed Professional Engineer or Registered Architect with the DOB. These inspections primarily act as a safety measure to protect the public from falling building materials and improve awareness of the importance of maintaining and restoring the City's architecture.

Q. When is the next LL11 review cycle?

A. In 2012, the Company's engineering department and an outside consultant completed its LL11 Cycle 7 building inspections/evaluation and submitted the associated report to the DOB. This report identified any façade repairs that needed to be immediately addressed or completed prior to the Cycle 8 inspection which is scheduled for 2017. The report was submitted prior to the NYC DOB mandated date August 21, 2012.

Q. What façade-type repairs were necessary as a result of the Cycle 7 inspection?

A. In 2012, the Company's engineering department (through an outside consultant) submitted a corrective report to the DOB on the LL11 Cycle 7 inspections. This report identified "safe with a repair and maintenance program" ("SWARMP") and "unsafe" conditions. These items included repairing new and emerging defects such as

cracked stone, defective masonry sealant, and open masonry joints not identified in Cycle 6. In addition to normal façade and/or parapet repairs, the report identified other water infiltration issues associated with caulking on the facade windows.

Q. Please explain further.

A. Deteriorated facade areas, such as cracked brickwork, defective window lintels/broken sills, defective caulking along window perimeters and open joints, etc., permit water infiltration into the building. This water travels behind the façade stone and masonry. During cold months of the year, this water can freeze, which then expands against the back of the stone/masonry, resulting in cracked, loosened stone, masonry and mortar. This broken stone, masonry, and loosened mortar have the potential to fall from the side of the building to the street below, thereby creating a public safety concern.

Q. Please continue.

A. Recognizing the public safety concern and other potential water infiltration issues, Facilities Engineering worked with the LL11 Cycle 7 inspector to perform a comprehensive assessment of 4 Irving Place in order to identify any deficiencies that can lead to water infiltration and structural damage of the

building's load-bearing system. Note that the Cycle 6 LL11 report generically mentioned deficient window caulking as one cause of possible water infiltration into the building. Facilities Engineering has since hired a civil engineer with expertise in architectural façades and this person has knowledge of and recognizes that deficient window caulking is but one possible means of the water infiltration. This Engineer coordinated the Cycle 7 Local Law 11 effort with his own assessments and produced comprehensive recommendations.

Q. Please explain further.

A. This comprehensive assessment reviewed areas such as the clock tower and penthouse setbacks. Engineering believes that items identified in both the LL 11 Cycle 7 report and the Company's own engineering assessment should be completed in the time frame indicated below as these corrective measures will help mitigate water infiltration into the building and restore the structural integrity of the building. The proposed scope of work is as follows:

- Retire remaining decorative stone lintels and install new steel lintels atop the window assemblies along Third Avenue façade. Work should include removal of five brick courses and installation of

Total Flash waterproofing system and new matching bricks in color and texture.

- Retire and install new 9-foot high parapet wall along Third Avenue façade. Work shall include installation of new steel shelf angle to support the single-wythe exterior brick veneer retrofitting of existing steel spandrel beam/installation of water proofing at parapet base and restoration of the roofing system.
- Remove and replace cracked/spalled stone along the tower elevations. Work shall include all associated anchorage onto the adjoining structure using stainless steel spring-loaded anchors.
- Cut out and re-point defective stone-to-stone mortar joints along all tower facades with Cathedral Stone M110 mortar. Work shall include all associated surface preparation and installation of backer rods.
- Remove and replace cracked/bulging or otherwise defective brickwork along the roof level masonry stacks and interior courtyards/airshafts. Work shall include installation of stainless steel staples every three brick courses.
- Completely scrape flaking paint along third Avenue façade and install Cathedral Stone vapor permeable MasonRE coating.

- Retire and install new window assemblies along Third Avenue façade. Work shall include all associated fasteners and caulking along the window perimeter.
- Remove and replace defective cast iron decorations along the street elevations.
- Cut out and replace spalled stone segments (via form and pour techniques) along the Tower section of the building using Cathedral Stone's M60 Mortar and stainless steel pins. Work shall include all associated preparations following manufacturer's instructions.
- Remove and replace all defective stucco along third Avenue façade. Work shall include installation of galvanized wire mesh, followed by application of Cathedral Stone's M90 as per manufacturer's instructions.

Note that all "Unsafe" issues identified during the Cycle 7 inspection have been corrected and it is proposed that all remaining "SWARMP" work be accomplished in stages over a two year period (RY1 and RY2) and that this work be completed prior to the Cycle 8 inspections, which will be scheduled in mid-2017, so that the required inspection report can be filed by August 2018. Note that if the "SWARMP" repairs identified in the Cycle 7 inspection are not addressed

by 2018, they will automatically become the more severe condition defined as ”UNSAFE" and any repairs will need to be completed immediately.

Q. What is the total cost of this program?

A. The total O&M cost estimate is approximately $4 million. This work will begin in 2014 and should be completed in 2015. Anticipated costs are $2.0 million in RY1 and $2.0 million in RY2 compared to historic year spending of approximately $2.0 million.

Q. Please explain the anticipated O&M expenditures for this project.

A. The LL11 Cycle 6 repairs costs were estimated at approximately $4.0 million and during the Cycle 7 inspections we concentrated on other areas not necessarily reviewed during the Cycle 6 inspections (e.g., the clock tower and penthouses setbacks); it is anticipated that repair costs will be similar in magnitude (i.e., $4.0 million). Recognizing that attempting to accomplish all the work scope in one year would be extremely intrusive to personnel occupying the building and the neighborhood, due to the required sidewalk bridging surrounding the entire building, it was decided the work shall be accomplished over a two year period and prior to the 2018 Cycle 8 inspection deadline.

Additional Compliance Projects

Q. What other regulatory compliance projects need to be undertaken?

A. Additional examples of compliance projects that are capital in nature include:

- Replacement of Astoria Outfall B Sewer System for a cost of approximately $13 million in 2013. In April 2010 Con Edison entered into a Consent Order with the New York State Department of Environmental Conservation ("NYS DEC") that required the Company to implement a NYS DEC approved work plan to replace/repair the Outfall B storm sewer system to prevent sediments containing PCBs from entering the storm sewer discharging at Outfall B. This storm sewer system collects storm water from approximately 18 acres of the southwest portion of the Astoria facility and discharges to the East River via Outfall B. The system originates on Con Edison property, although the lower 800 feet of piping and Outfall B itself are located on US PowerGen's property. Some portions of the system are believed to have been constructed more than one hundred years ago. This project will remove the existing Astoria Outfall B system pipes, manholes and catch basins and replace them with new corrugated high-

performance polypropylene pipes and associated concrete structures. To mitigate ground water infiltration, the new drainage system will utilize double-gasketed bell & spigot high performance piping connections.

- Installation of Fall Protection/Guardrails on the Roofs of Various Regional Buildings of Facilities for approximately $1.9 million in 2014. Note that the Company's Environment, Health and Safety personnel identified roofs, elevated working locations and platforms throughout the Regions that do not have adequate protective guardrails or fall protection. This project will bring those roofs and elevated working surfaces into full compliance with current OSHA and NYC Building Code regulations.
- Installation of a new Fire Alarm System at the TLC for approximately $2.1 million in 2013. Note that the existing TLC fire alarm system has a history of malfunctioning, which has led to the unnecessary evacuation of the building on several occasions. Obsolete system components are frequently in need of repair or replacement but are no longer manufactured and thus, extremely difficult, if not impossible, to obtain necessitating the purchase of after-market parts from suppliers outside the United States. The

critical "life-safety" fire alarm system at TLC has thus become unreliable. The NYC Building and Fire Codes require a functionally reliable fire alarm system and the building may not be occupied with one in disrepair or inoperable. This project replaces the existing system at TLC with an addressable microprocessor based fire alarm system including manual pull stations and horn/strobes. In addition, new wiring will be provided not only to bring the system up to current codes but also to allow the means to build a parallel system while the existing fire alarm system remains active.

- Installation of additional fire alarm notification devices in the basement of 4 Irving Place for $635,000 in 2014. This project installs, as needed to bring the system into compliance with the applicable NYC Building and Fire Codes, new addressable type devices/equipment (i.e., Manual Pull Stations, Speaker/Strobes, Speakers, Smoke Detectors, Heat Detectors, Duct Detectors, Tamper Switch Interface, Flow Switch Interface, and Warden Phones) that are compatible with the existing fire alarm control panel at Irving Place.
- Installation of Stairwell Pressurization Fan Louvers at 4 Irving Place for Emergency Diesel Generator

Exhaust Fumes Mitigation for a capital cost of approximately $180,000 in 2014. This project calls for the installation of new stairwell pressurization louvers to stop the odorous fumes entering the building during the testing of diesel generators. These louvers are intended to be closed at all times unless the fans come on during a building fire. The intake air louvers for the pressurization fans are leaky and are allowing wind and associated pollutants to enter the building without restrictions.

- Replacement of an oil filled Pad Mounted Transformer at Van Nest to prevent potential oil spills to the sewer at a capital cost of $550,000 in 2015. This project installs a new 480V dry type transformer to feed equipment that is currently connected to the oil-filled transformer. The project will not only reduce the size of the existing transformer but also relocate it to the inside of the building. The new 480V distribution system will include new disconnect switches, new 800A distribution switch, local disconnect switches and wiring.
- Renovation of 2nd and 3rd floor Ladies Bathrooms at the West End Avenue Energy Control Center for a cost of approximately $815,000 in 2014. This project

will provide suitable facilities for women at this location which is a requirement of the NYC Building Code.

Q. What are the projected costs of all of the compliance projects that you have addressed?

A. The estimated capital costs for this category of projects are $39.5 million in 2013, $30.5 million in 2014, $27.5 million in 2015, $15.0 million in 2016 and $15.0 million in 2017. The 2013 and 2014 costs are primarily for LL26 projects and Consent Order related work discussed above while the 2015 costs are almost exclusively for the continued need to address LL26 compliance.

Q. Are there any additional compliance projects expected to be undertaken that are O&M in nature?

A. No.

Critical Infrastructure Projects

Q. Please explain critical infrastructure projects.

A. These are projects that have been initiated because they are deemed necessary to maintain the structural integrity of the Facilities' buildings, to allow them to operate as designed, or to protect critical equipment (e.g., high maintenance or obsolete HVAC systems; LAN Room AC Installations, Chiller Steam turbine condensate drain enhancements, building water

supply rehabilitations). Note that various required projects in this category have been identified and are projected to be undertaken in the Rate Years but other projects may need to be added to the list as ESRs are completed and programmatic assessments are performed. Projects of this nature, despite planning, and preventative maintenance, are generally identified when systems, equipment and components are at or close to failure. Projects that address replacement of critical infrastructure usually need to be completed in a quick time frame.

Q. How much are you planning to expend in capital costs for these types of projects?

A. We plan to spend $1.8 million in 2013 and $615,000 in 2014. Exhibits SSP-11 and SSP-12 identify the projects currently remaining for this category. Some of the largest critical infrastructure jobs, completed in 2010, 2011 and 2012, include the 3rd Ave Yard Building 2,3 & 4 Demolition, the West End Avenue and Irving Place Cooling Tower Condenser Water Piping Replacement, the Eastview Yazaki Chiller and the Irving Place Penthouse & Cornice Restorations.

Q. What are some other examples of the capital projects included in this group?

A. Examples and descriptions of such capital projects are:

- Irving Place East Penthouse Controls and Valve Modifications - $1.45 million for 2013. This project will perform various repairs and modifications to this riveted tank such as cleaning, repairing and recoating its interior, sealing joints and rivets, installation of a new man-way for future inspections, replacement of stiffening members and the installation of new level sensors and isolation valves.
- Irving Place Chiller Condenser Steam Turbine Traps and Condensate Drain Modifications - $250,000 in 2013. This project will replace traps and provide for larger condensate drain lines to address an existing condition where condensate and water are backing up into Chiller Condenser Steam Turbine; such build-up can severely damage the turbine blades and reduce performance.

Q. Please explain the O&M projects in this category.

A. The Company plans to undertake one project to upgrade facades at various locations as part of the Facilities Structural Inspection and Repair Program (explained above) and LL11.

Programmatic Site Improvements

Q. Please describe your third category of costs, Programmatic Site Improvements work.

A. These capital projects are to maintain and improve on overall conditions at the buildings and yards and are

intended to upkeep the facilities. The program addresses efficiency improvements and/or equipment modernization or upgrades and projects that are evaluated/prioritized based on facility assessments. These projects generally involve yard paving/resurfacing, roof replacements identified in the Facilities' roof inspection program, HVAC systems nearing the end of their expected useful life, general office renovations for buildings other than 4 Irving Place, and elevator upgrades.

Concerning roofs, Engineering has in place a roof inspection program, which assesses each building roof once every five years. The inspection reports, generated as a result of this effort, specify the extent of the repair work necessary or if a complete roof replacement is required. The roof project is then budgeted for and scheduled accordingly.

In order to group, evaluate and prioritize other building systems and equipment, Facilities has established various programs to address: yard and road paving/resurfacing, loading platforms, sidewalks, fences/gates, garage doors, windows, office renovations, HVAC systems, lighting, electrical systems, bathroom/locker rooms, security systems, electrical systems, and emergency diesel generator.

Projects are listed in Programmatic Site Improvements Category either as a result of a completed ESR or program assessment or as a placeholder based on engineering or historical knowledge of the systems and equipment (e.g., since the expected life of a freon-based HVAC system is approximately 20 years, units that are 15 years or older will be listed in the five year plan). A completed ESR provides a scope of work and budgetary order of magnitude cost estimate required to address a particular system problem.

Q. Please provide some examples of this type of capital work.

A. There are currently over one hundred projects identified in the Programmatic Site Improvements category, which are listed in Exhibits SSP-11 and SSP-12. These include:

- 3rd Avenue Parking Lot Design for More Efficient Operation - $2.5 million in 2013.
- Astoria Cable Yard Security Improvements - $3.0 million in 2013.
- WEA - Halon System Replacement $2.0 million in 2013.
- Van Nest S/C Bldg 1 - 1st floor Mezzanine Bathrooms/Locker rooms renovation - $520,000.
- Bruckner Boulevard. – Yazaki HVAC Replacement - $2.0 million in 2014.

- Van Nest Building 1 – Air Handler Replacement $2.57 million in 2014.
- Various Roof Replacements (The Astoria Warehouse, 3rd Ave Yard Garage, and other anticipated emerging work as a result of the ongoing roof inspection program) approximately $7.0 million in 2013, $5.5 million in 2014, $3.0 million in 2015 and $3.0 million in 2016.

Q. What are the projected costs for this category of Programmatic Site Improvement projects?

A. The estimated capital costs for this category are $17.2 million in 2013, $34.4million in 2014, $19.0 million in 2015, $31.5 million in 2016 and $31.5 million in 2017.

User Requests

Q. Please describe the final category, user requests.

A. Any projects that do not meet the criteria of the three categories explained above and are generally done at the request of the user are considered to be User Requests. They are prioritized on a "first-come, first-served" basis and budgeted/engineered/scheduled subject to an engineering evaluation of the need for the project.

Q. Are these User Request projects capital or O&M projects?

A. Generally, these are capital projects but there are some O&M requests.

Q. Please provide examples of these types of projects.

A. There are currently almost 30 projects identified in the User Request category, and these were similarly discussed in previous rate cases. They are forecasted for $6.1 million in 2017. We do not expect to incur costs for this category from 2013 to 2016 as we will be concentrating on the other project categories.

Examples of such projects are:

- TLC - Enclose gas pavilion for training.
- College Point Blvd. S/C- New Heated Flush Truck Shed.
- 16th St S/C - Enlarge Ave C gate for truck traffic.
- TLC - Employee/student notification system.
- Irving Place – Additional Pressure Switches for Chilled & Secondary Water Pumps.

Astoria Dock Repairs

Q. Please explain this dock repair program.

A. In late 2007, as part of the Company's five-year waterfront inspection program and in order to determine the condition of its docks, Ocean and Coastal Consultants ("OCC"), an outside engineering consultant hired by the Company, identified various deteriorated and degraded conditions at the Astoria A-11 and A-12 docks.

The OCC report recommended an over-sheeting bulkhead repair method for A-11 Dock Area A and replacement of

pump house intake grating for Area B. The OCC report recommended for the A-11 Dock Area D, a Rip Rap Revetment repair method (i.e., sloped natural stone to secure the waterfront and prevent erosion). For the A-12 Luyster Creek Bulkhead, a Rip Rap Revetment repair method was also recommended. The OCC report waterfront inspection program discussed above identified the various deteriorations/degradations of the A-11 Dock and A-12 Luyster Creek Bulkhead and these were categorized from "Poor" to "Serious." The American Society of Civil Engineers recommends that such conditions be carried out "with urgency." The section A work of the A-11 dock and the A-12 dock work were completed in 2011 for a cost of $3.7 million. The section B & D repairs of the A-11 dock have been bid and construction will continue into 2013 for a cost of $4.4 million.

Q. Was this project requested in Case 09-E-0428.

A. Yes. The Commission adopted a Joint Proposal in the Company's last electric rate case that reflects spending on this capital program.

Storm Hardening

Q. Has Facilities evaluated its project needs in the immediate aftermath of Superstorm Sandy?

A. Yes, Facilities Engineering and Operations personnel have assessed the Headquarters Buildings and Regional Buildings & Yards in order to determine the projects and efforts needed for immediate restoration and to return facilities to their original design basis (i.e. "System Normalization"). These assessments have determined that there was damage from Superstorm Sandy's wind and storm surge to both life safety and key operational equipment, along with damage to basic building infrastructure at most of the buildings and yards of Facilities that are located adjacent to waterways. The Company's Learning Center experienced the most significant damage due to flooding in its basement and first floors, which house equipment such as its fire pump, fire alarm panel, roof tank fill and domestic water pumps, sewer ejector pumps, air compressors, elevators, and roll-up doors, along with classroom facilities (e.g., damage to sheet rock walls, cabinets, training equipment). All will need to be repaired or replaced in the short term in order to return this facility to full operations for Company training.

The E. 16th Street Service Center also experienced significant damage to key operational equipment, such as its steam absorption chillers, hot water boiler and

heaters, UPS's, security systems, A/C systems and vacuum pumps, along with damage to its first floor locker and equipment storage areas.

Other Buildings and Yards of Facilities, such as the Neptune Ave, Rye, Van Nest, Davis Ave, 28th Street, Victory Blvd and Bruckner Service Centers, all experienced damage to key equipment and basic critical infrastructure, such as fencing, lighting, signage, security systems, flooring, sheet rock walls, and sanitary sewage systems, which also will need to be repaired or replaced in the short and immediate term. The preliminary direct cost estimate for this capital, O&M and demolition work is approximately $6.1 million.

Q. What is the Company's current plan to fund these expenditures?

A. The Company believes that these repairs are covered by insurance and therefore will be covered by insurance proceeds. Accordingly, the projections for O&M and capital expenses in this rate filing do not reflect any of these costs. However, to the extent the Company is unable to recover these costs (or any portion thereof) through insurance, the Company plans to update this filing at the appropriate stage of this proceeding.

Q. Are there any other Storm Hardening efforts that the Company is considering?

A. There are ongoing efforts at the Company to develop and recommend immediate and long-term Storm Hardening initiatives and system design changes that would mitigate the impacts of future weather related damage.

Q. Does the Company have specific projects or programs, a proposed schedule and/or estimates of costs to effectuate Storm Hardening concepts?

A. Although the Company commenced evaluation of new storm hardening initiatives immediately following completion of restoration of service, time did not permit the development of specific projects, projected costs and schedules to be reflected in the rate request. The Company will update the rate filing during the course of this rate proceeding if and to the extent that Company determines that specific initiatives for storm hardening are necessary and appropriate.

Q. Does the Company have a proposal for addressing Storm Hardening projects and programs that are not developed in a timeframe that permits their consideration in this rate proceeding?

A. Yes. Company witness Muccilo proposes a framework for addressing the recovery of such costs.

Q. Does this conclude the Panel’s testimony?

A. Yes, it does.